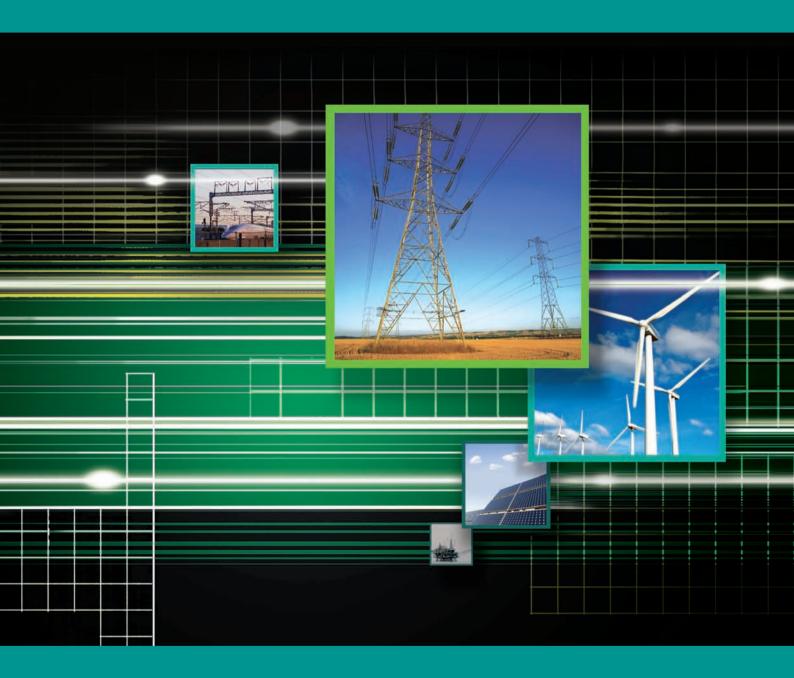
Industrial Networking Solutions



- Industrial Ethernet
- Serial Connectivity and Networking
- Industrial Wireless
- Embedded Computing















www.moxa.com

Our Vision

To be a world-class leader in industrial-grade device networking solutions for automation

Our Values

Integrity
Mutual Respect
Customer Focus
Execution

Our Mission

To customers

Provide value-added service and quality products.

To business partners

Establish win-win business relationships based on trust and integrity.

To employees

Provide educational and career advancement opportunities, and share the company's success.

To society

Conduct regular educational programs and work to protect the environment.



The brand to ask for in industrial device networking

For over twenty years, industrial systems integrators have relied on Moxa products in major device networking installations all over the world. Moxa offers industrialgrade solutions backed by an excellent warranty and highly-specialized technical support for a diverse range of applications, including connecting PLCs to a wireless control network, transmitting temperature signals over long distances, and automating device control and monitoring at remote locations.

Trusted worldwide

Moxa was established in 1987 and has offices in Europe, the United States, China, and Taiwan. Working with a network of certified distributors, Moxa offers world-class industrial networking products to systems integrators and value-added resellers in over 60 countries. Clients place great trust in Moxa's business and environmental practices, which are backed by ISO 9001:2000 and ISO 140001 certification. All products obtain standard, internationally recognized certifications, as well as specialized certifications depending on client requirements.

Wide selection of products for connecting and controlling industrial devices

Moxa offers a comprehensive selection of products that are designed for device communication in industrial settings:

- Industrial Ethernet switches
- Device servers (including the award-winning NPort® series)
- Serial, Ethernet, and fiber optic media converters
- Industrial I/O
- Industrial IEEE 802.11 Wireless AP/Bridge/Client
- Industrial Cellular Solutions
- Embedded computing platforms
- Modbus gateways
- Industrial video networking solutions
- Multiport serial boards

Designed to exact specifications

In addition to standard product offerings, Moxa's expert R&D team can also deliver customized solutions for projects that have highly specialized requirements, including the development of specific technical functions or simple changes in connector type.



Quality Assurance

An all-encompassing commitment to quality

At the core of Moxa's competitiveness is an all-encompassing commitment to quality. One aspect of this commitment is Moxa's acceptance into the ISO 9001:2000 family of certified organizations, with annual certification by some of the most demanding auditors. In addition, Moxa has also achieved ISO 14001:2004 certification for adopting an environmental management system.

ISO 9001:2000

Research & Development, Manufacturing & Service, Quality product design

ISO 14001:2004

Environmental Management System

5-year product warranty

Most Moxa products carry a solid 5-year warranty.





Moxa's Green Products

The European Union's Waste Electrical and Electronic Equipment (WEEE) directive took effect in August of 2005, and the Restriction on Hazardous Substances (RoHS) directive was enforced starting in July of 2006. The Chinese government has also released its own RoHS directive that requires manufacturers to declare and control the use of hazardous substances.

Moxa is dedicated to producing "green products" that satisfy the WEEE and RoHS directives. We are also proud to be among the first in the industry to eliminate the use of perfluorooctanesulfonic acid in most of our products. In addition, all Moxa products carry UL, FCC, and CE certifications.

















International Recognition

Moxa products receive top honors from industry groups

Moxa takes great pride in developing well-designed products that meet the needs of industrial users. Many of Moxa's products have been recognized by prominent industry groups for outstanding performance, design, and innovation.

- 2008/2009 Trend 100 Products, SPS Magazine PT-7828 IEC 61850-3 Layer 3 Gigabit modular rackmount Ethernet switch
- 2008 Good Design Award
 EDS-728 Industrial Gigabit modular Ethernet switch
- 2008 Red Dot Product Design Award
 EDS-728 industrial Gigabit modular Ethernet switch
- 2007 Engineer's Choice Award, Control Engineering Magazine
 W345 RISC-based wireless computer
- 2007 Product of the Year Finalist,
 Plant Engineering Magazine
 EDS-P308 industrial PoE switch

- 2006 New Product Award, IEN Magazine NPort W2004 wireless device server
- 2006 iF Product Design Award EDS-726 industrial Gigabit modular Ethernet switch
- 2006 Engineer's Choice Award,
 Control Engineering Magazine
 ioLogik E2210 Active Ethernet I/O server
- 2006 Taiwan Symbol of Excellence AWK-1100 wireless access point
- 2004 Editor's Choice Award,
 Control Engineering Magazine
 EDS-508 industrial Ethernet switch













Industrial Device Networking

Specializing in industrial communication interfaces and protocols

When working with industrial networks, one of the biggest challenges is finding a way to enable communication between devices that use different interfaces and protocols. Moxa products are designed to establish network connections for devices that use the following interfaces and protocols:

- RS-232, RS-422, RS-485
- PCI, PCIe
- 10/100/1000 Mbps Ethernet
- TCP, UDP
- DF1
- SNMP
- Single-mode and multi-mode optical fiber
- Modbus ASCII/RTU/TCP
- USB 2.0
- Analog and digital I/O
- IEEE 802.11a/b/g and IEEE 802.11n
- GSM, GPRS, EDGE, HSDPA, UMTS (cellular)
- CCTV video

Industrial-grade design

Moxa's industrial-grade products are tough enough to provide continuous, reliable, long-term operation in even the harshest industrial settings. Systems integrators will appreciate the fact that Moxa designs products with the following industry-friendly features:

- DIN-Rail, wall, and 19-inch rack mounting
- Low power consumption
- Redundant power inputs
- Optical isolation and ESD protection
- IP30/54/66/67/68 protection ratings
- Wide operating temperatures
- M12 connectors
- Easy to use software libraries
- Generous 5-year warranty on most products
- Industry certifications such as UL, CE, Class 1 Div 2, ATEX, DNV, GL
- Protection against shock and vibration
- Terminal block connectors

R&D

The world's best engineers and IT specialists

Moxa's products have the advantage of being engineered in Taiwan, one of the world's hottest spots for high-end electronics and information technology. Companies around the world rely on the high quality of components developed and made in Taiwan to maintain their own standards of quality and reliability. Industry specialists know that there is no better source for electronic components such as LCDs, touch screens, semiconductor wafers, ICs, PC motherboards, and more.

With direct access to Taiwan's talented labor pool, Moxa has assembled an expert R&D team that has developed innovative technologies and set new standards for the industry:

- Advanced Ethernet switch design for Turbo Ring[™] redundant networking and a recovery time of under 20 ms
- Advanced serial communication via hardware-based ADDC® (Automatic Data Direction Control) in RS-485 communication
- Award-winning and intuitive Click&Go Logic for Active Ethernet I/O
- Flexible, reliable Windows/Linux Real COM driver and operation modes for serial-to-Ethernet applications
- The most up-to-date Windows drivers and WHQL compliance
- Wide selection of Linux and Unix drivers
- Turbo Roaming[™]: Industrial IEEE 802.11 solution for seamless connections and long-distance communication
- OnCell Central Manager: Centralized management solution for accessing private IPs from the Internet

In addition, we ensure in-depth support for your needs through our strong engineering capabilities:

- x86 and RISC-based embedded platform design
- In-house ASIC chip design

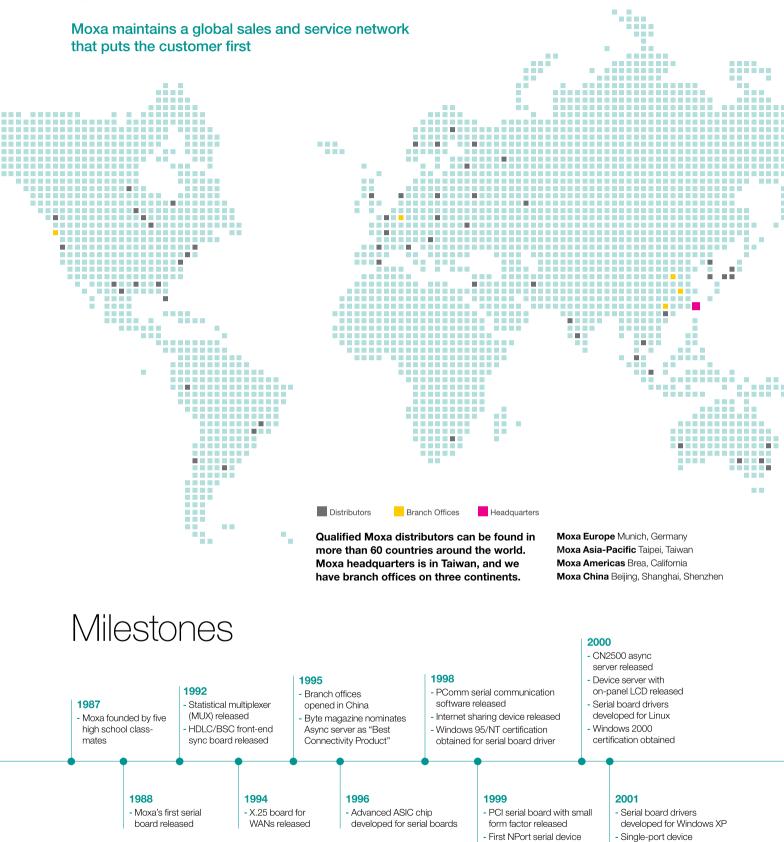








Sales and Service



server released

server released
- Industrial Ethernet switch released



International coverage

With Moxa offices in the United States, Europe, China, and Taiwan, users around the world can benefit from the highest level of technical expertise and professionalism. In addition, the MTSC (Moxa Technical Support Certification) program ensures that certified distributors deliver the highest standard of service.

Highly experienced sales professionals

Moxa sales reps take great pride in their deep understanding of the market and available technology. Clients can speak directly with a Moxa sales rep about detailed project specifications, testing requirements, and network architecture. In addition, all Moxa distributors are required to meet rigorous standards for quality, integrity, and technical proficiency.

World-class support

In every region of the world, users of Moxa products receive the highest level of support from teams of specialists that are trained and certified by Moxa. Integrators also benefit from Moxa's extremely responsive engineering team, which can tailor products to fit a project's special needs. Most Moxa products are also backed by a 5-year warranty, which is one of the most generous warranties in the industry.

2002

- US branch office opens in California
- Managed Ethernet switch released
- Serial-to-fiber converter released
- Universal PCI serial boards released

2004

- Video servers released
- Embedded computer line introduced
- Dual-Ethernet terminal servers released

2006

- Europe branch office opens in Munich
- Control Engineering Engineer's Choice award for Active Ethernet I/O server
- Industrial Engineering News award for NPort W2004 wireless device server
- UPort USB-to-serial line introduced

2008

- PowerTrans IEC 61850-3 Ethernet switch introduced for substation automation
- Good Design Awards and Red Dot product design award for EDS-728 modular Ethernet switch, NPort 6450 terminal server, and Modbus Gateway MB3270i
- Red Dot product design award for EDS-728
- Ranked among top 20 best companies to work for in Taiwan

2003

- Moxa Technical Support Certification (MTSC) established
- Turbo Ring redundant network topology developed
- PC/104 serial boards released

2005

- Control Engineering Editor's Choice award for EDS-508 Ethernet switch
- iF Product Design award for EDS-726 Ethernet switch
- ioLogik Ethernet I/O server released
- AWK wireless access point released

2007

- OnCell industrial cellular modem released
- ioMirror peer-to-peer I/O server released
- Control Engineering Engineer's Choice award for W315 wireless embedded computer
- MGate Modbus gateways released

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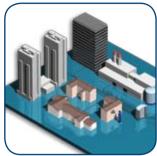
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Industrial Networking Applications

Power Automation

The field of power automation is composed of the following fundamental systems: power generation, power transmission, and power distribution. For each of these systems, Moxa offers device networking products to facilitate different power automation applications.



Power Substation Automation		 		 	 		 ٠.	 . 2
Automatic Meter Reading		 		 	 		 	 . 3
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Transportation Automation

Many advanced and cost-effective options are available to improve the efficiency of transportation systems through automation. A wide selection of Moxa products can be used for intelligent transportation system (ITS) applications of almost any size and scope.



Fleet Management	. 5
P-based Train Control	. 6

Factory Automation

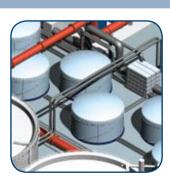
Every manufacturing facility has two essential components: the production line and the facility itself. Moxa offers the right device networking products for automating both production line management and facility monitoring operations.



Production Line Management.....

Oil and Gas Automation

Oil and gas production can be divided into three stages: upstream, midstream, and downstream. From drilling to refining, Moxa products can be used to optimize efficiency, productivity, reliability, and safety at any stage of oil and gas production.



Industrial Networking Applications



Power Substation Automation

Reliability, speed, and real-time response are critical for communication between devices at a power plant or power substation. Use Moxa products to build a truly industrial-grade network backbone that supports real-time monitoring and control.

Products



The **DA-681** embedded computer is a protocol gateway that handles multiple devices running different protocols for front-end data computing and protocol conversion.



The **DA-682** embedded computer serves as an embedded backbone host and central controller for data analysis, processing, and transmission back to the control center.



The IKS-6726 Gigabit modular rackmount Ethernet switch uplinks with the network ring and connects with embedded computers; its industrial, rugged design is ideal for harsh environments.





The IMC-101 industrial media converters provide industrial grade media conversion between 10/100BaseT(X) and 100BaseFX(SC/ST connectors).

The PT-7728 Gigabit modular Ethernet

ensuring superior reliability for complex,

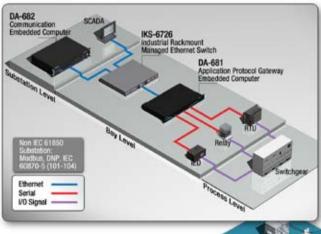
high voltage substation environments through IEC 61850-3 and IEEE 1613

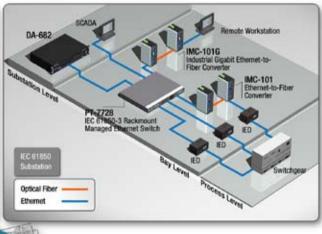
compliance.

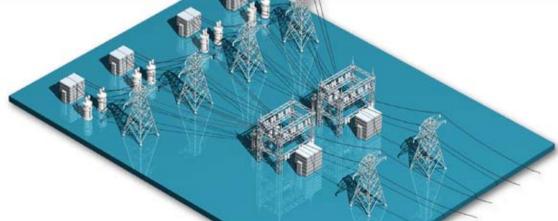
switch forms a network ring for redundancy,



The IMC-101G industrial Gigabit media converters provide reliable and stable 10/100/1000BaseSX/LX/LHX/ZX media conversion in harsh industrial environments.







Automatic Meter Reading

A great deal of time and effort is wasted when technicians need to make regular in-person visits to take manual power meter readings. Automated meter reading systems have become an increasingly popular alternative and can be established by using Moxa products to connect power meters to central management workstations.

Products



The **W325** embedded computer stores metering data, converts it from proprietary protocols to the standard protocols used by the automation system, performs front-end computing, and then transmits the data to central servers via GSM/GPRS.



The AWK-3121 provides wireless connection for Ethernet-enabled devices in addition to standard STP/RSTP support for looping protection and redundant communication links.



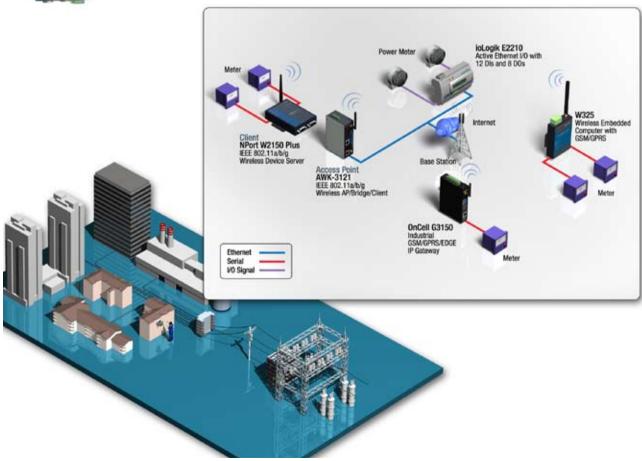
The **OnCell G3150** cellular IP gateway makes use of high speed wireless GSM/GPRS/ EDGE technologies and provides secure TCP/IP connection to your remote power meters over cellular networks.



The **ioLogik E2210** Active Ethernet I/O collects readings from power meters through event-based messaging, allowing system administrators to actively retrieve data for better management.



The NPort® W2150 Plus collects data from the power meters over RS-232 or RS-485 connections, and then transmits the encrypted data to central servers over a WiFi network.



Renewable Energy

Rising fuel costs and global warming have led to rapid growth in worldwide demand for renewable energy. In response to the worldwide search for alternative sources of energy, solar power and wind power have emerged as two of the most viable options. Moxa provides a wide range of networking solutions to help harness the power of these invaluable resources.

Products



The W321 and UC-7112 embedded computers can be used as front-end controllers that connect to the PV inverter, Al and counter input module, and power meter. They can also be used for remote monitoring, data acquisition, data logging, and protocol conversion.



The UC-8410 embedded computer is used to control, manage, and remotely monitor the equipment making up a solar power system.



The V468 and IA260 embedded computers can serve as the central controller for mapping and tracking the Sun in solar power plants, and sending data back and forth between the tracker and control center.



The EDS-408A 3-fiber Series Ethernet switches provide network redundancy in the form of a fiber ring topology with super fast recovery time < 20 ms for reliable Ethernet network communication in wind farms.



With Active OPC server, the ioLogik E2242 Active Ethernet I/O proactively updates event messages to the control center with realtime stamps over the network, effectively integrating it with a real-time SCADA/HMI system.



Moxa's NPort® 5210 device server can convert industrial serial devices inside a wind turbine into Ethernet devices.

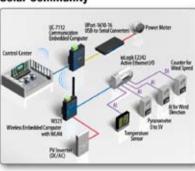


The **UPort™ 1610-16** converters can connect 16 RS-232 devices to your workstation/laptop by USB. With Moxa's own CPU, the **UPort™** 1610 offers USB 2.0 connectivity, 128 bytes FIFO, and HW/SW flow control.

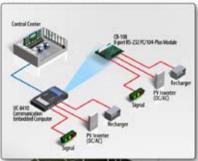


Moxa's CB-108 connects an industrial PC directly to multiple RS-232 devices. All Moxa's PC/104 and PC/104-Plus modules provide a reliable, high performance solution for serial communication

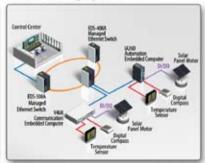
Solar Community

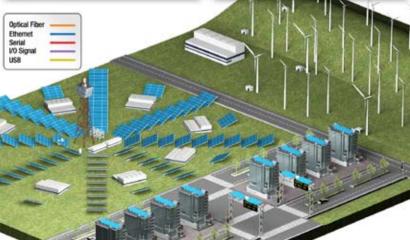


Solar Transportation



Solar Tracking System







Fleet Management

Managing large fleets of trucks or buses around the country requires a scalable system that is designed for maximum mobility and efficiency. By taking advantage of Moxa's wide selection of products, a management system can be established to fit nearly any requirement and size.

Products



The W345 collects data from the onboard GSM/GPRS and transmits the data wirelessly over cellular networks to the control center.



The NPort® W2150 Plus allows collected data on the EM-1240 to be transferred wirelessly to the central server when the vehicle is at the station.



The CP-118U connects a PC to a large number of devices for station management, including a ticket printer, scanner, vehicle sensor, and modem.

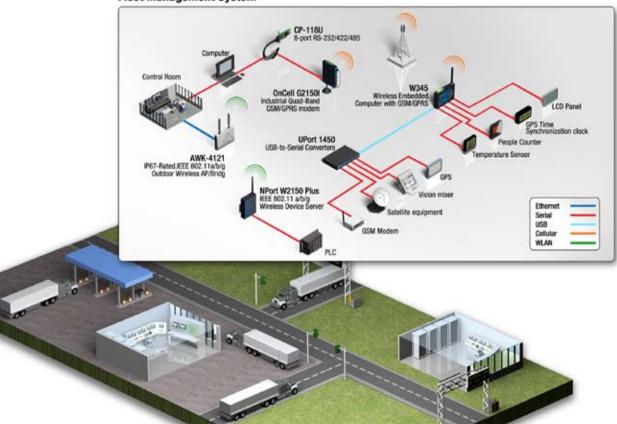


The UPort™ 1450 connects a laptop and multiple devices for SNG data collection, allowing command centers to gather intelligence and other data with greater mobility.



The AWK-4121-T allows information from the vehicle's data collection devices to be downloaded wirelessly when the vehicle arrives in the station.

Fleet Management System



IP-based Train Control

Moxa's industrial Ethernet products, wireless solutions, serial-to-Ethernet device servers, and embedded computers are ideally suited for IP-based train control systems. High port density Ethernet switches and outdoor wireless access points can establish a robust network for rolling stock, along-track, and ground station applications.

Products



The AWK-4121-T industrial IEEE 802.11a/b/g outdoor wireless AP/Bridge/Client provides wireless communication capability at speeds up to 100 km/hr with Turbo Roaming under 500 ms.

m: (m: / m: / : 2)

The IKS-6726 industrial rackmount Ethernet switch meets EN50155/EN50121-4 certifications, guaranteeing high adaptability and reliable Gigabit speeds for severe conditions including vibrations, shocks, and wide operating temperatures from -40 to 75°C.



The NPort® 6650-32 collects data from PLCs via RS-232 or RS-485 connections and then transmits the data to central servers.



The TN-5500 series M12 managed Ethernet switches with EN50155/50121-3-2/50121-4 certification are tough enough to withstand critical vibrations and shocks, ensuring robust communication between all Ethernetenabled devices over a network.



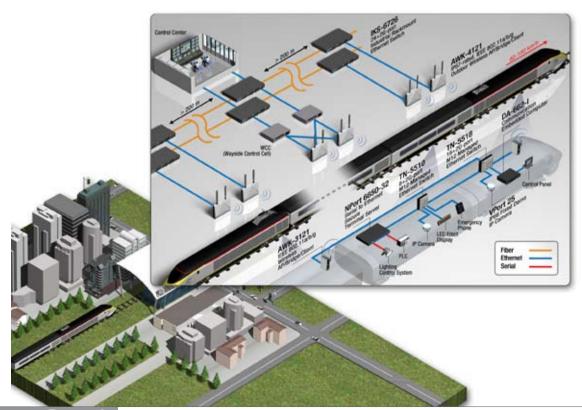
The DA-662-I communication embedded computer can be used as an intelligent control platform to handle daily operation aboard trains and ensure reliable performance for rail transport systems.



The AWK-3121 industrial IEEE 802.11a/b/g wireless Access Point/Bridge/Client can be installed in each car to provide seamless wireless connection to railway stations and control systems.



The VPort 25 IP camera has a vandal-proof design, IP66 protection, -40 to 50°C operating temperature, and Power-over-Ethernet capability, which is ideal for constructing a secure surveillance system aboard trains.



Production Line Management

By incorporating monitoring devices into a centralized control network, manufacturers can achieve significant gains in productivity. Moxa offers products that directly or wirelessly connect CNCs, robots, AGVs, sensors, PLCs, RTUs, and other devices to management networks.

Products



The EDS-728 offers up to 4 Gigabit ports, advanced network control, and scalability for a high-performance network backbone.



The EDS-508A Ethernet switch forms a redundant Ethernet network with a recovery time under 20 ms, connecting Ethernet devices for non-stop daily operation.



The VPort 351 video encoders feature wide operating temperature from -40 to 75°C, fiber support, and fanless design for distributed IP surveillance systems.



The ioLogik E2214 I/O device provides event-driven alarm messaging with real-time stamps, Click&Go configuration, and SNMP support for real-time monitoring and local control of meters and sensors.



The AWK-3121 and NPort® W2150 Plus can connect primary workstations and factory equipment to a wireless network.



The IA262-I features DIOs to control conveyer belts, VGA connectors to display and collect scanned data, and is also capable of computing and sending data to the control center.



The NPort® 6650-32 collects serial data from meters and sensors transmitting the data to central servers.



The CP-104EL connects an industrial PC directly to multiple PLCs, meters, RTUs, and other monitoring devices.



The IMC-101 converts 10/100BaseT(X) to 100BaseFX fiber optic connections.



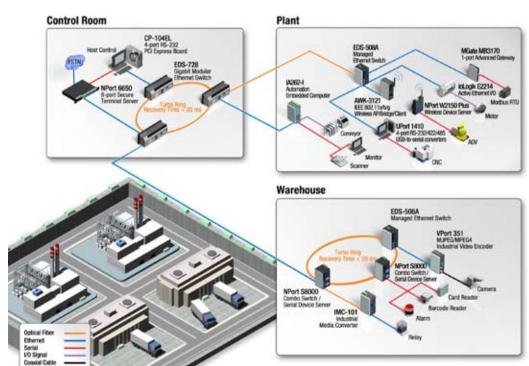
The NPort® S8455I-MM-SC integrates 2 fiber ports, 3 Ethernet ports, and 4 RS-232/422/485 serial ports, connecting both Ethernet and serial devices to an Ethernet network for redundancy.



The MGate MB3170 is designed to integrate Modbus, TCP, ASCII, and RTU devices in almost any master/slave combination.



The UPort 1410 converters can connect 4 RS-232/422/485 devices to your workstation



Oil Refinery Monitoring

Distributed Control Systems (DCS) are deployed in complex oil refining processes to connect the entire system of controllers for communication and monitoring. Moxa's industrial networking products, with Class I Division 2 and DNV/GL certifications, extended operating temperature, redundancy technology, and intelligent management features, can develop a hazard-free Ethernet network for non-stop system operation and monitoring in oil refineries.

Products



The EDS-728 modular Gigabit managed Ethernet switch establishes dual redundant Ethernet networks for a DCS that offers media modules flexibility and supports Turbo Ring redundant technology with a recovery time less than 20 ms.



The NPort® IA5000 series industrial serialto-Ethernet device server connects PLCs, sensors, and other serial-based devices to an Ethernet network and ensures reliable communication due to its industrial rating and wide operating temperature design.



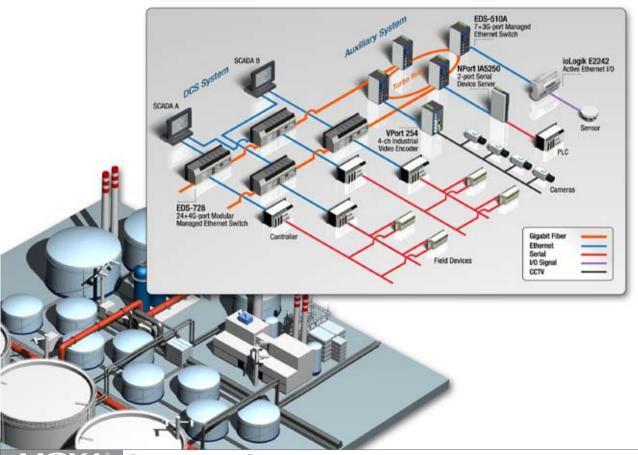
The EDS-510A Gigabit managed Ethernet switch is ideal for constructing a redundant fiber-optic Ethernet network with high bandwidth and reliability, thanks to its support for up to 3 Gigabit ports, -40 to 75°C operating temperature, and industrial ratings (Class I Division 2, DNV/GL).



The ioLogik E2214 Active Ethernet I/O product delivers event-driven reporting with time stamp for precise status updates and real-time alarm management.



The VPort 254 industrial video encoder, with -40 to 75°C operating temperature, Class I Division 2 certification, and redundant power inputs, connects analog cameras over a Gigabit network for real-time video streaming and robust surveillance.





New Product Showcase

New Product Showcase
Industrial Ethernet Switches
Industry-specific Ethernet Switches
Industrial I/0
Video Networking Solutions
Terminal Servers
Serial Device Servers
Ethernet Fieldbus Gateways
Multiport Serial Boards
USB Connectivity
Media Converters
WLAN & Cellular Solutions
Embedded Computers for Communication
Embedded Computers for Automation



New Product Showcase

Industrial Ethernet Switches

EDS-608 (page 3-24)

8-port compact modular managed Ethernet switch



Features

- > Modular design lets you choose from a variety of media combinations
- > Turbo Ring and RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy
- > QoS, IGMP snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > IEEE 802.1X, HTTPS, and SSH to enhance network security
- > -40 to 75°C operating temperature (T models)

EDS-P510 Series (page 3-40)

7+3G-port Gigabit PoE managed **Ethernet switches**



Features

- > 4 IEEE 802.3af-compliant PoE and Ethernet combo ports
- > Provides up to 15.4 watts at 48 VDC per PoE port
- > Intelligent power consumption detection, classification, and PoE scheduling function
- > 3 combo (10/100/1000BaseT(X) or 100/1000BaseSFP slot) Gigabit ports; 2 ports for redundant ring and 1 port for uplink
- > Turbo Ring (recovery time < 20 ms), RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy

EDS-G205/G308 Series (page 3-57)

5G and 8G-port full Gigabit unmanaged Ethernet switches



Features

- > Fiber optic options for extending distance and electrical noise immunity (FDS-G308)
- > Redundant dual 12/24/48 VDC power inputs
- > Relay output warning for power failure and port break alarm
- > Broadcast storm protection
- > -40 to 75°C operating temperature range (T models)

EDS-G509 Series (page 3-29)

9G-port full Gigabit managed Fthernet switches



Features

- > 4 10/100/1000BaseT(X) ports plus 5 combo (10/100/1000BaseT(X) or 100/1000BaseSFP slot) Gigabit ports
- > Fiber optic options for extending distance and improving electrical noise immunity
- > Turbo Ring, RSTP/STP (IEEE 802.1w/D) for Ethernet redundancy
- > QoS, IGMP snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > IEEE 802.1X, HTTPS, and SSH enhance network security

IKS-6726 Series (page 3-14)

24+2G-port Gigabit modular managed Ethernet switches



Features

- > Meets UL 60950-1, NEMA TS2, EN50155/EN50121-4, and DNV/GL certifications
- > Turbo Ring and RSTP/STP for Ethernet redundancy
- > Isolated redundant power inputs with universal 24/48 VDC or 110/220 VDC/VAC power supply
- > Modular design lets you choose from a variety of media combinations
- > -40 to 75°C operating temperature range

EDS-205A/208A Series (page 3-62)

5 and 8-port unmanaged Ethernet switches



Features

- > 10/100BaseT(X) (RJ45 connector), 100BaseFX (multi/single-mode, SC or ST connector)
- > Redundant dual 12/24/48 VDC, 18 to 30 VAC power inputs
- > IP30 aluminum housing
- > Rugged hardware design well-suited for hazardous locations (Class I Div. 2 / Zone 2) and marine environments (DNV/GL/ABS/LR/NKK)
- > -40 to 75°C operating temperature range (T models)

Industry-specific Ethernet Switches

TN-5508/5510/5516/5518 Series (page 4-7)



8, 8+2G, 16, 16+2G-port M12 managed Ethernet switches

Features

- > M12 connectors for robust links
- > Wide power input range from 12 to 110 VDC (LV-MV model)
- > Isolated redundant power inputs with universal 12/24/36/48 VDC. 72/96/110 VDC, or 110/220 VDC/VAC power supply range
- > 2-port flexibility of Gigabit Ethernet ports with relay bypass function
- > EN50155/50121-3-2/50121-4, NEMA TS2, and e1 compliant
- > -40 to 75°C operating temperature range (T models)

TN-5308 Series (page 4-10)



8-port M12 unmanaged Ethernet switches

Features



- > M12 connectors and IP40 metal housing
- > Supports IEEE 802.3/802.3u/802.3x
- > EN50155/50121-3-2/50121-4, NEMA TS2, and e1 compliant
- > -40 to 75°C operating temperature range (T models)



10

PT-7828 Series (page 4-20)

IEC 61850-3 24+4G-port Layer 3 Gigabit modular managed rackmount Ethernet switches



Features

- > Layer 3 routing to interconnect multiple LAN segments
- > IEC 61850-3, IEEE 1613 (power substations), NEMA TS2 (traffic control systems), and EN50121-4 (railway applications) compliant
- > Turbo Ring and RSTP/STP for Ethernet redundancy
- > Isolated redundant power inputs with universal 24/48 VDC or 110/220 VDC/VAC power supply range
- > Modular design for various media options: RJ45, fiber optic, M12, and SFP ports
- > -40 to 85°C operating temperature range

PT-7710 Series (page 4-26)

IEC 61850-3 8+2G-port Gigabit modular managed rackmount Ethernet switches



Features

- > IEC 61850-3, IEEE 1613 (power substations), NEMA TS2 (traffic control systems), and EN50121-4 (railway applications) compliant
- > Turbo Ring and RSTP/STP for Ethernet redundancy
- > Universal power supply range, 12/24/48 VDC or 110/220 VDC/VAC
- > Modular design lets you choose from a variety of media combinations
- > -40 to 85°C operating temperature range

Industrial I/O

Active OPC Server Lite (page 5-11)

Seamlessly connect ioLogik to vour SCADA system

Features

- > OPC DA 3.0 supported
- > Event-driven tag update:
 - Save 80% on network bandwidth
- I/O response that's 7 times faster
- > Patented automatic tag generation
- > Firewall-friendly connection from remote ioLogik devices
 - Allows remote I/O to use dynamic IP
 - Allows remote I/O to use private IP
- > Download free from Moxa's website

Easy and intuitive I/O control configuration for ioLogik Active Ethernet I/O

Click&Go (page 5-13)



Features

- > PC-free solution with local intelligence
- > Programming-free IF-THEN-ELSE logic reduces setup time
- > Time stamped active alarm reports with TCP, UDP, SNMP Trap, email, SMS, or CGI commands
- > Time-based scheduler and timer control
- > Input-to-output control over IP with peer-to-peer and remote action

ioLogik E2242 (page 5-19)

Active Ethernet I/O with 4 analog inputs and 12 configurable DIOs

Features

- > 4 fixed differential analog input channels
- > 12 configurable digital input/output channels
- > DI counter saved automatically when power shuts off
- > Instant event messaging by TCP/UDP/email/SNMP-Trap
- > PC-based configuration utility and web console
- > Easy-to-use Click&GoTM Logic for local output control
- > Windows/WinCE VB/VC.NET and Linux C APIs
- > I/O control over Modbus/TCP and SNMP protocol
- > NIST traceable calibration

ioMirror E3210 (page 5-22)

Ethernet Peer-to-Peer I/O with 8 digital inputs and 8 digital outputs



Features

- > Direct input-to-output signal communication over IP
- > High speed Peer-to-Peer I/O within 20 ms
- One physical alarm port for connectivity statusQuick and easy utility and web-based settings
- > Local alarm channel and remote alarm messaging
- > Supports Modbus/TCP for remote monitoring
- > Optional LCD module for convenient configuration

ioLogik E4200 (page 5-24)

Modular Active Ethernet I/O adaptor



Features

- > Supports up to 16 I/O modules
- > Dual Ethernet LANs and one RS-232 port
- > Front-end intelligence that supports 80 Click&Go rules > Unicode Active Messaging with real-time stamp, including SMS, SNMP
- Trap with I/O status, TCP, email > Built-in web console
- > Built-in web console
- > PC utility: Auto detection of installed modules > Windows/WinCE VB/VC.NET and Linux C APIs

ioLogik W5340 (page 5-27)

Active GPRS I/O with 4 Als, 8 DIOs, and 2 relay outputs

- > GPRS, Ethernet LAN, RS-232/422/485 supported
- > Smart Active GPRS connection
- > Low power consumption
- > Secure wake on call ID
- > Active messaging with real-time stamp
- > SNMP Trap with I/O status
- > Data logging with SD card
- > Unicode Active Messaging with real-time stamp, including SMS, SNMP Trap with I/O status, TCP, email
- > ioAdmin and Active OPC Server supported
- > Windows/WinCE VB/VC.NET and Linux C APIs

Video Networking Products

VPort 354 Series (page 6-7)



Full motion, 4-channel MJPEG/MPEG4 industrial video encoders



Features

- > Industrial design with -40 to 75°C operating temperature and fiber optic Ethernet port
- > 2 Ethernet ports for cascade and port redundancy
- > SD card slot for local storage capability
- > Modbus/TCP supported for easy communication with SCADA software
- > Video stream up to 120 frames/sec at 4CIF (704 x 480) resolution

VPort 251 (page 6-20)

Full motion. 1-channel MJPEG/MPEG4 video encoder



Features

- > Compress analog video/audio signals into MJPEG/MPEG4 video streams
- > Video stream up to 30 frames/sec at full D1 (720 x 480) resolution
- > 2-way (1-in/1-out) audio supported
- > Transparent PTZ control for using legacy PTZ control panel or keyboard
- > Loop-through power output for powering an analog camera

VPort 25 Series (page 6-24)

IP66, day-and-night vandalproof fixed dome IP camera for outdoors



Features

- > -40 to 50°C operating temperature; heater or fan not required
- > IP66-rated for protection from rain and dust
- > Direct-wired power input and PoE for power redundancy
- > Up to 30 frames/sec at 720 x 480 resolution
- > One camera lens for both day and night use

VPort 351 Series (page 6-13)

Full motion, 1-channel MJPEG/MPEG4 industrial video encoder



Features

- > Industrial design with -40 to 75°C operating temperature and fiber optic Ethernet port
- > Video stream up to 30 frames/sec at full D1 (720 x 480) resolution
- > Pre/post-alarm video recording function for advanced surveillance
- > 2-way (1-in/1-out) audio supported
- > Free VPort SDK PLUS and 4-channel video surveillance software

VPort D351 (page 6-22)

1-channel MJPEG/MPEG4 industrial video decoder



Features

- > Decode MJPEG and MPEG4 video streams to an analog video signal automatically
- > Manual selection or automatic scan with maximum of 64 video sources
- > 2-way (1-in/1-out) audio supported
- > Transparent PTZ control with legacy PTZ controller
- > SNMP for network management

SoftNVR (page 6-27)

Expandable IP surveillance software for managing up to 64 video channels



Features

- > Multi-screen viewing format (maximum of 64 channels)
- > Dual monitor capability
- > Video analytics and instant response
- > Video quality enhancement tools
- > Intelligent and convenient video search

: Terminal Servers

CN2600 Series (page 7-24)

8 and 16-port RS-232/422/485 terminal servers with LAN redundancy



- > LCD panel for easy IP address configuration
- > Dual-LAN cards with two independent MAC addresses and IP addresses
- > Redundant COM function available when both LANs are active
- > Dual-host redundancy can be used to add a backup PC to your system
- > Dual AC power inputs
- > Real COM/TTY drivers for Windows and UNIX

Serial Device Servers

NPort \$8000 Series (page 8-16)

Combo switch / serial device server



Features

- > Configurable serial data transmission priority
- > 5-port managed Ethernet switch built in
- > Ethernet redundancy with Turbo Ring® (recovery time < 20 ms) or RSTP/ STP (IEEE 802.1w/D)
- > QoS, IGMP-snooping/GMRP, VLAN, LACP, SNMPv1/v2c/v3, RMON supported
- > 4-port RS-232/422/RS-485 serial device server
- > 2 KV (DC) isolation protection for each serial port
- > Surge protection for serial, power, and Ethernet
- > 15 KV ESD surge protection for all serial signals
- > Adjustable pull high/low resistor and terminator for RS-485 ports

NPort 5600 Desktop Series (page 8-35)

8-port RS-232/422/485 serial device servers

Features

- > 8 serial ports supporting RS-232/422/485
- > Compact desktop design
- > 10/100M auto-detecting Ethernet
- > Built-in 15 KV ESD protection for all serial signals
- > Easy IP address configuration with LCD panel
- > Choice of configuration methods: Web console, Telnet console, and Windows utility
- > Versatile socket operation modes, including TCP Server, TCP Client, UDP, and Real COM
- > SNMP MIB-II for network management
- > Built-in recorder: Use your own voice as the alert when exceptions occur

MiiNePort E1 Series (page 8-42)



10/100 Mbps embedded serial device servers



Features

- > Same size as an RJ45 connector—only 33.9 x 16.25 x 13.5 mm
- > Extremely low power consumption—only 600 mW @ 3.3 VDC input
- > Uses the MiiNe, Moxa's second generation SoC
- > NetEz technology makes integration incredibly easy
- > Versatile choice of operation modes: Real COM, RFC2217, TCP Server, TCP Client, UDP, and Modem

WE-2100T Series (page 8-49)

Wireless LAN embedded serial device servers

Features

- > Connects serial devices to IEEE 802.11a/b/g networks
- > Choice of operation modes: Real COM, TCP Server, TCP Client, UDP, and RFC2217
- > Windows (including Vista) Real COM and Linux fixed TTY drivers provided
- > Wireless security with WEP, WPA, and WPA2
- > Select any baudrate between 50 bps and 921.6 Kbps
- > 9 programmable digital I/O channels
- > SSL/SSH encryption for configuration
- > Compact size and easy to mount housing

Ethernet Fieldbus Gateways

MGate[™] MB3170/3270 (page 9-8)

1 and 2-port advanced serial-to-Ethernet Modbus gateways



Features

- > Configuration is exceptionally easy
- > Slave mode supports 16 TCP masters and up to 62 serial slaves at the same time
- > Master mode supports 32 TCP slaves at the same time
- > Emergency request tunnels ensure QoS control
- > Serial redirector function provided
- > Embedded Modbus protocol analyzer
- > Redundant dual DC power inputs
- > Built-in Ethernet cascading for easy wiring

MGate EIP3000 (page 9-13)

1 and 2-port DF1 to Ethernet/IP gateways



- > Supports PCCC objects for Rockwell Automation networks
- > Supports 8 simultaneous Ethernet/IP clients with up to 16 simultaneous requests per client
- > Serial redirector function provided
- > Remote serial port for multiple DF1 device communication
- > Embedded Ethernet/IP and DF1protocol analyzer
- > Redundant dual DC power inputs
- > Built-in Ethernet cascading for easy wiring

***** Multiport Serial Boards

CP-102E/EL (page 10-26)

2-port RS-232 PCI Express boards





Features

- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4/2.6, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
- > 15 KV ESD protection on the board

CP-132EL/EL-I (page 10-28)

2-port RS-422/485 PCI Express boards with optional 2 KV isolation





Features

- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4/2.6, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
- > 15 KV ESD protection on the board

CP-112UL/112UL-I Series (page 10-52)

2-port RS-232/422/485 Universal PCI serial boards with optional 2 KV isolation



Features

- > Over 700 Kbps data throughput for top performance
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Universal PCI compatible with 3.3/5 V PCI and PCI-X
- > Serial communication speed up to 921.6 Kbps
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Windows CE 5.0/6.0, Windows XP Embedded, Linux 2.4/2.6, SCO OpenServer 5/6, UnixWare 7
- > Easy maintenance with on-board LED display
- > On-board 15 KV ESD and 2 KV optical isolation protection
- > Wide temperature model available for -40 to 85°C environments

USB Connectivity

UPort™ 2210/2410 (page 11-23)

2 and 4-port RS-232 USBto-serial converters



Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Additional I/O and IRQ not needed
- > Built-in 15 KV ESD protection for all serial ports
- > Certified drivers provided for Windows (including Vista) and Linux
- > Supports Fixed-Base COM Utility for setting the initial COM port number
- > LEDs for easy monitoring

CP-114EL/EL-I (page 10-22)

4-port RS-232/422/485 PCI Express boards with optional 2 KV isolation





Features

- > PCI Express x1 compliant
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W. S/W flow control
- > Low profile form factor fits small-sized PCs
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Linux 2.4/2.6, QNX 6, Windows XP Embedded, SCO OpenServer 5/6, UnixWare 7
- > 15 KV ESD protection on the board

CP-114UL/114UL-I (page 10-46)

4-port RS-232/422/485 Universal PCI serial board with optional 2 KV isolation





Features

- > Over 700 Kbps data throughput for top performance
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Universal PCI compatible with 3.3/5 V PCI and PCI-X
- > Serial communication speed up to 921.6 Kbps
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64, 9X/ ME/NT), Windows CE 5.0/6.0, Windows XP Embedded, DOS, Linux 2.4/2.6, FreeBSD 4/5, QNX 6, SCO Open Server 5/6, UnixWare 7
- > Easy maintenance with on-board LED display
- > On-board 15 KV ESD and 2 KV optical isolation protection
- Wide temperature model available for -40 to 85°C environments

CP-102UF Series (page 10-60)

2-port Universal PCI serial over fiber boards

Features

- > Extend serial transmission distance up to:
- 40 km with single mode—CP-102UF-S-ST
- 5 km with multi-mode—CP-102UF-M-ST
- > Supports "Ring" and "Point-to-Point" transmission modes
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > 128-byte FIFO and on-chip H/W, S/W flow control
- > Compatible with 3.3/5 V PCI and PCI-X
- > Drivers provided for Windows (2000, XP/2003/Vista/2008 x86/x64), Windows XP Embedded, Windows CE 5.0/6.0, DOS, Linux 2.4, Linux 2.6 (x86/x64), QNX 6, SCO OpenServer 5/6, UnixWare 7
- > Easy maintenance with on-board LED display and management software
- > Immune from signal interference
- > Guards against electronic degradation and chemical corrosion
- > Wide temperature model available for -40 to 85°C environments

■ UPortTM 2230/2430 (pages 11-25)

2 and 4-port RS-422/485 USB-to-serial converters



- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > 921.6 Kbps maximum baudrate for super fast data transmission
- > Additional I/O and IRQ not needed
- > Built-in 15 KV ESD protection for all serial ports
- > Certified drivers provided for Windows (including Vista) and Linux
- > Supports Fixed-Base COM Utility for setting the initial COM number
- > LEDs for easy monitoring

UPortTM 404/407 (page11-27)

4 and 7-port industrial-grade USB hubs



Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > USB-IF certification
- > Dual power supply (power jack and terminal block)
- > 15 KV ESD Level 4 protection for all USB ports
- > Rugged metal housing
- > DIN-Rail and wall mountable
- > Comprehensive diagnostic LEDs
- > Choose bus power or external power (UPort™ 404)

UPort™ 204/207 (page 11-29)

4 and 7-port entry-level USB hubs



Features

- > Hi-Speed USB 2.0 for up to 480 Mbps USB transmission
- > USB-IF Certification
- > Compatible with USB 1.1 devices
- > 15 KV ESD Level 4 protection for all USB ports
- > Wall mountable
- > Comprehensive diagnostic LEDs
- > Full 500 mA of power per port
- > Choose bus power or external power (UPort™ 204 only)

Media Converters

TRC-190 Series (page 12-7)

Rackmount chassis for the NRack System



Features

- > 19-inch chassis for rackmount use
- > 19 slots for high density applications
- > Supports hot-swap and dual power input with redundancy
- > Fan-less chassis design reduces repair time

TCF-142-RM Series (page 12-9)

RS-232/422/485 to fiber slide-in modules for the NRack System



Features

- > Extend RS-232/422/485 transmission up to:
 - 40 km with single mode
 - 5 km with multi-mode
- > 1K or 150K ohm adjustable pull high/low resistor
- > "Ring" and "Point-to-Point" transmission supported

ICF-1150 Series (page 12-11)

Industrial serial-to-fiber converters



Features

- > RS-232, fiber, and RS-422/485 3-way communication
- > Rotary switch to change the pull high/low resistor value
- > Extend RS-232/422/485 transmission up to:
 - 40 km with single-mode
 - 5 km with multi-mode
- > 3-way Galvanic Isolation (for "I" model only)
- > -40 to 85°C wide temperature models available
- > Class I. Div. II certification (Pending)

TCF-90 Series (page 12-17)

Port-powered RS-232 to optical

fiber media converters

TCF-142 Series (page 12-14)

RS-232/422/485 to optical fiber media converters



Features

- > "Ring" and "Point-to-Point" transmission
- > Extends RS-232/422/485 transmission up to:
 - 40 km with single-mode—TCF-142-S
 - 5 km with multi-mode—TCF-142-M
- > Compact size
- > Decreases signal interference
- > Protects against electrical interference and chemical corrosion
- > Supports baudrates of 50 bps to 921.6 Kbps
- > Wide temperature models available (-40 to 75°C)

TCF-100/1001 Series (page 12-19)

Industrial RS-232 to RS-422/485 converters with optional 2 KV isolation

Features

- > Use either external power or power over serial
- > Extends RS-232 transmission up to:
 - 40 km with single-mode—TCF-90-S
 - 5 km with multi-mode—TCF-90-M
- > Reduces signal interference
- > Protects against electrical interference or chemical corrosion
- > 15 KV ESD protection for serial signals
- > Baudrates up to 115.2 Kbps
- > Compact size

- > RS-232 to RS-422 conversion with RTS/CTS support
- > RS-232 to 2-wire or 4-wire RS-485 conversion
- > 2 KV isolation protection (TCC-100I)
- > Wall and DIN-rail mounting
- > Plug-in terminal block for easy RS-422/485 wiring
- > LED indicators for power, Tx, Rx
- > -20 to 60°C operating temperature
- > Wide temperature model available (-40 to 85°C)



WLAN & Cellular Solutions

AWK-4222 Series (page 13-16)



Industrial IEEE 802.11a/b/g outdoor dual-RF AP/Bridge/Client



Features

- > IEEE 802.11a/b/g compliant
- > Redundant power inputs and PoE
- > Higher security with WEP/WPA/WPA2/802.11X and powerful filters
- > Turbo Roaming™ for seamless wireless connections
- > Dual-RF design for redundant wireless communication
- > Wide operating temperature range and IP67-rated metal housing for hazardous environments

AWK-3222 Series (page 13-20)



Industrial IEEE 802.11a/b/g dual-RF AP/Bridge/Client



Features

- > IEEE 802.11a/b/g compliant
- > Redundant power inputs and PoE
- > Higher security with WEP/WPA/WPA2/802.11X and powerful filters
- > Turbo Roaming™ for seamless wireless connections
- > Dual-RF design for redundant wireless communication

OnCell 5004/5104-HSDPA (page 13-34)



Industrial tri-band UMTS/HSDPA high speed cellular routers



Features

- > Universal tri-band UMTS/HSDPA 850/900/2100 MHz
- > Industrial primary and backup wireless WAN connectivity
- > Connect up to 4 10/100BaseT(X) devices
- > Redundant DC power inputs
- > 2 digital inputs and 1 relay output (OnCell 5104-HSDPA only)

OnCell G3110/3150-HSDPA (page 13-38)

Industrial tri-band UMTS/HSDPA IP gateways





Features

- > Universal tri-band UMTS/HSDPA 850/900/2100 MHz
- > Bring 10/100Base-T and serial devices together
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM. Reverse Real COM. and RFC2217
- > Secure modes for TCP Server, TCP Client, Real COM, and Reverse Real COM
- > Redundant DC power inputs
- > Two digital inputs and 1 relay output
- > Centralize private IP management software
- > DIN-Rail mounting

AWK-4121 Series (page 13-18)

Industrial IEEE 802.11a/b/q outdoor wireless AP/Bridge/Client



Features

- > IEEE 802.11a/b/g compliant
- > Redundant power inputs and PoE
- > Higher security with WEP/WPA/WPA2/802.11X and powerful filters
- > Turbo Roaming™ for seamless wireless connections
- > Long-distance communication support
- > Wide operating temperature range and IP67-rated metal housing for hazardous environments

AWK-3121 Series (page 13-22)

Industrial IEEE 802.11a/b/g wireless AP/Bridge/Client



Features

- > IEEE 802.11a/b/g compliant
- > Power input by redundant 24 VDC power inputs or Power-over-Ethernet
- > Powerful security with WPA/WPA2/802.11X filters
- > Turbo Roaming™ for seamless wireless connection
- > Long-distance communication support
- > STP/RSTP support to increase reliability
- > DIN-Rail or wall mounting ability
- > IP30 protected high-strength metal housing
- > -40 to 75°C operating temperature range (T models)

OnCell 5004/5104 (page 13-36)



Industrial quad-band GSM/GPRS cellular routers





Features

- > Universal guad-band GSM/GPRS 850/900/1800/1900 MHz
- > Industrial primary and backup wireless WAN connectivity
- > Connect up to 4 10/100BaseT(X) devices
- > Redundant DC power inputs
- > 2 digital inputs and 1 relay output (OnCell 5104 only)

OnCell G3110/3150 (page 13-40)

Industrial quad-band GSM/ GPRS/EDGE IP gateways



- > Connect both Ethernet and serial devices to cellular networks
- > Universal quad-band GSM/GPRS/EDGE-850/900/1800/1900 MHz
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM, and RFC2217
- > Secure modes for TCP Server, TCP Client, and Real COM
- > Redundant DC power input
- > 2 digital inputs and 1 relay output
- > Centralize private IP management software
- > DIN-Rail mounting

OnCell G3111/3151/3211/3251 (page 13-42)



1 and 2-port RS-232 or RS-232/422/485 cellular IP modems



Features

- > Universal quad-band GSM/GPRS 850/900/1800/1900 MHz
- > Choice of operation modes, including TCP Server, TCP Client, UDP, Real COM and Reverse Real COM
- > Management software: private IP management with OnCell Central
- > Choice of configuration methods, including web console, serial console, and Telnet
- > Desktop or DIN-Rail installation

NPort® W2150/2250 Plus (page 13-26)

1 and 2-port RS-232/422/485 IEEE 802.11a/b/g wireless device servers



Features

- > Link any serial device to an IEEE 802.11a/b/g network
- > 921.6 Kbps baudrate for RS-232/422/485 transmissions
- > Web-based configuration using built-in Ethernet or WLAN
- > Enhanced remote configuration with HTTPS, SSH
- > Secure data access with WEP, WPA, WPA2
- > Built-in WLAN site survey tool
- > Wireless roaming with user-defined signal strength threshold
- > Off-line port buffering and serial data log
- > Dual power inputs (1 power jack, 1 terminal block)

Embedded Computers for Communication

V462 Series (page 15-8)

x86-based computers with 4 serial ports, dual LANS, VGA, CompactFlash, PCMCIA, USB

- > AMD Geode LX 800@0.9W CPU. 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB of SRAM with battery backup
- > Dual 10/100 Mbps Ethernet ports for network redundancy
- > 4 USB 2.0 hosts supporting system boot up
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > -40 to 75°C wide temperature model available

V464 Series (page 15-11)

x86-based computers with 4 serial ports. quad LANs, VGA, CompactFlash, USB

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB of SRAM with battery backup
- > Quad 10/100 Mbps Ethernet ports for network redundancy
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > -40 to 75°C wide temperature model available

V466 Series (page 15-14)

x86-based computers with 4 serial ports, quad LANs, VGA, CompactFlash, built-in 8-port Ethernet switch, USB

Features

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB battery backup SRAM
- > Quad 10/100 Mbps Ethernet ports for network redundancy
- > Built-in 8-port Ethernet switch for connecting network devices
- > 4 USB 2.0 hosts supporting system boot up
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > Robust, fan-less design
- > -40 to 75°C wide temperature model available

V468 Series (page 15-17)

x86-based computers with 4 serial ports, quad LANS, VGA, 8 DIS, 8 DOS, CompactFlash, USB

- > AMD Geode LX 800@0.9W CPU, 500 MHz
- > Built-in 256 MB (CE) or 512 MB (XPe) DDR SDRAM
- > Built-in 256 MB (CE) or 1 GB (XPe) industrial DOM to store the operating system
- > 256 KB battery backup SRAM
- > Quad 10/100 Mbps Ethernet ports for network redundancy
- > 8 DI and 8 DO interfaces for digital input/output connections, with 3 KV isolation protection
- > 4 USB 2.0 hosts supporting system boot up
- > LED indicators for power, battery, storage
- > Ready-to-run WinCE 6.0 or Windows XP Embedded platform
- > -40 to 75°C wide temperature model available

UC-8410 Series (page 15-23)

RISC-based industrial embedded computers with 8 serial ports, 3 LANs, DIO, 2 CAN ports, CompactFlash, USB

- > Intel XScale IXP435 533 MHz processor
- > 256 MB DDR2 SDRAM and 16 MB Flash ROM onboard
- > 32 MB NAND Flash for data storage
- > 8 RS-232/422/485 serial ports
- > 4 digital input and 4 digital output channels
- > 3 10/100 Mbps Ethernet ports > 2 USB 2.0 hosts for mass storage devices
- > Ready-to-run Linux platform
- > Robust, fanless design > Wide temperature model available



RISC-based industrial embedded computers with 8 serial ports, 3 LANs, DIO, 8 built-in Ethernet switch ports, CompactFlash, USB

- > Intel XScale IXP435 533 MHz processor
- > 256 MB DDR2 SDRAM and 16 MB Flash ROM onboard
- > 32 MB NAND Flash for data storage
- > 8 RS-232/422/485 serial ports
- > 8 Ethernet switch ports
- > 4 digital input and 4 digital output channels
- > 3 10/100 Mbps Ethernet ports
- > 2 USB 2.0 hosts for mass storage devices
- > Ready-to-run Linux platform
- > -40 to 75°C wide temperature model available



UC-8418 Series (page 15-29)

RISC-based industrial embedded computers with 8 serial ports, 3 LANs, DIO, 2 CAN ports, CompactFlash, USB

Features

- > Intel XScale IXP435 533 MHz processor
- > 256 MB DDR2 SDRAM and 16 MB Flash ROM onboard
- > 32 MB NAND Flash for data storage
- > 8 RS-232/422/485 serial ports
- > 2 CANhus norts
- > 12 digital input and 12 digital output channels
- > 3 10/100 Mbps Ethernet ports
- > 2 USB 2.0 hosts for mass storage devices
- > Ready-to-run Linux platform
- > Robust, fanless design
- > -40 to 75°C wide temperature model available

DA-682 Series (page 15-52)

x86-based rackmount computers with VGA, 4 Gigabit Ethernet ports, 2 peripheral expansion slots. CompactFlash. USB



Features

- > Intel Celeron M 1 GHz processor with 400 MHz FSB
- > Built-in DDR2 SDRAM and industrial flash disk module
- > Quad Gigabit Ethernet ports for network redundancy
- > Software selectable RS-232/422/485 with 2 KV isolation protection
- > PCI expansion slots for inserting expansion modules
- > 1 CompactFlash socket for storage expansion
- > USB 2.0 ports for high speed peripherals, supporting system bootup
- > 19-inch rackmount, 2U high form factor
- > 100/240 VAC/VDC power inputs
- > Ready-to-Run Linux, WinCE 6.0, or Windows XP Embedded platform
- > Fanless design

DA-681 Series (page 15-49)

x86-based rackmount embedded computer with 4 isolated RS-232 and 8 isolated RS-485 ports, 6 LANs, VGA, CompactFlash, USB



Features

- > Intel Celeron M 1 GHz processor with 400 MHz FSB
- > 1 x 200-pin DDR2 SODIMM socket, supporting DDR2 400 up to 1 GB
- > 6 10/100 Mbps Ethernet ports
- > 1 CompactFlash socket, 1 IDE and serial ATA-150 connectors for storage expansion
- > USB 2.0 ports for high speed peripherals
- > Serial port speed from 50 to 921.6 Kbps, supporting nonstandard baudrates
- > Embedded Linux, WinCE 6.0, or WinXPe platform
- > 19-inch rackmount model, 1U high
- > Dual 100/240 VAC/VDC power input (DP/PP version)
- > Fanless Design

Embedded Computers for Automation

IA260 Series (page 16-3)

RISC-based computers with 4 serial ports, dual LANs, VGA, DIO, CompactFlash, USB



Features

- > Cirrus Logic EP9315 ARM9 CPU, 200 MHz
- > 128 MB RAM on-board, 32 MB flash disk
- > 4 software-selectable RS-232/422/485 serial ports
- > VGA interface for field site monitoring
- > Dual 10/100 Mbps Ethernet for network redundancy
- > 8+8 DI/DO channels, up to 30 VDC12 to 48 VDC power input design
- > Supports CompactFlash and USB 2.0 hosts
- > Ready-to-run Linux or WinCE 6.0 platform
- > H-type heat dissipation design for system reliability
- > -40 to 75°C wide operating temperature model available

IA-261-I/262-I Series (page 16-6)

RISC-based computers with 2 or 4 digitally isolated serial ports, dual LANs, VGA, CAN, DIO, CompactFlash, USB



- > Cirrus Logic EP9315 ARM9 CPU, 200 MHz
- > 128 MB RAM on-board, 32 MB flash disk
- > VGA interface for field site monitoring
- > 2 KV digitally isolated RS-232/422/485 serial ports
- > Dual 10/100 Mbps Ethernet for network redundancy
- > Dual 2 KV digitally isolated CAN ports with CANopen protocol support
- > 8+8 DI/DO with 3 KV optical isolation protection
- > 12 to 48 VDC redundant power input design
- > Supports CompactFlash and USB 2.0 hosts
- > Ready-to-run Linux or WinCE 6.0 platform
- > -40 to 75°C wide temperature models available

Product Selection Guides

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Product Selection Guides



Managed Ethernet Switches

	Managad Dackmaur	at Cusitabaa	Managad DIN Dail (Puritohaa				
	Managed Rackmour	it Switches	Managed DIN-Rail S	SWITCHES				
	THE REAL PROPERTY.	THEFT						
	IKS-6726	IKS-6726-PoE	EDS-828	EDS-728	EDS-608	EDS-G509	EDS-518A	EDS-510A
Supported Modules							<u> </u>	
Gigabit Ethernet Modules	√	V	√	V				
Fast Ethernet Modules	√	V	√	V	√			
SFP Gigabit Ethernet	√	√	√	√		√	V	V
Modules SFP Fast Ethernet	· ·	· √				√		
Modules	V	V				V		
Number of Ports Max. Number of Ports	26	26	28	28	8	9	18	10
Gigabit Ethernet,	up to 2	up to 2		up to 4		9	2	3
10/100/1000 Mbps Fast Ethernet,			up to 4			9		
10/100 Mbps	up to 24	up to 24	up to 24	up to 24	8		16	7
Available Power Supplies	_							
3.3 VDC 24 VDC	 √	 √	 √	 √			√	 √
24 VAC								
48 VDC	√	√						
12/24/48 VDC					√	√		
88-300 VDC or 85-264 VAC, isolated	\checkmark	\checkmark						
Installation Options								
DIN-Rail Mounting			√	\checkmark	$\sqrt{}$	√	√	\checkmark
Panel Mounting Rack Mounting	√	 √	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit
Supported Operating Tem		V	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit
0 to 60°C			√	V	√	V	V	√
-10 to 60°C								
-40 to 75°C	\checkmark	√			√	\checkmark	\checkmark	\checkmark
Redundancy and Backup								
Turbo Ring (Recovery Time < 20 ms)	√	√	\checkmark	\checkmark	√	\checkmark	√	\checkmark
STP/RSTP	√	V	√	√	√	√	\checkmark	\checkmark
Automatic Backup Configurator (ABC-01)	√	$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$	\checkmark	\checkmark	\checkmark
Network Management an	d Control							
Layer 3 Switching			√					
IPv6 DHCP Option 66/67/82	√ √	√ √	 √	√ √	√ √	√ √	√ √	√ √
IEEE 1588 PTP	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √
LLDP	√	√	√ √	√	√	V	√	√ √
Modbus/TCP	√	V	\checkmark	$\sqrt{}$	\checkmark	\checkmark	√	√
IGMP/GMRP			1	1		1		
Port Trunking	√	√	√ √	√ √	1	√ √	1	1
Port Trunking IEEE 802.1X			√ √ √	√ √ √	√ √ √	√ √ √	√ √ √	√ √ √
IEEE 802.1X Port Lock	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	√ √ √	\ \ \	√ √ √	√ √ √	\ \ \	\ \ \	√ √
IEEE 802.1X Port Lock SNMP/RMON	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \	\ \ \ \	\ \ \ \ \	√ √ √	\ \ \ \ \	\ \ \ \ \	√ √
IEEE 802.1X Port Lock SNMP/RMON VLAN	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \	\ \ \ \ \ \	\frac{1}{\sqrt{1}}	\ \ \ \ \ \ \	√ √ √
IEEE 802.1X Port Lock SNMP/RMON	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \	\ \ \ \	\ \ \ \ \	√ √ √	\ \ \ \ \	\ \ \ \ \	√ √
IEEE 802.1X Port Lock SNMP/RMON VLAN QoS Relay Warning Regulatory Approvals	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \	4 4 4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \
IEEE 802.1X Port Lock SNMP/RMON VLAN OoS Relay Warning Regulatory Approvals CE/FCC	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
IEEE 802.1X Port Lock SNMP/RMON VLAN QoS Relay Warning Regulatory Approvals CE/FCC UL/cUL 60950-1	√ √ √ √ V √ V ← Pending	V V V V V Pending	√ √ √ √ Pending	√ √ √ √ V Pending	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
IEEE 802.1X Port Lock SNMP/RMON VLAN QoS Relay Warning Regulatory Approvals CE/FCC UL/cUL 60950-1 UL508	\ \lambda	√ √ √ √ √ √ Pending	√ √ √ √ √ Pending	√ √ √ √ √ √ √ √ √ Pending Pending	√ √ √ √ √ √ √ Pending	√ √ √ √ √ · · · · Pending	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
IEEE 802.1X Port Lock SNMP/RMON VLAN OoS Relay Warning Regulatory Approvals CE/FCC UL/cUL 60950-1 UL508 UL/cUL Class I, Div. 2; ATEX Class I, Zone 2	\ \lambda	√ √ √ √ √ √ √ √ √ Pending	√ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √ √	√ √ √ √ √ √ Pending Pending	√ √ √ √ √ √ −−− Pending Pending	√ √ √ √ √ √ √ √ Pending	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
IEEE 802.1X Port Lock SNMP/RMON VLAN QoS Relay Warning Regulatory Approvals CE/FCC UL/cUL 60950-1 UL508	\ \lambda	√ √ √ √ √ √ Pending	√ √ √ √ √ Pending	√ √ √ √ √ √ √ √ √ Pending Pending	√ √ √ √ √ √ √ Pending	√ √ √ √ √ · · · · Pending	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \

Managed Ethernet Switches

	Managed DIN-Rail Sw	itches					
		-					
	EDS-505A	EDS-508A	EDS-516A	EDS-405A	EDS-408A	EDS-P510	EOM-104
Supported Modules					<u>'</u>	<u>'</u>	
Gigabit Ethernet Modules							
Fast Ethernet Modules							
SFP Gigabit Ethernet Modules						\checkmark	
SFP Fast Ethernet Modules						\checkmark	
Number of Ports							
Max. Number of Ports	5	8	16	5	8	10	4
Gigabit Ethernet, 10/100/1000 Mbps						3	
Fast Ethernet, 10/100 Mbps	5	8	16	5	8	7 (4 PoE)	4
Available Power Supplies							,
3.3 VDC 24 VDC	 √	 √	 √	 √	 √		√
24 VAC							
48 VDC						√	
12/24/48 VDC 88-300 VDC or							
85-264 VAC, isolated							
Installation Options			,	,		,	
DIN-Rail Mounting Panel Mounting	√ w/ optional kit	√ w/ optional kit	√ w/ontional kit	√ w/ optional kit	√ w/ optional kit	√ w/ontional kit	
Rack Mounting	w/ optional kit	w/ optional kit w/ optional kit	w/ optional kit w/ optional kit	w/ optional kit w/ optional kit	w/ optional kit	w/ optional kit w/ optional kit	
Supported Operating Tem					·	·	
0 to 60°C	√	\checkmark	\checkmark	\checkmark	V	√	
-10 to 60°C -40 to 75°C	 √	 √	 √	 √	 √	 √	 √
Redundancy and Backup		V	V	V	V	V	V
Turbo Ring (Recovery Time < 20 ms)	√ V	V	V	√	V	V	\checkmark
STP/RSTP	√	√	√	√	√	√	√
Automatic Backup Configurator (ABC-01)	√	\checkmark	√	√	√	V	
Network Management and	d Control						
Layer 3 Switching							
IPv6	1	√ 	1	√ .1	√ .1	1	
DHCP Option 66/67/82 IEEE 1588 PTP	√ √	√ √	√ √	√ 	√ 	√ √	
LLDP	1	1	√	√	√	V	
Modbus/TCP	1	√ 	1	√	√	√ 	
IGMP/GMRP Port Trunking	√ √	√ √	√ √			√ √	
IEEE 802.1X	1	1	√ √			√ √	
Port Lock	√	\checkmark	\checkmark			√	
SNMP/RMON VLAN	√ √	√ √	√ √	√ √	√ √	√ √	√
QoS	√ √	V	V √	√ √	√ √	√ √	
Relay Warning	V	V	√	√	1	√	
Regulatory Approvals							
CE/FCC	√ 1	√ -1	√ -/	√ -/	√ -/	V	√
UL/cUL 60950-1 UL508	√ √	√ √	√ √	√ √	√ √	Pending	
UL/cUL Class I, Div. 2; ATEX Class I, Zone 2	√ √	√ ·	Pending	√ √	√ √	Pending	
DNV/GL	√	\checkmark	√	\checkmark	√	Pending	
NEMA TS2							
EN50155/EN50121-4							

Unmanaged Ethernet Switches

	Unmanaged	Unmanaged DIN-Rail S	witches				
	Rackmount Switches						
	-				-		
	IKS-6324	EDS-G205	EDS-G308	EDS-305	EDS-308	EDS-309	EDS-316
Supported Modules							
Gigabit Ethernet Modules	√						
Fast Ethernet Modules	V						
SFP Gigabit Ethernet Modules	√		√				
SFP Fast Ethernet Modules			√				
Number of Ports							
Max. Number of Ports	24	5	8	5	8	9	16
Gigabit Ethernet, 10/100/1000 Mbps	Up to 2	5	8				
Fast Ethernet, 10/100 Mbps	Up to 24			5	8	9	16
Available Power Supplies							
24 VDC				$\sqrt{}$	$\sqrt{}$	\checkmark	$\sqrt{}$
24 VAC							
48 VDC							
12/24/48 VDC	$\sqrt{}$	\checkmark	\checkmark				
88-300 VDC or 85-264 VAC, isolated	\checkmark						
Installation Options							
DIN-Rail Mounting		$\sqrt{}$	V	√	V	√	$\sqrt{}$
Panel Mounting		w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit
Rack Mounting	$\sqrt{}$	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit
Supported Operating Tem	peratures						
0 to 60°C		$\sqrt{}$	1	$\sqrt{}$	1	$\sqrt{}$	\checkmark
-10 to 60°C							
-40 to 75°C	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Regulatory Approvals							
CE/FCC	√	√	√	√	√	√	√
UL/cUL 60950-1	Pending			\checkmark	\checkmark	\checkmark	\checkmark
UL508		Pending	Pending	\checkmark	\checkmark	\checkmark	\checkmark
UL/cUL Class I, Div. 2; ATEX Class I, Zone 2		Pending	Pending	√	\checkmark	\checkmark	Pending
DNV/GL	Pending	Pending	Pending	\checkmark	\checkmark	\checkmark	\checkmark
NEMA TS2	\checkmark						
EN50155/EN50121-4	$\sqrt{}$						

Unmanaged Ethernet Switches

	Unmanaged DIN-Rail Switches				
	EDS-205A	EDS-208A	EDS-205	EDS-208	EDS-P308
Supported Modules					
Gigabit Ethernet Modules					
Fast Ethernet Modules					***
SFP Gigabit Ethernet Modules					
SFP Fast Ethernet Modules					
Number of Ports					
Max. Number of Ports	5	8	5	8	8
Gigabit Ethernet, 10/100/1000 Mbps					
Fast Ethernet, 10/100 Mbps	5	8	5	8	8 (4 PoE)
Available Power Supplies					
24 VDC			V	\checkmark	
24 VAC	\checkmark	\checkmark	\checkmark	\checkmark	
48 VDC					\checkmark
12/24/48 VDC	√	\checkmark		•••	
88-300 VDC or 85-264 VAC, isolated					
Installation Options					
DIN-Rail Mounting	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Panel Mounting	w/ optional kit	w/ optional kit			w/ optional kit
Rack Mounting	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit	w/ optional kit
Supported Operating Tem	peratures				
0 to 60°C					\checkmark
-10 to 60°C	√	√	\checkmark	$\sqrt{}$	
-40 to 75°C	$\sqrt{}$	\checkmark			\checkmark
Regulatory Approvals	,	,	,		
CE/FCC	√	√	$\sqrt{}$	√	√
UL/cUL 60950-1				√	
UL508	√	√	√	√	√
UL/cUL Class I, Div. 2; ATEX Class I, Zone 2	Pending	Pending			Pending
DNV/GL	Pending	Pending			Pending
NEMA TS2					
EN50155/EN50121-4					

M12 Ethernet Switches















			a loring and		200	269	0-0
	TN-5508 Series	TN-5510 Series	TN-5516 Series	TN-5518 Series	TN-5308 Series	TN-5308-PoE Series	EDS-305-M12 Series
Number of Ports	•	_		•	•		•
Max. Number of Ports	8	10	16	18	8	8	5
Gigabit Ethernet, 10/100/1000 Mbps		2		2			
Fast Ethernet, 10/100 Mbps	8	8	16	16	8	8 (4 PoE)	5
Power Supply							
12/24/36/48 VDC	V	V	V	V	√ (LV Model)		
72/96/110 VDC	\checkmark	\checkmark	$\sqrt{}$	√	√ (MV Model)		
80-300 VDC, 85-264 VAC	\checkmark	\checkmark	\checkmark	√			
24 VDC							$\sqrt{}$
48 VDC						\checkmark	
24 VAC							\checkmark
Installation Options							
DIN-Rail Mounting	w/ optional kit	w/ optional kit					
Panel Mounting	$\sqrt{}$	√	1	√	√	1	√
Operating Temperature							
0 to 60°C	V	V	V	√	V	√	V
-40 to 75°C	√ √	√ √	√ √	√ √	√ √	√ √	1
Redundancy and Backup Option		,	,	`	,	<u>'</u>	,
Turbo Ring (Recovery Time < 20 ms)	√	V	V	√			
STP/RSTP	√	√	V	V			
Network Management and Cor		V	V	V			
IPv6	√	V	V	V			
DHCP Option 66/67/82	√ √	√ √	√ √	V √			
IEEE 1588 PTP	√ √	1	2/	2/			
LLDP	√ √	√ √	√ √	√ √			
Modbus/TCP	7	1	\ \	v 2			
IGMP/GMRP	√ √	1	√ √	√ √			
Port Trunking	V	V	\ 	√ √			
IEEE 802.1X	√ √	V	√ √	√ √		***	
Port Lock	√ √	V	V	√ √			
SNMP/RMON	√ √	√	V	√			
VLAN	√	√	V	√			
QoS	1	√ √	1	√			
Relay Warning	√ √	√ √	1	√ √			
Regulatory Approvals							
CE/FCC	V	V	√	√	V	√	V
UL508	Pending	Pending	Pending	Pending	Pending	Pending	1
Traffic Control Systems: NEMA TS2 e1	Pending Pending	Pending Pending	Pending Pending	Pending Pending	Pending Pending	Pending Pending	
Railway Applications: EN50155 EN50121-3-2 EN50121-4	Pending Pending Pending	Pending Pending Pending	Pending Pending Pending	Pending Pending Pending	Pending Pending Pending	Pending Pending Pending	√ Pending Pending
DNV/GL							Pending

IEC 61850-3 Rackmount Ethernet Switches

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		MIN NO. 11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	**** **** *** ****
	PT-7828	PT-7728	PT-7710	PT-7324
Supported Modules	11.7023	111123	1	11.1021
Gigabit Ethernet Modules	V		V	V
Fast Ethernet Modules	√ √	√ √	V	√ √
SFP Gigabit Ethernet Modules	√ √	√ √	√ √	√ √
SFP Fast Ethernet Modules	√	√	√	
Number of Ports				
Max. Number of Ports	28	28	10	24
Gigabit Ethernet, 10/100/1000 Mbps	Up to 4	Up to 4	Up to 2	Up to 2
Fast Ethernet, 10/100 Mbps	Up to 24	Up to 24	Up to 10	Up to 24
Power Supply				
24 VDC, isolated	V			
48 VDC, isolated	\ \ √	\ \ \		
12/24/48 VDC			√	<i>√</i>
88-300 VDC or 85-264 VAC, isolated	1	√	√ √	√ √
Installation Options				
Rack Mounting	√	√	\checkmark	V
Panel Mounting			<i>√</i>	
Operating Temperature			·	
-40 to 85°C	V	√	V	V
	·	V	V	V
Redundancy and Backup Opt				
Turbo Ring (Recovery Time < 20 ms)	√	√	√	
STP/RSTP	√	√	\checkmark	
Automatic Backup Configurator (ABC-01)	√	\checkmark	\checkmark	
Network Management and C	ontrol			
Layer 3 Switching	\checkmark			
IPv6		\checkmark	\checkmark	
DHCP Option 66/67/82	\checkmark	\checkmark	\checkmark	
IEEE 1588 PTP	\checkmark	\checkmark	\checkmark	
LLDP	\checkmark	\checkmark	\checkmark	
Modbus/TCP	√	$\sqrt{}$	\checkmark	
IGMP/GMRP	√	V	√	
Port Trunking	√	√	√	
IEEE 802.1X	√	V	√	
Port Lock	√	V	√	
SNMP/RMON	√	V	√	
VLAN	√ ,	√	√	√
QoS Balan Wanning	√	√ 	√ 	√
Relay Warning	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Regulatory Approvals		1		,
CE/FCC	√ 	√ 	√ 	√
UL/cUL 60950-1 IEC 61850-3 (Power	Pending √	Pending √	Pending √	Pending √
Substation) IEEE 1613 (Power	√ √	√ √	√ √	√ √
NEMA TS2 (Traffic Control	√ √	√ √	√ √	√ √
System) EN50155/EN50121-4 (Railway Applications)	√	√	·	√
DNV/GL	Pending	Pending	Pending	Panding
DIVV/GL	Pending	renung	renung	Pending

Stand-alone Type I/Os













Model	ioLogik W5340	ioLogik E2210	ioLogik E2212	ioLogik E2214	ioLogik E2240	ioLogik E2242
Category	Cellular GPRS I/O	Active Ethernet I/O	Active Ethernet I/O	Active Ethernet I/O	Active Ethernet I/O	Active Ethernet I/O
Comm. Interface	GPRS, 10/100M Ethernet	10/100M Ethernet				
I/O Combination	4 Als, 8 DIOs, 2 Relays	12 DIs, 8 DOs	8 DIs, 8 DOs, 4 DIOs	6 DIs, 6 Relays	8 Als, 2 AOs	4 Als, 12 DIOs
Control Protocol	Modbus/TCP, SNMP, OPC	Modbus/TCP, SNMP, OPC, Http-CGI				
Local Intelligence	Click&Go	Click&Go	Click&Go	Click&Go	Click&Go	Click&Go
Alarm Function	SMS, E-mail, SNMP Traps, TCP/UDP Messaging	E-mail, SNMP Traps, TCP/UDP Messaging				











Model	ioLogik E2260	ioLogik E2262	ioLogik R2110	ioLogik R2140	ioMirror E3210
Category	Active Ethernet I/O	Active Ethernet I/O	RS-485 I/O	RS-485 I/O	Peer-to-Peer I/O
Comm. Interface	10/100M Ethernet	10/100M Ethernet	RS-485	RS-485	10/100M Ethernet
I/O Combination	4 DOs, 6 RTDs	4 DOs, 8 TCs	12 DIs, 8 DOs	8 Als, 2 AOs	8 DIs, 8 DOs
Control. Protocol	Modbus/TCP, SNMP, OPC, Http-CGI	Modbus/TCP, SNMP, OPC, Http-CGI	Modbus/RTU	Modbus/RTU	
Local Intelligence	Click&Go	Click&Go			
Alarm Function	E-mail, SNMP Traps, TCP/UDP Messaging	E-mail, SNMP Traps, TCP/UDP Messaging			Alarm Channel with LED for Conn. Status

Modular Type I/Os









Model	ioLogik E4200	NA-4010	NA-4020	NA-4021
Category	Modular Active Ethernet I/O	Modular Ethernet I/O	Modular Serial I/O	Modular Serial I/O
Comm. Interface	Dual 10/100M Ethernet	10/100M Ethernet	RS-485	RS-232
Max. Expansion Capacity	16 slices	31 slices	31 slices	31 slices
Control Protocol	Modbus/TCP, SNMP, OPC	Modbus/TCP	Modbus/RTU	Modbus/RTU
Local Intelligence	Click&Go			
Alarm Function	SMS, E-mail, SNMP Traps, TCP/UDP Messaging			
SMS/GPRS Connectivity	Yes, with an ext. modem			

Modular Remote I/O Selection Guide



		AC-Digit	al Inputs				
	Model	M-1800	M-1801	M-1600	M-1601	M-1450	M-1451
	Channels	8	8	16	16	4	4
Specs	Sink/Source	Sink	Source	Sink	Source		
Opcos	Connector	RTB	RTB	20-pin	20-pin	RTB	RTB
	Voltage	24 VDC	24 VDC	24 VDC	24 VDC	110 VAC	220 VAC
	Isolation			Optical	isolation		



Digital Outputs						
	Model	M-2800	M-2801	M-2600	M-2601	M-2450
	Channels	8	8	16	16	4
	Sink/Source	Sink	Source	Sink	Source	Relay
Specs	Connector	RTB	RTB	20-pin	20-pin	RTB
	Voltage	24 VDC	24 VDC	24 VDC	24 VDC	24 VDC
	Current	0.5 A	0.5 A	0.3 A	0.3A	0.5 A
	Isolation			Optical isolation		



	Analog Inputs							
	Model	M-3802	M-3810	M-6200	M-6201			
	Channels	8	8	2	2			
	Current	4 to 20 mA						
	Voltage		0 to 10V					
Specs	Connector	RTB	RTB	RTB	RTB			
	Resolution	12-bit	12-bit					
	Isolation		Optical	isolation				
	Sensor Input			RTD(ohm)	Thermo-couple (mV)			



	Analog Outputs					
	Model	M-4402	M-4410			
	Channels	4	4			
	Current	4 to 20 mA				
Specs	Voltage		0 to 10 V			
	Connector	RTB	RTB			
	Resolution	12-bit	12-bit			
	Isolation	Optical	isolation			

	Power Modules							
	Model	M-7001	M-7002	M-7804	M-7805			
	Channels	0	0	8	8			
Specs	Voltage	24 VDC	DC: 5, 24, 48 VDC AC: 110/220 VAC	0 VDC	24 VDC			
	Purpose	System Power	Field Power	Field Power	Field Power			

Video Networking Products

















	Sto	3111	e				0	
	VPort 354	VPort 254	VPort 351	VPort 3310	VPort 2141	VPort 251	VPort D351	VPort 25
Type of Product	Encoder	Encoder	Encoder	Encoder	Encoder	Encoder	Decoder	IP Camera
Form Factor								
Protection Rating	IP30	IP30	IP30	IP30			IP30	IP66
DIN-Rail Mounting	√	√	√ V	√ V	w/ optional Kit	w/ optional Kit	√	
Panel Mounting	w/ optional Kit	w/ optional Kit	w/ optional Kit	w/ optional Kit	√ V	√ V	w/ optional Kit	
Surface/Ceiling Mounting								V
Audio/Video Channels								
Video Inputs	4	4	1	1	4	1	0	0
Video Outputs	0	0	1	1	0	0	1	1
Audio Inputs	1	1	1	1	0	1	1	1
Audio Outputs	1	1	1	0	0	1	1	1
Compression Algorithm								
MJPEG	√	V	V		V	V	V	V
MPEG4	√	1	1	√		V	1	1
Video Performance								
QCIF (NTSC: 176 x 120)	30 FPS (max.)			30 FPS (max.)	30 FPS (max.)			
QVGA (NTSC: 320 x 240)		30 FPS (max.)	30 FPS (max.)			30 FPS (max.)		30 FPS (max.)
CIF (NTSC: 352 x 240)	30 FPS (max.)	30 FPS (max.)	30 FPS (max.)	30 FPS (max.)	30 FPS (max.)	30 FPS (max.)		30 FPS (max.)
VGA (NTSC: 640 x 480)	(IIIax.)	7 FPS (max.)	30 FPS (max.)	10 FPS (max.)	(IIIax.)	30 FPS (max.)		30 FPS (max.)
2CIF (NTSC: 704 x 240)	30 FPS (max.)							
4CIF (NTSC: 704 x 480)	30 FPS (max.)	7 FPS (max.)	30 FPS (max.)	10 FPS (max.)	30 FPS (max.)	30 FPS (max.)		30 FPS (max.)
Full D1 (NTSC: 720 x 480)		7 FPS (max.)	30 FPS (max.)			30 FPS (max.)		30 FPS (max.)
QCIF (PAL: 176 x 144)	25 FPS (max.)			25 FPS (max.)	25 FPS (max.)			
QVGA (PAL: 320 x 288)		25 FPS (max.)	25 FPS (max.)			25 FPS (max.)		25 FPS (max.)
CIF (PAL: 352 x 288)	25 FPS (max.)	25 FPS (max.)	25 FPS (max.)	25 FPS (max.)	25 FPS (max.)	25 FPS (max.)		25 FPS (max.)
VGA (PAL: 640 x 576)		7 FPS (max.)	25 FPS (max.)	8 FPS (max.)		25 FPS (max.)		25 FPS (max.)
2CIF (PAL: 704 x 288)	25 FPS (max.)							
4CIF (PAL: 704 x 576)	25 FPS (max.)	7 FPS (max.)	25 FPS (max.)	8 FPS (max.)	8 FPS (max.)	25 FPS (max.)		25 FPS (max.)
Full D1 (PAL: 720 x 576)		7 FPS (max.)	25 FPS (max.)			25 FPS (max.)		25 FPS (max.)
Quad View					15 FPS (max.)			
Network Connections								
10/100BaseT(X) Ports	2	1	1	1	1	1	1	1
100BaseFX Ports	2	1	1					
Number of COM Ports								
PTZ Ports	1	1	1	1	2	1	1	
RS-232 Console Ports	1	1	1			1	1	
Network Management and Control	'	'	'				'	
Web Browser	V	V	V	V	V	V	V	V
SNMP Protocols	v1/v2c/v3	v1/v2c/v3	v1/v2c/v3	v1/v2c/v3		v1/v2c/v3	v1/v2c/v3	v1/v2c/v3
RTSP (Real Time Streaming							V1/V2G/V3	
Protocol)	√	\checkmark	√	\checkmark		√		\checkmark
Multicast (IGMP)	v3	v3	v3	v3		v3		v3
QoS	√	V	V			\checkmark		V
UPnP	√	V	V	\checkmark	$\sqrt{}$	\checkmark	V	V
DDNS	√	$\sqrt{}$	√	\checkmark	√	V	V	V
PPPoE				\checkmark	\checkmark			
IP Filtering	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Power Requirements								
Power Redundancy	√	√	V	√			√	V
Power Inputs	2	2	2	2	1	1	2	1
Power Outputs	0	0	0	0	1	1	0	0
Power-over-Ethernet (PoE)								V
Alarms								
VMD (Video Motion Detection)	1	V	V	V	V	V		√
Digital Inputs	V				4	1	2	1
	4	4	2	2	4			
Relay (Digital) Outputs				2	4	1	2	1
	4	4	2 2 √			1	2	1
Relay (Digital) Outputs	4 2	4 2	2	2	4			
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image	4 2 √ √	4 2 	2 √	2	4			
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar	4 2 √ √	4 2 √	2 √ √	2 √	4 √	 √		√
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar 0 to 60°C	4 2 √ √ 1ges	4 2 \(\)	2 \ \ \ \ \ \ \ \ \	2 √	4 √	 √	 	 √
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar 0 to 60°C -40 to 50°C	4 2 √ √ 1ges √	4 2 \(\)	2 √ √	2 √	4 √	 √	 √ 	 √
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar 0 to 60°C -40 to 50°C -40 to 75°C	4 2 √ √ 1ges	4 2 \(\)	2 \ \ \ \ \ \ \ \ \	2 √	4 √	 √ 	 	 √
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar 0 to 60°C -40 to 50°C -40 to 75°C Regulatory Approvals	4 2 √ √ √ 1988 √ 	4 2 \(2 √ √	2 \lambda	4 √ √ 	√ √ 	√ 	√ √
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar 0 to 60°C -40 to 50°C -40 to 75°C Regulatory Approvals CE/FCC	4 2 √ √ 1ges √ √	4 2 \(\)	2 √ √ 	2 \(\)	4 √ 	\ \ \ \ \ \	\ \ \ \	\ \ \ \ \ \
Relay (Digital) Outputs Alarm Video Recording Alarm Snapshot Image Supported Operating Temperature Rar 0 to 60°C -40 to 50°C -40 to 75°C Regulatory Approvals	4 2 √ √ √ 1988 √ 	4 2 \(2 √ √	2 \lambda	4 √ √ 	√ √ 	√ 	√ √

NPort® 6000 Terminal Servers



	NPort® 6150	NPort® 6250	NPort®	NPort® 6250-S-SC	NPort® 6450	NPort® 6610-8	NPort® 6610-8-48V	NPort® 6610-16	NPort®
			6250-M-SC	0230-5-56			0010-0-48V		6610-16-48V
LAN Interface									
10/100BaseT(X) Ports	1 port (8-pin RJ4	15 connector)							
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
100BaseFX Ports			1 (multi-mode)	1 (single-mode)					
Expansion Modules			T (maid mode)	r (olligio illodo)					
10/100BaseT(X) (RJ45)					V	V	V	V	V
Multi-mode Fiber (SC)			***	***	√ √	√ √	2	2	√ √
Single-mode Fiber (SC)					√ √	√ √	√ √	√ √	√ √
GSM/GPRS					√ √	√ √	7	7	1
Modem					V	V	V	√ √	V
Serial Interface					,	,	,	,	,
RS-232 Ports						8	8	16	16
RS-232/422/485 Ports	1	2	2	2	4		0		
Connectors	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45
Communication						0-piii 11045	0-piii 11043	0-piii 11043	0-piii 11045
Parameters	Data Bits: 5, 6, 7	, 8; Stop Bits: 1, 1.5	5, 2; Parity: None, E	ven, Odd, Space, M	ark				
Flow Control	RTS/CTS, DTR/D	SR, XON/XOFF							
Baudrate	50 bps to 921.6	Kbps (supports nor	ı-standard baudrate	s)					
15 KV ESD Protection		$\sqrt{}$	\checkmark	\checkmark	√	√	$\sqrt{}$	\checkmark	√
2 KV isolation									
protection RS-485 Data Direction									
Control	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
RS-232 Console Port	√	√	\checkmark	$\sqrt{}$	V	V	\checkmark	\checkmark	\checkmark
Advanced Features									
LCD Panel with 4 push					1	1	1	1	1
buttons					√	\checkmark	\checkmark	\checkmark	$\sqrt{}$
Serial Data Log	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB
								CALCD	64 KB
Offline Port Buffering	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	04 ND
Offline Port Buffering SD Slot		64 KB √	64 KB √	64 KB √	64 KB √	64 KB √	64 KB √	04 KB √	V NB
SD Slot Software Network Protocols	64 KB ICMP, IP, TCP, UI	√ DP, DHCP, BOOTP, T	√ elnet, DNS, SNMP	√ V1/V2c/V3, DDNS, F	√	√	V	v4, Turbo Ring, Turbo	√
•	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver	√ DP, DHCP, BOOTP, T , SSH, SSL, HTTPS, Inet Console, Serial Manager (for Wind Iriver (for 2.4.x, 2.6	Telnet, DNS, SNMP N RADIUS, PAP, CHA Console, Windows DWS 95, 98, ME, NT,	V1/V2c/V3, DDNS, H AP, TACACS+ Search Utility , 2000, XP x86/x64,	√ HTTP, SMTP, HTTPS 2003 x86/x64, Visi	√ 5, SSL, SSH, PPPoE, ta x86/x64, 2008 x86	√ RFC2217, IPv6, IP 6/x64, Embedded C	V	√ D Ring 2 ded),
SD Slot Software Network Protocols Security Protocols Configuration Options	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d	√ DP, DHCP, BOOTP, T , SSH, SSL, HTTPS, Inet Console, Serial Manager (for Wind Iriver (for 2.4.x, 2.6	Telnet, DNS, SNMP N RADIUS, PAP, CHA Console, Windows DWS 95, 98, ME, NT,	V1/V2c/V3, DDNS, H AP, TACACS+ Search Utility , 2000, XP x86/x64,	√ HTTP, SMTP, HTTPS 2003 x86/x64, Visi	√ 5, SSL, SSH, PPPoE, ta x86/x64, 2008 x86	√ RFC2217, IPv6, IP 6/x64, Embedded C	√ v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo	√ D Ring 2 ded),
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1	DP, DHCP, BOOTP, T , SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windd Iriver (for 2.4.x, 2.6	Telnet, DNS, SNMP N RADIUS, PAP, CHA Console, Windows DWS 95, 98, ME, NT,	V1/V2c/V3, DDNS, H AP, TACACS+ Search Utility , 2000, XP x86/x64,	√ HTTP, SMTP, HTTPS 2003 x86/x64, Visi	√ 5, SSL, SSH, PPPoE, ta x86/x64, 2008 x86	√ RFC2217, IPv6, IP 6/x64, Embedded C	√ v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo	√ D Ring 2 ded),
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windiriver (for 2.4.x, 2.6.11)	elnet, DNS, SNMP N RADIUS, PAP, CHA Console, Windows ows 95, 98, ME, NT, x), Fixed TTY drive	V1/V2c/V3, DDNS, H NP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI	√ HTTP, SMTP, HTTPS 2003 x86/x64, Vist 0 OpenServer, Unix	√ 5, SSL, SSH, PPPoE, ta x86/x64, 2008 x86	RFC2217, IPv6, IP 5/x64, Embedded Cl 11, SVR 4.2, QNX 4	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo 25, QNX 6, Solaris 1	√ D Ring 2 ded),
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S	OP, DHCP, BOOTP, T , SSH, SSL, HTTPS, SSH, SSL, HTTPS, Manager (for Windd Iriver (for 2.4.x, 2.6 11) P-II Server, TCP Client, U	elnet, DNS, SNMP P. RADIUS, PAP, CHAP Console, Windows was 95, 98, ME, NT, xx), Fixed TTY drive	V1/V2c/V3, DDNS, H NP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI	HTTP, SMTP, HTTPS 2003 x86/x64, Visit 0 OpenServer, Unix	√ S, SSL, SSH, PPPoE, ta x86/x64, 2008 x8t Ware 7, UnixWare 2	RFC2217, IPv6, IP 5/x64, Embedded Cl 11, SVR 4.2, QNX 4	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo 25, QNX 6, Solaris 1	√ D Ring 2 ded),
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIP Real COM, TCP S	OP, DHCP, BOOTP, T , SSH, SSL, HTTPS, SSH, SSL, HTTPS, Manager (for Windd Iriver (for 2.4.x, 2.6 11) P-II Server, TCP Client, U	elnet, DNS, SNMP P. RADIUS, PAP, CHAP Console, Windows was 95, 98, ME, NT, xx), Fixed TTY drive	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI	HTTP, SMTP, HTTPS 2003 x86/x64, Visit 0 OpenServer, Unix	√ S, SSL, SSH, PPPoE, ta x86/x64, 2008 x8t Ware 7, UnixWare 2 Ethernet Modem, Pr	RFC2217, IPv6, IP 5/x64, Embedded Cl 11, SVR 4.2, QNX 4	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo 25, QNX 6, Solaris 1	√ D Ring 2 ded),
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics	ICMP, IP, TCP, UE DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per po	DP, DHCP, BOOTP, T , SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windd Iriver (for 2.4.x, 2.6 11) P-II Server, TCP Client, U	relnet, DNS, SNMP P. RADIUS, PAP, CHA Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive JDP, Pair Connectio er, Secure TCP Clier	V1/V2c/V3, DDNS, H P, TACACS+ Search Utility , 2000, XF x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn	TTP, SMTP, HTTPS 2003 x86/x64, Vision 0 OpenServer, Unix al, Reverse Telnet, section, SSH, Rever	√ S, SSL, SSH, PPPoE, ta x86/x64, 2008 x8t Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH	RFC2217, IPv6, IP 5/x64, Embedded C 11, SVR 4.2, QNX 4 inter, PPP, Disabled	v4, Turbo Ring, Turbo	√ D Ring 2 led), D, FreeBSD,
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIP Real COM, TCP S Secure Real COM 8 sessions per po	OP, DHCP, BOOTP, T SSH, SSL, HTTPS, Inet Console, Serial Manager (for Wind friver (for 2.4.x, 2.6 11) P-II Server, TCP Client, U M, Secure TCP Serve ort	elnet, DNS, SNMP NRADIUS, PAP, CHAP Console, Windows Dws 95, 98, ME, NT, LX), Fixed TTY drive JDP, Pair Connectio Ler, Secure TCP Clier Metal	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn	HTTP, SMTP, HTTPS 2003 x86/x64, Vist 0 OpenServer, Unix al, Reverse Telnet, section, SSH, Rever	ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH	RFC2217, IPv6, IP S/x64, Embedded Ci 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30)	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo 25, QNX 6, Solaris 1	√ Ring 2 Jed), 0, FreeBSD, Metal (IP30)
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, TE Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per products Metal 700 g	DP, DHCP, BOOTP, T SSH, SSL, HTTPS, Inet Console, Serial Manager (for 2.4.x, 2.6 (11) P-II Server, TCP Client, U M, Secure TCP Serve ort Metal 730 g	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows ows 95, 98, ME, NT, x), Fixed TTY drive	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g	HTTP, SMTP, HTTPS 2003 x86/x64, Visit 0 OpenServer, Unix al, Reverse Telnet, election, SSH, Rever Metal (IP30) 1020 g	S, SSL, SSH, PPPoE, ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g	RFC2217, IPv6, IP 8/x64, Embedded Ci 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embede 25, QNX 6, Solaris 1 Metal (IP30) 3580 g	√ Pring 2 ded), 0, FreeBSD, Metal (IP30) 3580 g
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm)	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIP Real COM, TCP S Secure Real COM 8 sessions per po	OP, DHCP, BOOTP, T SSH, SSL, HTTPS, Inet Console, Serial Manager (for Wind friver (for 2.4.x, 2.6 11) P-II Server, TCP Client, U M, Secure TCP Serve ort	elnet, DNS, SNMP NRADIUS, PAP, CHAP Console, Windows Dws 95, 98, ME, NT, LX), Fixed TTY drive JDP, Pair Connectio Ler, Secure TCP Clier Metal	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn	HTTP, SMTP, HTTPS 2003 x86/x64, Vist 0 OpenServer, Unix al, Reverse Telnet, section, SSH, Rever	ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH	RFC2217, IPv6, IP S/x64, Embedded Ci 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30)	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo 25, QNX 6, Solaris 1	√ Pring 2 ded), 0, FreeBSD, Metal (IP30) 3580 g
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, TE Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per products Metal 700 g	DP, DHCP, BOOTP, T SSH, SSL, HTTPS, Inet Console, Serial Manager (for 2.4.x, 2.6 (11) P-II Server, TCP Client, U M, Secure TCP Serve ort Metal 730 g	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows ows 95, 98, ME, NT, x), Fixed TTY drive	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g	HTTP, SMTP, HTTPS 2003 x86/x64, Visit 0 OpenServer, Unix al, Reverse Telnet, election, SSH, Rever Metal (IP30) 1020 g	S, SSL, SSH, PPPoE, ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g	RFC2217, IPv6, IP 8/x64, Embedded Ci 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embede 25, QNX 6, Solaris 1 Metal (IP30) 3580 g	√ Pring 2 ded), 0, FreeBSD, Metal (IP30) 3580 g
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per pr Metal 700 g 67 x 100.4 x 28	DP, DHCP, BOOTP, T SSH, SSL, HTTPS, Inet Console, Serial Manager (for 2.4.x, 2.6 (11) P-II Server, TCP Client, U M, Secure TCP Serve ort Metal 730 g	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows ows 95, 98, ME, NT, x), Fixed TTY drive	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g	HTTP, SMTP, HTTPS 2003 x86/x64, Visit 0 OpenServer, Unix al, Reverse Telnet, election, SSH, Rever Metal (IP30) 1020 g	S, SSL, SSH, PPPoE, ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g	RFC2217, IPv6, IP 8/x64, Embedded Ci 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embede 25, QNX 6, Solaris 1 Metal (IP30) 3580 g	√ Pring 2 ded), 0, FreeBSD, Metal (IP30) 3580 g
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per po Metal 700 g 67 x 100.4 x 28	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, SSH, SSL, HTTPS, SFI all Manager (for Windulriver (for 2.4.x, 2.6.11) P-II Server, TCP Client, U M, Secure TCP Server Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH	JDP, Pair Connectioner, Secure TCP Clier Metal 730 g 77 × 111 × 28 0 to 55°C 5 to 95% RH	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO U	ATTP, SMTP, HTTPS 2003 x86/x64, Vist 0 OpenServer, Unix al, Reverse Telnet, section, SSH, Rever Metal (IP30) 1020 g 158 x 103 x 35 0 to 55°C 5 to 95% RH	ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	RFC2217, IPv6, IP 5/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedd 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	√ Ring 2 led), 0, FreeBSD, Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per pr Metal 700 g 67 x 100.4 x 28	OP, DHCP, BOOTP, T, SSH, SSL, HTTPS, SSH, SSL, HTTPS, Intel Console, Serial Manager (for Winduriver (for 2.4.x, 2.6 11i) P-II Server, TCP Client, UM, Secure TCP Server, TCP Client, UM, Secure TCP Server TCP S	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows Swa 95, 98, ME, NT, x), Fixed TTY drive JDP, Pair Connectioner, Secure TCP Clier Metal 730 g 77 x 111 x 28 0 to 55°C	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C	HTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of the Company of the	√ S, SSL, SSH, PPPoE, ta x86/x64, 2008 x8t Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C	RFC2217, IPv6, IP S/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C	√ Pring 2 ded), 0, FreeBSD, Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terrminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per po Metal 700 g 67 x 100.4 x 28	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, SSH, SSL, HTTPS, SFI all Manager (for Windulriver (for 2.4.x, 2.6.11) P-II Server, TCP Client, U M, Secure TCP Server Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH	JDP, Pair Connectioner, Secure TCP Clier Metal 730 g 77 × 111 × 28 0 to 55°C 5 to 95% RH	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO U	ATTP, SMTP, HTTPS 2003 x86/x64, Vist 0 OpenServer, Unix al, Reverse Telnet, section, SSH, Rever Metal (IP30) 1020 g 158 x 103 x 35 0 to 55°C 5 to 95% RH	ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	RFC2217, IPv6, IP 5/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedd 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	√ Ring 2 led), 0, FreeBSD, Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per po Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windstriver (for 2.4.x, 2.6.11) P-II Server, TCP Client, L M, Secure TCP Serve ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	elnet, DNS, SNMP RADIUS, PAP, CHAP Console, Windows was 95, 98, ME, NT LX, Fixed TTY drive JDP, Pair Connectio er, Secure TCP Clier Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	ATTP, SMTP, HTTPS 2003 x86/x64, Vist 0 OpenServer, Unix al, Reverse Telnet, section, SSH, Rever Metal (IP30) 1020 g 158 x 103 x 35 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	RFC2217, IPv6, IP 5/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedo 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	√ Pring 2 ded), 0, FreeBSD, Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per pr Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Winduriver (for 2.4.x, 2.6.11) P-II Server, TCP Client, L M, Secure TCP Server Ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	relnet, DNS, SNMP P. RADIUS, PAP, CHA Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive JDP, Pair Connectio er, Secure TCP Clier Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	V1/V2c/V3, DDNS, H P, TACACS+ Search Utility , 2000, XF x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	ATTP, SMTP, HTTPS 2003 x86/x64, Vision 2003 x86/x64, Vision 2003 x86/x64, Vision 2003 x86/x64, Vision 2004 x86/x64, Vision 2005 x86/x64, Vision 2006 x86/x64, Vision 2006 x86/x64, Vision 2006 x86/x64, Vision 2007 x86/x64, Vision 200	ta x86/x64, 2008 x86 Ware 7, UnixWare 2 Ethernet Modem, Pr se SSH Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	v4, Turbo Ring, Turbo E 5.0/6.0, XP Embedd 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per pr Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, SSH, SSL, HTTPS, Thet Console, Serial Manager (for Winduriver (for 2.4.x, 2.6 11i) P-II Server, TCP Client, U, Secure TCP Server, TCP Client, U, Secure TCP Server TCP Ser	Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 48 VDC 428 mA @ 12 V	V1/V2c/V3, DDNS, HP. TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 12 V	MHTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of Ope	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	RFC2217, IPv6, IP S/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per po Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 285 mA @ 12 V 150 mA @ 24 V	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, SSH, SSL, HTTPS, SSH, SSL, HTTPS, SFIal Manager (for Windulriver (for 2.4.x, 2.6.11) P-II Server, TCP Client, U Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 333 mA @ 12 V V 173 mA @ 24 V	Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 48 VDC 428 mA @ 12 V	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 24 V	MHTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of Ope	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	RFC2217, IPv6, IP S/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIP Real COM, TCP S Secure Real COM 8 sessions per per Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 285 mA @ 12 V 150 mA @ 24 V CE (EN55022 Cla UL (UL60950-1),	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windiriver (for 2.4.x, 2.6.11)) P-II Server, TCP Client, L M, Secure TCP Serve ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 333 mA @ 12 V 173 mA @ 24 V	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive in TY d	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 24 V	MHTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of Ope	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	RFC2217, IPv6, IP S/x64, Embedded C 1, SVR 4.2, QNX 4 inter, PPP, Disabled Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIP Real COM, TCP S Secure Real COM 8 sessions per per Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 285 mA @ 12 V 150 mA @ 24 V CE (EN55022 Cla UL (UL60950-1),	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windiriver (for 2.4.x, 2.6.11)) P-II Server, TCP Client, L M, Secure TCP Serve ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 333 mA @ 12 V 173 mA @ 24 V	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive in TY d	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 24 V	MHTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of Ope	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V EN61000-4-2 (ESI EN61000-4-2 (ESI EN61000-4-2 (ESI	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
SD Slot Software Network Protocols Security Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY d AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per pr Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 285 mA @ 12 V 150 mA @ 24 V CE (EN55022 Cla	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windiriver (for 2.4.x, 2.6.11)) P-II Server, TCP Client, L M, Secure TCP Serve ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 333 mA @ 12 V 173 mA @ 24 V	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive in TY d	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 24 V	MHTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of Ope	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
SD Slot Software Network Protocols Security Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS Reliability	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 Static, RIP-I, RIF Real COM, TCP S Secure Real COM 8 sessions per per Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 285 mA @ 12 V 150 mA @ 24 V CE (EN55022 Cla UL (UL60950-1); EN61000-4-2 (EEN61000-4-5 (Statics))	OP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serie Manager (for Winduriver (for 2.4.x, 2.6.11) P-II Server, TCP Client, L M, Secure TCP Serve ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 333 mA @ 12 V 173 mA @ 24 V ass A, EN55024), FC, TÜV (EN60950-1) 5D), Level 3 =T), Level 2 urge), Level 2	elnet, DNS, SNMP NRADIUS, PAP, CHAP Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive JDP, Pair Connectio er, Secure TCP Clier Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 428 mA @ 12 V 219 mA @ 24 V	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCI n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 12 V 193 mA @ 24 V	Metal (IP30) 1020 g 158 x 103 x 35 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 730 mA @ 24 V	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V EN61000-4-2 (ES EN61000-4-4 (EF EN61000-4-5 (Sui	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	Wetal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V
SD Slot Software Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS	ICMP, IP, TCP, UI DES, 3DES, AES, Web Console, Te Windows Driver Linux Real TTY of AIX 5.x, HP-UX 1 SNMP MIB-II Static, RIP-I, RIP Real COM, TCP S Secure Real COM 8 sessions per per Metal 700 g 67 x 100.4 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 285 mA @ 12 V 150 mA @ 24 V CE (EN55022 Cla UL (UL60950-1),	DP, DHCP, BOOTP, T, SSH, SSL, HTTPS, Inet Console, Serial Manager (for Windiriver (for 2.4.x, 2.6.11)) P-II Server, TCP Client, L M, Secure TCP Serve ort Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 333 mA @ 12 V 173 mA @ 24 V	ielnet, DNS, SNMP in RADIUS, PAP, CHA Console, Windows was 95, 98, ME, NT, x), Fixed TTY drive in TY d	V1/V2c/V3, DDNS, HP, TACACS+ Search Utility , 2000, XP x86/x64, r (for SCO Unix, SCO n, RFC2217, Termin nt, Secure Pair Conn Metal 730 g 77 x 111 x 28 0 to 55°C 5 to 95% RH -20 to 85°C 12 to 48 VDC 376 mA @ 24 V	MHTTP, SMTP, HTTPS 2003 x86/x64, Visit of OpenServer, Unix of Ope	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V EN61000-4-2 (ESI EN61000-4-2 (ESI EN61000-4-2 (ESI	Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	v4, Turbo Ring, Turbo v4, Turbo Ring, Turbo E 5.0/6.0, XP Embed 25, QNX 6, Solaris 1 Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C

NPort® 6000 Terminal Servers



	NPort® 6610-32	NPort® 6610-32-48V	NPort® 6650-8	NPort® 6650-8-48V	NPort® 6650-16	NPort® 6650-16-48V	NPort® 6650-32	NPort® 6650-32-48V
LAN Interface		0010 02 101		0000 0 101	·	0000 10 101		0000 02 107
10/100BaseT(X) Ports	1 port (8-pin RJ45	connector)						
Magnetic Isolation			1.5 1/1/	1 5 1/1/	1 5 1/1/	1 5 1/1/	1 5 1/1/	1.5 1/1/
Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
100BaseFX Ports								
Expansion Modules	1		1	1	1	1	1	1
10/100BaseT(X) (RJ45) Multi-mode Fiber (SC)	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √
Single-mode Fiber (SC)	√ √	√ √	√ √	V	√ √	√ √	√ √	√ √
GSM/GPRS	√ ·	√ √	V	V	V	√ √	√ √	√ √
Modem	V	$\sqrt{}$	V	V	V	√	1	1
Serial Interface								
RS-232 Ports	32	32						
RS-232/422/485 Ports			8	8	16	16	32	32
Connectors	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45
Communication Parameters	Data Bits: 5, 6, 7, 8	; Stop Bits: 1, 1.5, 2;	Parity: None, Even, Od	ld, Space, Mark				
Flow Control	RTS/CTS, DTR/DSF	R, XON/XOFF						
Baudrate		ps (supports non-sta		,	,	,	,	
15 KV ESD Protection	√	√	√	√	√	√	1	√
2 KV isolation protection								
RS-485 Data Direction	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
Control RS-232 Console Port	\ \	√	√ ×	√ ×	√ V	√	√ ×	√
Advanced Features	V	V	V	V	V	V	V	V
LCD Panel with 4 push		,		,	,	,	,	,
buttons	√	√	√	√	√	√	√	\checkmark
Serial Data Log	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB	64 KB
Offline Port Buffering SD Slot	64 KB √	64 KB √	64 KB √	64 KB	64 KB √	64 KB √	64 KB √	64 KB √
30 3101	V	.V	·V					
Software				V	· ·	V	V	
Network Protocols Security Protocols Configuration Options	DES, 3DES, AES, S Web Console, Telne Windows Driver Ma	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000,	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8	MTP, HTTPS, SSL, SSH,	PPPoE, RFC2217, IF	v6, IPv4, Turbo Ring, and ded CE 5.0/6.0, XP Em	bedded),
Network Protocols Security Protocols	DES, 3DES, AES, S Web Console, Telne Windows Driver Ma	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows ver (for 2.4.x, 2.6.x), I	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000,	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8	MTP, HTTPS, SSL, SSH,	PPPoE, RFC2217, IF	v6, IPv4, Turbo Ring, and ded CE 5.0/6.0, XP Em	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing	DES, 3DES, AES, S Web Console, Telne Windows Driver Ma Linux Real TTY driv VAIX 5.x, HP-UX 11	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows ver (for 2.4.x, 2.6.x), I	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000,	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8	MTP, HTTPS, SSL, SSH,	PPPoE, RFC2217, IF	v6, IPv4, Turbo Ring, and ded CE 5.0/6.0, XP Em	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management	DES, 3DES, AES, S Web Console, Telne Windows Driver Ma Linux Real TTY driv 'AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i)	DIUS, PAP, CHAP, TAC Isole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S	//3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS	MTP, HTTPS, SSL, SSH,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, (v6, IPv4, Turbo Ring, ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation	DES, 3DES, AES, S Web Console, Telne Windows Driver M. Linux Real TTY driv AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser	SH, SSL, HTTPS, RAI et Console, Serial Con anager, (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP,	DIUS, PAP, CHAP, TAC isole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, (v6, IPv4, Turbo Ring, ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes	DES, 3DES, AES, S Web Console, Telne Windows Driver M. Linux Real TTY driv AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows reer (for 2.4.x, 2.6.x), I) ver, TCP Client, UDP, Secure TCP Server, S	DIUS, PAP, CHAP, TAC Isole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, (v6, IPv4, Turbo Ring, ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions	DES, 3DES, AES, S Web Console, Telne Windows Driver M. Linux Real TTY driv AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows reer (for 2.4.x, 2.6.x), I) ver, TCP Client, UDP, Secure TCP Server, S	DIUS, PAP, CHAP, TAC isole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, (v6, IPv4, Turbo Ring, ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics	DES, 3DES, AES, S Web Console, Telne Windows Driver M. Linux Real TTY driv AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 8 sessions per port	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows reer (for 2.4.x, 2.6.x), I) ver, TCP Client, UDP, Secure TCP Server, S	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect	/V3, DDNS, HTTP, SA ACS+ Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS 2217, Terminal, Reve	ATP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo SSH, Reverse SSH	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, I dem, Printer, PPP, Di	ded CE 5.0/6.0, XP Em 2NX 4.25, QNX 6, Sola	ibedded), ris 10, FreeBSD,
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions	DES, 3DES, AES, S Web Console, Telne Windows Driver M. Linux Real TTY driv AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3	SH, SSL, HTTPS, RAI et Console, Serial Con anager (for Windows reer (for 2.4.x, 2.6.x), I) ver, TCP Client, UDP, Secure TCP Server, S	DIUS, PAP, CHAP, TAC isole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S	/V3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, (v6, IPv4, Turbo Ring, ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola	bedded),
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing	DES, 3DES, AES, S Web Console, Telne Windows Driver Hindows Driver Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 sessions per port Metal (IP30)	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30)	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, ixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30)	A/3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, st Metal (IP30)	ATP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 7, Unixware 8, Unixware 8, Unixware 8, Unixware 8, Unixware 7, Unixware 8, Unixware 8, Unixware 8, Unixware 8, Unixware 9,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di	ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola sabled	bedded), ris 10, FreeBSD, Metal (IP30)
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Preminal Sessions Physical Characteristics Housing Weight	DES, 3DES, AES, S Web Console, Telne Windows Driver M Linux Real TTY driv AIX 5.x, HP-UX 11 SMMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 8 sessions per port Metal (IP30) 3600 g	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows er (for 2.4.x, 2.6.x), I i ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g	//3, DDNS, HTTP, SA ACS+ I Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve are Pair Connection, s Metal (IP30) 3460 g	ATP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 7, Unixware 7, Unixware 8, 1 erverse SSH Metal (IP30) 3580 g	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, dem, Printer, PPP, Di Metal (IP30) 3580 g	ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola sabled Metal (IP30) 3600 g	bedded), ris 10, FreeBSD, Metal (IP30) 3600 g
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature	DES, 3DES, AES, S Web Console, Telne Windows Driver M Linux Real TTY driv AIX 5.x, HP-UX 11 SMMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 8 sessions per port Metal (IP30) 3600 g	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows er (for 2.4.x, 2.6.x), I i) vver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Secu Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C	//3, DDNS, HTTP, SA ACS+ I Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve are Pair Connection, s Metal (IP30) 3460 g	ATP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 7, Unixware 7, Unixware 8, 1 erverse SSH Metal (IP30) 3580 g	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, dem, Printer, PPP, Di Metal (IP30) 3580 g	ded CE 5.0/6.0, XP Em QNX 4.25, QNX 6, Sola sabled Metal (IP30) 3600 g	bedded), ris 10, FreeBSD, Metal (IP30) 3600 g
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity	DES, 3DES, AES, S Web Console, Telne Windows Driver IL LINUX Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows erer (for 2.4.x, 2.6.x), I i) Ever, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	//3, DDNS, HTTP, SN ACS+ I Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, S Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	MTP, HTTPS, SSL, SSH, 36/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo SSH, Reverse SSH Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, d dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature	DES, 3DES, AES, S Web Console, Telne Windows Driver IL LINUX Real TTY driv AIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows er (for 2.4.x, 2.6.x), I i) vver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, Fixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Secu Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C	A/3, DDNS, HTTP, SN ACS+ 1 Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, S Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo SSH, Reverse SSH Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, d dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44	Metal (IP30) 3600 g 440 x 195 x 44	Metal (IP30) 3600 g 440 x 195 x 44
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements	DES, 3DES, AES, S Web Console, Telne Windows Driver He Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, inxed TTY driver (for S Pair Connection, RFC ecure TCP Client, Secu Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	ACS+ I Utility XP x86/x64, 2003 x6 CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, 3 Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage	DES, 3DES, AES, S Web Console, Telne Windows Driver In Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	SH, SSL, HTTPS, RAI at Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, inxed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	ACS+ I Utility XP x86/x64, 2003 x6 CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, 3 Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	METAL (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements	DES, 3DES, AES, S Web Console, Telne Windows Driver He Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, inxed TTY driver (for S Pair Connection, RFC ecure TCP Client, Secu Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	ACS+ I Utility XP x86/x64, 2003 x6 CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, 3 Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage	DES, 3DES, AES, S Web Console, Telne Windows Driver In Invalidation Linux Real TTY driv AIX 5.x, HP-UX 11 SIMMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, S 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	SH, SSL, HTTPS, RAI at Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, cixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	ACS+ I Utility XP x86/x64, 2003 x6 CO Unix, SCO OpenS 2217, Terminal, Reve ure Pair Connection, 3 Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 8,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC	DES, 3DES, AES, S Web Console, Telne Windows Driver National Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V CE (EN55022 Class	SH, SSL, HTTPS, RAI at Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, cixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	AV3, DDNS, HTTP, SNACS+ 1 Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve Ure Pair Connection, S Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 8,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals	DES, 3DES, AES, S Web Console, Telne Windows Driver In Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V CE (EN55022 Class UL (UL60950-1), T	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) Lever, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V S.A. EN55024), FCC P ÜV (EN60950-1)	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, cixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V	AV3, DDNS, HTTP, SNACS+ 1 Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve Ure Pair Connection, S Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 8,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC	DES, 3DES, AES, S Web Console, Telne Windows Driver National Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 3 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V CE (EN55022 Class	SH, SSL, HTTPS, RAI at Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) Ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V Et A, EN55024), FCC P ÜV (EN60950-1)), Level 3 Level 2	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, cixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V	AV3, DDNS, HTTP, SNACS+ 1 Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve Ure Pair Connection, S Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 8,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS Reliability	DES, 3DES, AES, S Web Console, Telne Windows Driver National Linux Real TTY driv VAIX 5.x, HP-UX 11 SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V CE (EN55022 Class UL (UL60950-1), T EN61000-4-2 (ESD)	SH, SSL, HTTPS, RAI at Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) Ver, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V Et A, EN55024), FCC P ÜV (EN60950-1)), Level 3 Level 2	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, cixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V	AV3, DDNS, HTTP, SNACS+ 1 Utility XP x86/x64, 2003 xt CO Unix, SCO OpenS 2217, Terminal, Reve Ure Pair Connection, S Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unixware 8,	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, 4 dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS Reliability Buzzer, RTC, WDT	DES, 3DES, AES, S Web Console, Telne Windows Driver Main Linux Real TTY driv VAIX 5.x, HP-UX 11 SIMMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V CE (EN55022 Class UL (UL60950-1), T EN61000-4-2 (ESD EN61000-4-5 (Surg	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) Ever, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V SA, EN55024), FCC P ÜV (EV60350-1)), Level 2 J, Level 2	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, cirixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V art 15 Subpart B Class	//3, DDNS, HTTP, SA ACS+ 1 Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS 2217, Terminal, Reve are Pair Connection, s Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	MTP, HTTPS, SSL, SSH, 16/x64, Vista x86/x64, 2 erver, UnixWare 7, Unix rse Telnet, Ethernet Mo SSH, Reverse SSH Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V	PPPoE, RFC2217, IF PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V
Network Protocols Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Secure Operation Modes Terminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS Reliability	DES, 3DES, AES, S Web Console, Telne Windows Driver Linux Real TTY driv AIX 5.x, HP-UX 11 SMMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Ser Secure Real COM, 8 8 sessions per port Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V CE (EN55022 Class UL (UL60950-1), T EN61000-4-2 (ESD EN61000-4-5 (Surg √ 68707 hrs	SH, SSL, HTTPS, RAI st Console, Serial Con anager (for Windows rer (for 2.4.x, 2.6.x), I i) Lever, TCP Client, UDP, Secure TCP Server, S Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V S.A. EN55024), FCC P ÜV (EN60950-1)), Level 2 Jei, Level 2	DIUS, PAP, CHAP, TAC sole, Windows Search 95, 98, ME, NT, 2000, inixed TTY driver (for S Pair Connection, RFC ecure TCP Client, Sect Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C 100 to 240 VAC 285 mA @ 100 V 190 mA @ 240 V art 15 Subpart B Class	ACS+ 1 Utility XP x86/x64, 2003 x8 CO Unix, SCO OpenS 2217, Terminal, Reve are Pair Connection, s Metal (IP30) 3460 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	METAL (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	PPPoE, RFC2217, IF 2008 x86/x64, Embed xWare 2.1, SVR 4.2, d dem, Printer, PPP, Di Metal (IP30) 3580 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3600 g 440 x 195 x 44 0 to 55°C 5 to 95% RH -20 to 70°C ±48 VDC 293 mA @ 48 V

CN2600 Terminal Servers













	CN2610-8	CN2610-16	CN2610-8-2AC	CN2610-16-2AC	CN2650-8	CN2650-16
LAN Interface						
10/100BaseT(X) Ports	2 ports (8-pin RJ45 co	onnector)				
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface						
RS-232 Ports	8	16	8	16		
RS-232/422/485 Ports					8	16
Connectors	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45	8-pin RJ45
Communication Parameters		top Bits: 1, 1.5, 2; Parity: No				
Flow Control	RTS/CTS, DTR/DSR, >	(ON/XOFF				
Baudrate	50 bps to 921.6 Kbps					
15 KV ESD Protection	√ .	√	\checkmark	√	$\sqrt{}$	$\sqrt{}$
2 KV isolation protection						
RS-485 Data Direction Control	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
RS-232 Console Port	√	√	\checkmark	√	\checkmark	\checkmark
Advanced Features						
LCD Panel with 4 push buttons	1	V	√	√	√	\checkmark
Serial Data Log	128 KB	128 KB	128 KB	128 KB	128 KB	128 KB
Offline Port Buffering	128 KB	128 KB	128 KB	128 KB	128 KB	128 KB
Software						
letwork Protocols	ICMP IP TCP LIDE D	HCP BOOTP Telnet DNS SN	IMP V1/V2c/V3 HTTP SMTP	ARP PPPoF DDNS		
			IMP V1/V2c/V3, HTTP, SMTP	ARP, PPPoE, DDNS		
Network Protocols Security Protocols Configuration Options	RADIUS, https, SSH, I	PAP, CHAP		ARP, PPPoE, DDNS		
	RADIUS, https, SSH, I Web Console, Telnet C	PAP, CHAP Console, Serial Console, Windows 95, 98, Mi	dows Search Utility	3 v86/v64 Vieta v86/v64 200	08 x86/x64, Embedded CE 5. /are 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i)	PAP, CHAP Console, Serial Console, Windows 95, 98, Mi	dows Search Utility	3 v86/v64 Vieta v86/v64 200	08 x86/x64, Embedded CE 5.1 Vare 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support Management	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II	PAP, CHAP Console, Serial Console, Windows 95, 98, Mi	dows Search Utility	3 v86/v64 Vieta v86/v64 200	08 x86/x64, Embedded CE 5. Vare 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II	PAP, CHAP Console, Serial Console, Win Iger (for Windows 95, 98, M (for 2.4.x, 2.6.x), Fixed TTY	dows Search Utility	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW	/are 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve	PAP, CHAP Console, Serial Console, Win Iger (for Windows 95, 98, M (for 2.4.x, 2.6.x), Fixed TTY	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW	/are 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes Terminal Sessions	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II	PAP, CHAP Console, Serial Console, Win Iger (for Windows 95, 98, M (for 2.4.x, 2.6.x), Fixed TTY	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW	/are 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ierminal Sessions Physical Characteristics	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port	PAP, CHAP Console, Serial Console, Win tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM,	/are 2.1, SVR 4.2, QNX 4.25, Disabled	QNX 6, Solaris 10, FreeBSD,
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Terminal Sessions Physical Characteristics Housing	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port	PAP, CHAP Console, Serial Console, Win tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30)	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30)	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30)	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30)	QNX 6, Solaris 10, FreeBSD, Metal (IP30)
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Terminal Sessions Physical Characteristics Housing Weight	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g	PAP, CHAP Console, Serial Console, Wini tiger (for Windows 95, 98, M (for 2.4 x, 2.6 x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g	dows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g	Pare 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30) 3740 g	QNX 6, Solaris 10, FreeBSD, Metal (IP30) 3790 g
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm)	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port	PAP, CHAP Console, Serial Console, Win tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30)	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30)	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30)	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30)	QNX 6, Solaris 10, FreeBSD, Metal (IP30)
Security Protocols Configuration Options Oriver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45	PAP, CHAP Console, Serial Console, Winiger (for Windows 95, 98, M) (for 2.4 x, 2.6 x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45	dows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30) 3740 g 440 x 198 x 45	Metal (IP30) 3790 g 440 x 198 x 45
Configuration Options Oriver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C	PAP, CHAP Console, Serial Console, Wing tger (for Windows 95, 98, M (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Operation of the content of the cont	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C	Metal (IP30) 3790 g 440 x 198 x 45
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Dimensions (mm) Environmental Limits Departing Temperature Departing Humidity	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	PAP, CHAP Console, Serial Console, Wini tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Stavironmental Limits Departing Temperature Operating Humidity Storage Temperature	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C	PAP, CHAP Console, Serial Console, Wing tger (for Windows 95, 98, M (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Operation of the content of the cont	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C	Metal (IP30) 3790 g 440 x 198 x 45
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Deperating Temperature Departing Temperature Power Requirements	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	PAP, CHAP Console, Serial Console, Winiter (for Windows 95, 98, M) (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Departing Temperature Departing Temperature Power Requirements Jumber of Inputs	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	PAP, CHAP Console, Serial Console, Winiter (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	Are 2.1, SVR 4.2, QNX 4.25, Disabled Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH
Configuration Options Configuration Options Configuration Options Configuration Options Configuration Options Configuration Conf	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	PAP, CHAP Console, Serial Console, Winiter tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Configuration Options Configuration Options Configuration Options Configuration Options Configuration Options Configuration Conf	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	PAP, CHAP Console, Serial Console, Winiter tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Configuration Options Configuration Options Configuration Options Configuration Options Configuration Options Configuration Conf	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	PAP, CHAP Console, Serial Console, Winiter tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	dows Search Utility 5, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Oriver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Operating Humidity Storage Temperature Ower Requirements Jumber of Inputs Input Voltage Ower Consumption Regulatory Approvals	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 100 to 240 VAC, 47 to 235 mA @ 100 VAC, 1	PAP, CHAP Console, Serial Console, Winiter tiger (for Windows 95, 98, Mi (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Driver Support Management IP Routing Standard Operation Modes	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 100 to 240 VAC, 47 to 235 mA @ 100 VAC, 1	PAP, CHAP Console, Serial Console, Wing (ger (for Windows 95, 98, M) (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217. Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 163 Hz 45 mA @ 240 V EN55024), FCC Part 15 Sub	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Deperating Temperature Deperating Temperature Power Requirements Number of Inputs Input Voltage Power Consumption Regulatory Approvals EMC Safety	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 100 to 240 VAC, 47 to 235 mA @ 100 VAC, 1 CE (EN55022 Class A, UL (UL60950), TÜV (IEN61000-4-2 (FSDI.))	PAP, CHAP Console, Serial Console, Winiter (for Windows 95, 98, M) (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 1 63 Hz 45 mA @ 240 V	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Oriver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Dimensions (mm) Environmental Limits Departing Temperature Departing Humidity Storage Temperature Power Requirements Number of Inputs Input Voltage Power Consumption Regulatory Approvals EMC Safety EMS	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 100 to 240 VAC, 47 to 235 mA @ 100 VAC, 1 CE (EN55022 Class A, UL (UL60950), TÜV (6	PAP, CHAP Console, Serial Console, Winiter (for Windows 95, 98, M) (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 1 63 Hz 45 mA @ 240 V	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Configuration Options Driver Support Management P Routing Standard Operation Modes Terminal Sessions Physical Characteristics Housing Dimensions (mm) Convironmental Limits Departing Temperature Departing Humidity Storage Temperature Departing Humidi	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 100 to 240 VAC, 47 to 235 mA @ 100 VAC, 1 CE (EN55022 Class A, UL (UL60950), TÜV (EN61000-4-2 (ESD), IEN61000-4-4 (EFT), L EN61000-4-4 (EFT), L EN61000-4-5 (Surge)	PAP, CHAP Console, Serial Console, Windiger (for Windows 95, 98, M) (for 2.4.x, 2.6.x), Fixed TTY r, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 163 Hz -45 mA @ 240 V EN55024), FCC Part 15 Suben60950) .evel 3 evel 4 t, Level 2	dows Search Utility F, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 2 part B Class A	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C
Security Protocols Configuration Options Configuration Options Driver Support Management P Routing Standard Operation Modes Ferminal Sessions Physical Characteristics Housing Weight Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Number of Inputs Input Voltage Power Consumption Regulatory Approvals EMC Safety	RADIUS, https, SSH, I Web Console, Telnet C Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i) SNMP MIB-II Static, RIP-I, RIP-II Real COM, TCP Serve 8 sessions per port Metal (IP30) 3525 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 100 to 240 VAC, 47 to 235 mA @ 100 VAC, 1 CE (EN55022 Class A, UL (UL60950), TÜV (IEN61000-4-2 (FSDI.))	PAP, CHAP Console, Serial Console, Winiter (for Windows 95, 98, M) (for 2.4.x, 2.6.x), Fixed TTY T, TCP Client, UDP, RFC2217 Metal (IP30) 3560 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C 1 1 63 Hz 45 mA @ 240 V	Jows Search Utility E, NT, 2000, XP x86/x64, 200 driver (for SCO Unix, SCO Op Terminal, Reverse Telnet, PF Metal (IP30) 3760 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW P, DRDAS, Redundant COM, Metal (IP30) 3980 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3740 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 3790 g 440 x 198 x 45 0 to 55°C 5 to 95% RH -20 to 70°C

CN2600 Terminal Servers













	-	Hidisa	H. H. H.	The second second	- Holding	Hodis
	CN2650-8-2AC	CN2650-16-2AC	CN2650I-8	CN2650I-16	CN2650I-8-2AC	CN2650I-16-2AC
LAN Interface						
10/100BaseT(X) Ports	2 ports (8-pin RJ45 c	onnector)				
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface						
RS-232 Ports						
RS-232/422/485 Ports	8	16	8	16	8	16
Connectors	8-pin RJ45	8-pin RJ45	DB9 male	DB9 male	DB9 male	DB9 male
Communication Parameters		Stop Bits: 1, 1.5, 2; Parity: Nor		250 maio	250 maio	550 maio
Flow Control	RTS/CTS, DTR/DSR, 2	XON/XOFF				
Baudrate	50 bps to 921.6 Kbps					
15 KV ESD Protection	√	\checkmark	V	\checkmark	\checkmark	$\sqrt{}$
2 KV isolation protection			√	√	√	√
RS-485 Data Direction Control	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
RS-232 Console Port	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Advanced Features						
LCD Panel with 4 push buttons	√	V	√	√	√	√
Serial Data Log	128 KB	128 KB	128 KB	128 KB	128 KB	128 KB
Offline Port Buffering	128 KB	128 KB	128 KB	128 KB	128 KB	128 KB
Software						
Network Protocols	ICMP, IP, TCP, UDP, D	HCP, BOOTP, Telnet, DNS, SN	MP V1/V2c/V3, HTTP, SMTP,	ARP, PPPoE, DDNS		
Security Protocols	RADIUS, https, SSH,	PAP, CHAP				
Configuration Options		Console, Serial Console, Wind				
Driver Support	Windows Driver Mana Linux Real TTY driver AIX 5.x, HP-UX 11i)	ager (for Windows 95, 98, ME (for 2.4.x, 2.6.x), Fixed TTY o	f, NT, 2000, XP x86/x64, 200 Iriver (for SCO Unix, SCO Op	3 x86/x64, Vista x86/x64, 200 enServer, UnixWare 7, UnixW	08 x86/x64, Embedded CE 5.0 are 2.1, SVR 4.2, QNX 4.25,	0/6.0, XP Embedded), QNX 6, Solaris 10, FreeBSD,
Management	SNMP MIB-II					
IP Routing	Static, RIP-I, RIP-II					
Standard Operation Modes	Real COM, TCP Serve	er, TCP Client, UDP, RFC2217,	Terminal, Reverse Telnet, PP	P, DRDAS, Redundant COM,	Disabled	
Terminal Sessions	8 sessions per port					
Physical Characteristics						
Housing	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)
Weight	3900 g	3980 g	3666 g	3776 g	3932 g	4022 g
Dimensions (mm)	440 x 198 x 45	440 x 198 x 45	440 x 198 x 45	440 x 198 x 45	440 x 198 x 45	440 x 198 x 45
Environmental Limits						
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C
Power Requirements						
Number of Inputs	2	2	1	1	2	2
Input Voltage	100 to 240 VAC, 47 to					
Power Consumption	235 mA @ 100 VAC,	145 mA @ 240 VAC				
Regulatory Approvals						
EMC		, EN55024), FCC Part 15 Subj	oart B Class A			
Safety	UL (UL60950), TÜV (
EMS	EN61000-4-2 (ESD), EN61000-4-4 (EFT), LEN61000-4-5 (Surge)	_evel 4				
Reliability	(Surge)	,, 2010. 2				
Buzzer, RTC, WDT	V	V	V	V	V	V
MTBF	99302 hrs	·	•	*	•	·
Warranty	5 years (see www.mo	ixa com/warranty)				
	5 yours (300 www.1110					

Combo Switch / Serial Device Server



NPort S8000: Ethernet Switch Specifications				
Ethernet Interface				
Standards	IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) and 100Base FX IEEE 802.3x for Flow Control IEEE 802.3x for Flow Control IEEE 802.1D for Spanning Tree Protocol IEEE 802.1v for Rapid STP IEEE 802.10 for VLAN Tagging IEEE 802.1p for Class of Service IEEE 802.1x for Authentication IEEE 802.3ad for Port Trunk with LACP			
Network Protocols	ICMP, IP, TCP, UDP, ARP, Telnet, DNS, HTTP, SMTP, SNTP, IGMPV1/v2 device, GVRP, SNMPV1/v2c/v3, DHCP Server/Client, DHCP Option 82, BootP, TFTP, SNTP, SMTP, RARP, GMRP, LACP, RMON			
MIB	MIB-II, Ethernet-Like MIB, P-BRIDGE MIB, Q-BRIDGE MIB, Bridge MIB, RSTP MIB, RMON MIB Group 1, 2, 3, 9			
Flow Control	IEEE 802.3x flow control, back pressure flow control interface			
Optical Fiber Interface				
Туре	Multi-mode			
Distance	0 to 2 km, 1310 nm (62.5/125 μm, 500 MHz*km)			
Min. TX Output	-20 dBm			
Max. TX Output	-14 dBm			
Sensitivity	-34 to -30 dBm			
Switch Properties				
Priority Queues	4			
Max. Number of Available VLANs	64			
VLAN ID Range	VID 1 to 4094			
IGMP Groups	256			
Switch Interface				
RJ45 Ports	10/100BaseT(X) auto negotiation speed, F/H duplex mode, and auto MDI/MDI-X connection			
DIP Switches	Turbo Ring, Master, Coupler, Reserve			
Alarm Contact	2 relay outputs with current carrying capacity of 1A @ 24 VDC			

NPort	S8000: General Specifications
Port Summary	· · · · · · · · · · · · · · · · · · ·
Serial Ports	4 RS-232/422/485 ports
Ethernet Switch Ports	3 RJ45 copper ports. 2 multi-mode fiber ports
Console Ports	1 (8-pin RJ45 connector)
LED Indicators	PWR1, PWR2, READY, MASTER, COUPLER, LINK4, LINK5
Physical Characteristics	
Housing	Metal
Weight	995 g
Dimensions	73.1 x 134 x 105 mm
Environmental Limits	
Operating Temperature	0 to 60°C
Operating Humidity	5 to 95% RH
Storage Temperature	-40 to 85°C
Power Requirements	
Input Voltage	12 to 48 VDC
Power Consumption	935mA @ 12 V, 470 mA @ 24 V
Regulatory Approvals	
EMC	CE (EN55022 Class A, EN55024), FCC Part 15 Subpart B Class A
Safety	UL-508, UL (UL60950-1), LVD (EN60950-1)
EMS	IEC 61000-4-2, Level 4 (ESD) IEC 61000-4-4, Level 4 (EFT) IEC 61000-4-5 for serial port, Level 1 (Surge) IEC 61000-4-5 for Power Line, Level 3 (Surge) IEC 61000-4-5 for LAN port, Level 2 (Surge)
Reliability	
Buzzer, RTC, WDT	\checkmark
Warranty	5 years (see www.moxa.com/warranty)

NPort S8	000: Device Server Specifications
Serial Interface	
Number of Ports	4
Serial Standards	RS-232/422/485
Connectors	DB9 male
Serial Line Protection	15 KV ESD protection for all signals 2 KV isolation protection
RS-485 Data Direction Control	ADDC® (automatic data direction control)
Pull High/Low Resistor for RS-485	1 ΚΩ, 150 ΚΩ
Terminator for RS-485	55 Ω, 120 Ω
Console Port	Dedicated RS-232 console port (8-pin RJ45)
Serial Communication Par	ameters
Data Bits	5, 6, 7, 8
Stop Bits	1, 1.5, 2
Parity	None, Even, Odd, Space, Mark
Flow Control	RTS/CTS and XON/XOFF
Baudrate	50 bps to 921.6 Kbps
Serial Signals	
RS-232	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND
RS-422	Tx+, Tx-, Rx+, Rx-, GND
RS-485-4w	Tx+, Tx-, Rx+, Rx-, GND
RS-485-2w	Data+, Data-, GND
Software	
Configuration Options	Web Console, Telnet Console, Serial Console, Windows Search Utility
Windows Real COM Drivers	Windows 95, 98, ME, NT, 2000, XP x86/x64, 2003 x86/x64, Vista x86/x64, 2008 x86/x64, Embedded CE 5.0/6.0, XP Embedded
Fixed TTY Drivers	SCO Unix, SCO OpenServer, UnixWare 7, UnixWare 2.1, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x, HP-UX 11i
Linux Real TTY Drivers	2.4.x, 2.6.x
Operation Modes	Real COM, TCP Server, TCP Client, UDP, RFC2217
Management	SNMP MIB-II
IP Routing	Static, RIP-I, RIP-II
Reliability	
Alert Tools	Built-in buzzer and RTC (real-time clock)
Automatic Reboot Trigger	Built-in WDT (watchdog timer)















	NPort® 5110 NPort® 5110-T	NPort® 5130	NPort® 5150	NPort® DE-211	NPort® DE-311	NPort® 5210 NPort® 5210-T	NPort® 5230 NPort® 5230-T
Ethernet Interface							
10BaseT Ports				1			
10/100BaseT(X) Ports	1	1	1		1	1	1
100BaseFX							
Connector	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface							
RS-232 Ports	1					2	1
RS-232/422 Ports		1					1
RS-232/422/485 Ports			1	1	1		
Connector	DB9-M	DB9-M	DB9-M	DB25-F	DB9-F	RJ45	ТВ
15 KV ESD Protection 2 KV Isolation	√	√	√	√	√	√	√
Protection							
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; Stop	p Bits: 1, 1.5, 2; Parity: N	lone, Even, Odd, Space,	Mark			
Flow Control	RTS/CTS, XON/XOFF						
Baudrate	110 bps to 230.4 Kbps	50 bps to 921.6 Kbps		50 bps to 230.4 Kbps		110 bps to 230.4 Kbp	OS .
Software Network Protocols	ICMP, IP, TCP, UDP, DHO SMTP	CP, BOOTP, Telnet, DNS, S	SNMP V1/V2c, HTTP,	DHCP, BOOTP, Telnet,	TCP, UDP, IP, ICMP,	ICMP, IP, TCP, UDP, D DNS, SNMP V1/V2c,	
Web Console	JWITF	√	√	ANF		DN3, 3NIVIF V1/V2C,	
Serial Console	· √		· √	√	√	٠,	2
Telnet Console	√ √	√	1	√ √	√ √	√ √	√ √
Windows Utility	V	V	V	√	V	√ √	V
Windows Real COM Drivers	Windows 95, 98, ME, N	T, 2000, XP x86/x64, 200	3 x86/x64, Vista x86/x6	4, 2008 x86/x64, Embed	ded CE 5.0/6.0, XP Embe	dded	
Fixed TTY Drivers	SCO Unix, SCO OpenSer	rver, UnixWare 7, UnixWa	are 2.1, SVR 4.2, QNX 4.	25, QNX 6, Solaris 10, F	reeBSD, AIX 5.x, HP-UX	11i	
Linux Real TTY Drivers	Linux 2.4.x, 2.6.x						
Onsite Configuration							
Mini Screen with Push Buttons							
Physical Characteristics							
Housing	Metal	Metal	Metal	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)
Weight	340 g	340 g	340 g	480 g	480 g	340 g	360 g
Dimensions	52 x 80 x 22 mm			67 x 100.4 x 22 mm			
Environmental Limits	0 to FE°C or 40 to						
Operating Temparture	0 to 55°C or -40 to 75°C	0 to 55°C		0 to 55°C		0 to 55°C or -40 to 75	5°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-40 to 85°C	-40 to 85°C
Power Requirements							
Input Voltage Power Consumption @	12 to 48 VDC 128.7/72/ mA	12 to 48 VDC 200/106/ mA	12 to 48 VDC 200/106/ mA	12 to 30 VDC 180/100/ mA	9 to 30 VDC /150/ mA	12 to 48 VDC 325/190/ mA	12 to 48 VDC 325/190/ mA
12/24/48 VDC Power Consumption @ 100/240 VAC							
Regulatory Approvals							
EMC	CE (EN55022 Class A, E	N55024), FCC Part 15 Sc	ibpart B Class A	CE (EN55022 Class B FCC Part 15 Subpart I		CE (EN55022 and EN- Part 15 Subpart B Cla	
Safety	UL (UL60950-1), TÜV (E	, ,		UL (UL60950), TÜV (EN60950)	UL (UL60950-1), TÜ\	
Marine					 FNC0C01 1 0 01	DNV	
Medical					EN60601-1-2 Class B, EN55011		
Reliability							
Buzzer, RTC, WDT	WDT only	WDT only	WDT only			√	\checkmark
MTBF	279122 hrs	246505 hrs	246034 hrs	347822 hrs	225529 hrs	134850 hrs	106955 hrs
Warranty	5 years (see www.moxa	.com/warranty)					















	NPort® 5232 NPort® 5232-T	NPort® 5232I NPort® 5232I-T	NPort® 5410	NPort® 5430	NPort® 5430I	NPort® 5450	NPort® 5450I
Ethernet Interface							
10BaseT Ports							
10/100BaseT(X) Ports	1	1	1	1	1	1	1
100BaseFX							
Connector	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface							
RS-232 Ports			4				
RS-232/422 Ports	2	2		4	4		
RS-232/422/485 Ports						4	4
Connector	TB	TB	DB9-M	TB	TB	DB9-M	DB9-M
15 KV ESD Protection	√	\checkmark	$\sqrt{}$	$\sqrt{}$	V	$\sqrt{}$	V
2 KV Isolation Protection		\checkmark			√		√
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; S	Stop Bits: 1, 1.5, 2; Parity:	None, Even, Odd, Space,	Mark			
Flow Control	RTS/CTS, XON/XOFF	RTS/CTS, XON/XOFF	RTS/CTS, XON/XOFF	RTS/CTS, XON/XOFF	RTS/CTS, XON/XOFF	RTS/CTS, XON/XOFF	RTS/CTS, XON/XO
Baudrate	110 bps to 230.4 Kbp		50 bps to 921.6 Kbps				
Software							
Network Protocols	ICMP, IP, TCP, UDP, D DNS, SNMP V1/V2c, I		ICMP, IP, TCP, UDP, DH	HCP, BOOTP, Telnet, DNS,	SNMP V1/V2c, HTTP, SN	ITP, SNTP, Rtelnet, ARP	
Web Console	√ Sitter € 17 € 20, 1	√ , SWIT, SWIT	V	V	√	V	V
Serial Console							
Telnet Console	√	√	√	√	√	√	√
Windows Utility	V √	√ √	1	√ √	√ √	√ √	√ √
Windows Real COM Drivers		NT, 2000, XP x86/x64, 20					•
Fixed TTY Drivers	CCO Univ CCO Open	Server, UnixWare 7, UnixV	Mara 2 1 CVP 4 2 ONV 4	25 ONV 6 Colorio 10 E	rooDCD AIVEY UD IIV	111	
Linux Real TTY Drivers	Linux 2.4.x, 2.6.x	Server, Offixware 7, Offixw	VAIC 2.1, 3VII 4.2, QIVX 4.	.23, QIVA 0, 30Ialis 10, 11	Teebob, AIX 5.X, TII -0X		
Onsite Configuration							
Mini Screen with Push Buttons			\checkmark	√	√	√	\checkmark
Physical Characteristics							
Housing	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)	Metal (IP30)
Weight	360 g	380 g	740 -				
Dimensions			740 g		(22)		
	67 x 100.4 x 22 mm	67 x 100.4 x 35 mm	158 x 103 x 33 mm				
Environmental Limits	67 x 100.4 x 22 mm	-					
	67 x 100.4 x 22 mm 0 to 55°C or -40 to 75	67 x 100.4 x 35 mm	158 x 103 x 33 mm)	(
Operating Temparture		67 x 100.4 x 35 mm		:)			
Environmental Limits Operating Temparture Operating Humidity Storage Temperature	0 to 55°C or -40 to 75	67 x 100.4 x 35 mm	158 x 103 x 33 mm 0 to 55°C (32 to 131°F	·)			
Operating Temparture Operating Humidity Storage Temperature	0 to 55°C or -40 to 75 5 to 95% RH	67 x 100.4 x 35 mm	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH	3)			
Operating Temparture Operating Humidity Storage Temperature Power Requirements	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C	67 x 100.4 x 35 mm	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C			12 to 48 VDC	
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @	0 to 55°C or -40 to 75 5 to 95% RH	67 x 100.4 x 35 mm	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	12 to 48 VDC 350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC	67 x 100.4 x 35 mm 5°C	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C	12 to 48 VDC	12 to 48 VDC		12 to 48 VDC
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals EMC Safety	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA 	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals EMC Safety Marine	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA CE (EN55022 and EN5 UL (UL60950-1), TÜV	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals EMC Safety Marine Medical	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA CE (EN55022 and EN3 UL (UL60950-1), TÜV DNV	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA 55024 Class A), FCC Part / (EN60950-1)	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 10/240 VAC Regulatory Approvals EMC Safety Marine Medical Reliability	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA CE (EN55022 and EN5 UL (UL60950-1), TÜV DNV	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA 55024 Class A), FCC Part / (EN60950-1)	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA 15 Subpart B Class A EN60601-1-2 Class B,	12 to 48 VDC 320/175/ mA 	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA
Operating Temparture Operating Humidity	0 to 55°C or -40 to 75 5 to 95% RH -40 to 85°C 12 to 48 VDC 280/150/ mA CE (EN55022 and EN3 UL (UL60950-1), TÜV DNV	67 x 100.4 x 35 mm 5°C 12 to 48 VDC 509.4/200/ mA 55024 Class A), FCC Part / (EN60950-1)	158 x 103 x 33 mm 0 to 55°C (32 to 131°F 5 to 95% RH -20 to 70°C 12 to 48 VDC 350/190/ mA	12 to 48 VDC 320/175/ mA	12 to 48 VDC 530/280/ mA	350/190/ mA	12 to 48 VDC 554/294/ mA



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	NPort® 5610-8	NPort® 5610-8-48V	NPort® 5630-8	NPort® 5650-8	NPort® 5650-8-M-SC	NPort® 5650-8-S-SC	NPort® 5610-16	NPort® 5610-16-48V
thernet Interface								
OBaseT Ports								
0/100BaseT(X) Ports	1	1	1	1			1	1
00BaseFX Ports					1 (multi-mode)	1 (single-mode)		
onnector	RJ45	RJ45	RJ45	RJ45	SC	SC	RJ45	RJ45
lagnetic Isolation rotection	1.5 KV	1.5 KV	1.5 KV	1.5 KV			1.5 KV	1.5 KV
erial Interface								
S-232 Ports	8	8					16	16
S-232/422 Ports			8					
S-232/422/485 Ports				8	8	8		
onnector	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
5 KV ESD Protection	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
KV Isolation rotection								
erial Communication arameters	Data Bits: 5, 6, 7, 8	3; Stop Bits: 1, 1.5, 2;	Parity: None, Even, Oc	ld, Space, Mark				
low Control	RTS/CTS, XON/XO	FF						
audrate	50 bps to 921.6 Kb							
oftware								
etwork Protocols	ICMP, IP, TCP, UDF	, DHCP, BOOTP, Telne	t, DNS, SNMP V1/V2c	, HTTP, SMTP, SNTP,	ARP, PPP, SLIP, RTeln	et, RFC2217		
Veb Console	V	V	V	V	V	1	V	V
erial Console						· · ·		
elnet Console	√	√	√	√	√	√	√	√
indows Utility	√ √	√ √	√ √	√ √	√ √	√ √	√ √	V
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	Windows 95 98 N	MF NT 2000 XP x86/	x64 2003 x86/x64 Vi	sta x86/x64 2008 x86	S/x64 Embedded CE 5	0/6 0 XP Embedded		
)rivers					6/x64, Embedded CE 5			
Orivers ixed TTY Drivers	SCO Unix, SCO Op		x64, 2003 x86/x64, Vi , UnixWare 2.1, SVR 4					
rivers ixed TTY Drivers inux Real TTY Drivers								
rivers ixed TTY Drivers inux Real TTY Drivers nsite Configuration	SCO Unix, SCO Op							
rivers ixed TTY Drivers inux Real TTY Drivers insite Configuration lini Screen with Push	SCO Unix, SCO Op						٧	√
rivers ixed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons	SCO Unix, SCO Op Linux 2.4.x, 2.6.x	enServer, UnixWare 7	, UnixWare 2.1, SVR 4	1.2, QNX 4.25, QNX 6,	Solaris 10, FreeBSD,	AIX 5.x, HP-UX 11i	٨	√
rivers ixed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics	SCO Unix, SCO Op Linux 2.4.x, 2.6.x	enServer, UnixWare 7	, UnixWare 2.1, SVR 4	1.2, QNX 4.25, QNX 6,	Solaris 10, FreeBSD,	AIX 5.x, HP-UX 11i	√ Metal (IP30)	√ Metal (IP30)
rivers xed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing	SCO Unix, SCO Op Linux 2.4.x, 2.6.x	enServer, UnixWare 7	, UnixWare 2.1, SVR 4	4.2, QNX 4.25, QNX 6,	Solaris 10, FreeBSD, √	AIX 5.x, HP-UX 11i		
rivers xed TTY Drivers nux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing feight	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30)	enServer, UnixWare 7 √ Metal (IP30) 3160 g	, UnixWare 2.1, SVR 4	.2, QNX 4.25, QNX 6, √ Metal (IP30)	Solaris 10, FreeBSD, √ Metal (IP30)	AIX 5.x, HP-UX 11i √ Metal (IP30)	Metal (IP30)	Metal (IP30)
rivers ixed TTY Drivers inux Real TTY Drivers insite Configuration lini Screen with Push uttons hysical Characteristics ousing //eight imensions	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g	enServer, UnixWare 7 √ Metal (IP30) 3160 g	, UnixWare 2.1, SVR 4	.2, QNX 4.25, QNX 6, √ Metal (IP30)	Solaris 10, FreeBSD, √ Metal (IP30)	AIX 5.x, HP-UX 11i √ Metal (IP30)	Metal (IP30)	Metal (IP30)
rivers ixed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing Jeight imensions nvironmental Limits	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm	enServer, UnixWare 7	, UnixWare 2.1, SVR 4 √ Metal (IP30) 3380 g	.2, QNX 4.25, QNX 6,	Solaris 10, FreeBSD, √ Metal (IP30) 3380 g	AIX 5.x, HP-UX 11i √ Metal (IP30) 3380 g	Metal (IP30) 3420 g	Metal (IP30) 3260 g
rivers ixed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing Jeight imensions nvironmental Limits perating Temparture	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C	enServer, UnixWare 7 Metal (IP30) 3160 g	UnixWare 2.1, SVR 4 √ Metal (IP30) 3380 g 0 to 55°C	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g	Solaris 10, FreeBSD, √ Metal (IP30) 3380 g 0 to 55°C	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C	Metal (IP30) 3420 g	Metal (IP30) 3260 g
rivers xed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing Jeight imensions nvironmental Limits perating Temparture perating Humidity	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH	UnixWare 2.1, SVR 4 √ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH	Solaris 10, FreeBSD, ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH
rivers xed TTY Drivers inux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing Jeight imensions nvironmental Limits perating Temparture perating Humidity torage Temperature	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C	enServer, UnixWare 7 Metal (IP30) 3160 g	UnixWare 2.1, SVR 4 √ Metal (IP30) 3380 g 0 to 55°C	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g	Solaris 10, FreeBSD, √ Metal (IP30) 3380 g 0 to 55°C	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C	Metal (IP30) 3420 g	Metal (IP30) 3260 g
rivers ixed TTY Drivers inux Real TTY Drivers insite Configuration lini Screen with Push uttons hysical Characteristics ousing Jeight imensions nvironmental Limits perating Temparture perating Humidity torage Temperature ower Requirements	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mn 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	AIX 5.x, HP-UX 11i ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH
Vindows Real COM brivers ixed TTY Drivers ixed TTY Drivers ixed TTY Drivers Onsite Configuration Aini Screen with Push buttons Physical Characteristics Idousing Veight Dimensions Invironmental Limits Operating Temparture Operating Humidity Storage Temperature Ower Requirements Input Voltage Ower Consumption @ Operating Properation & Operati	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C	enServer, UnixWare 7 ✓ Metal (IP30) 3160 g 1 0 to 55°C 5 to 95% RH -20 to 75°C	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C	Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C
rivers ixed TTY Drivers inux Real TTY Drivers inux Real TTY Drivers insite Configuration lini Screen with Push uttons hysical Characteristics ousing Veight imensions nvironmental Limits perating Temparture perating Humidity torage Temperature ower Requirements input Voltage ower Consumption @ 2/24/48 VDC ower Consumption @	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mn 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC
rivers xed TTY Drivers inux Real TTY Drivers inux Real TTY Drivers nisite Configuration lini Screen with Push uttons hysical Characteristics ousing /eight imensions nvironmental Limits perating Temparture perating Temparture perating Humidity torage Temperature ower Requirements input Voltage ower Consumption @ 20/244/48 VDC ower Consumption @ 00/240 VAC	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mn 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	AIX 5.x, HP-UX 11i ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC //135 mA
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rivers ixed TTY Drivers inux Real TTY Drivers inux Real TTY Drivers insite Configuration lini Screen with Push uttons hysical Characteristics ousing leight imensions nvironmental Limits perating Temparture perating Humidity torage Temperature ower Requirements input Voltage ower Consumption @ 20/24/48 VDC ower Consumption @ 00/240 VAC	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA	Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA
rivers xed TTY Drivers nux Real TTY Drivers nux Real TTY Drivers nux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing feight imensions nvironmental Limits perating Temparture perating Humidity torage Temperature ower Requirements uput Voltage ower Consumption @ 20/244 VDC ower Consumption @ 20/240 VAC egulatory Approvals MC	SCO Unix, SCO Op Linux 2.4.x, 2.6.x Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz Latingary MA CE (EN55022 Class Part 15 Subpart B	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA	Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B I	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC //135 mA
rivers ixed TTY Drivers inux Real TTY inux	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B IEC61000-4-12	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA	UnixWare 2.1, SVR 4 ✓ Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA	Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B I	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA
rivers xed TTY Drivers nux Real TTY Drivers nux Real TTY Drivers nux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing feight imensions nvironmental Limits perating Temparture perating Humidity torage Temperature over Requirements uput Voltage over Consumption @ 20/24/48 VDC over Consumption @ 20/24/48 VDC over Consumption @ 20/240 VAC egulatory Approvals MC afety larine	SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz CF (EN55022 Class Part 15 Subpart B IEC61000-4-12 UL (UL60950-1), 1	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA S A, EN55024), FCC Class A, ÜV (EN60950-1)	UnixWare 2.1, SVR 4 Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Class	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B I IEC61000-4-12	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC //135 mA
rivers xed TTY Drivers nux Real TTY nux Rea	SCO Unix, SCO Op Linux 2.4.x, 2.6.x Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B IEC61000-4-12 UL (UL60950-1), 1	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA S A, EN55024), FCC Class A, ÜV (EN60950-1)	UnixWare 2.1, SVR 4 Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Class	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B I IEC61000-4-12	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC //135 mA
rivers xed TTY Drivers nux Real TTY Drivers nux Real TTY Drivers nux Real TTY Drivers nsite Configuration lini Screen with Push uttons hysical Characteristics ousing feight imensions nuvironmental Limits perating Temparture perating Temparture perating Humidity torage Temperature ower Requirements put Voltage ower Consumption @ 20/24/48 VDC ower Consumption @ 20/240 VAC egulatory Approvals MC afety	SCO Unix, SCO Op Linux 2.4.x, 2.6.x Metal (IP30) 3340 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B IEC61000-4-12 UL (UL60950-1), 1	Metal (IP30) 3160 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC//135 mA S A, EN55024), FCC Class A, ÜV (EN60950-1)	UnixWare 2.1, SVR 4 Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Class	.2, QNX 4.25, QNX 6, Metal (IP30) 3360 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	Solaris 10, FreeBSD, Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	AIX 5.x, HP-UX 11i Metal (IP30) 3380 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	Metal (IP30) 3420 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 141/93 mA CE (EN55022 Class Part 15 Subpart B I IEC61000-4-12	Metal (IP30) 3260 g 0 to 55°C 5 to 95% RH -20 to 75°C ±48 VDC //135 mA



	NPort® 5630-16	NPort® 5650-16	NPort®	NPort®	NPort®	NPort®	NPort®	NPort®	NPort®
	NPUNG 3030-10	MPUIL® 3030-10	5650-16-M-SC	5650-16-S-SC	5610-8-DT	5610-8-DT-J	5650-8-DT	5650I-8-DT	5650-8-DT-J
Ethernet Interface									
10BaseT Ports									
10/100BaseT(X) Ports	1	1	4 (4 (-:	2	2	2	2	2
100BaseFX Ports Connector	RJ45	 RJ45	1 (multi-mode) SC	1 (single-mode) SC	 RJ45	 RJ45	 RJ45	RJ45	 RJ45
Magnetic Isolation	1.5 KV	1.5 KV			1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Protection	1.5 KV	1.5 KV			1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface									
RS-232 Ports		***	***	***	8	8		***	
RS-232/422 Ports RS-232/422/485 Ports	16	16	10				8	8	8
Connector	RJ45	RJ45	16	16		RJ45		O DB9-M	o RJ45
15 KV ESD Protection	NJ45 √	NJ45 √	RJ45 √	RJ45 √	DB9-M √	NJ45 √	DB9-M √	√ DD9-IVI	NJ45 √
2 KV Isolation		V	· · ·					√ √	· ·
Protection Serial Communication							***	V	***
Parameters	Data Bits: 5, 6, 7,	8; Stop Bits: 1, 1.5, 2	2; Parity: None, Even	, Odd, Space, Mark					
Flow Control	RTS/CTS, XON/XO								
Baudrate	50 bps to 921.6 Ki	bps							
Software									
Network Protocols		P, DHCP, BOOTP, Telr SLIP, RTelnet, RFC22		/2c, HTTP, SMTP,	ICMP, IP, TCP, L Rtelnet, ARP, R		Telnet, DNS, SNN	IP V1/V2c, HTTP, S	MTP, SNTP,
Web Console	√	V	$\sqrt{}$	$\sqrt{}$	√	\checkmark	V	\checkmark	√
Serial Console					$\sqrt{}$	\checkmark	\checkmark	\checkmark	$\sqrt{}$
Telnet Console		$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	$\sqrt{}$
	1	$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark	$\sqrt{}$
Windows Utility									
Windows Real COM			6/x64, 2003 x86/x64	, Vista x86/x64, 2008	3 x86/x64, Embed	ded CE 5.0/6.0, XP	Embedded		
Windows Real COM Drivers	Windows 95, 98, 1	ME, NT, 2000, XP x80		, Vista x86/x64, 2008					
Windows Real COM Drivers Fixed TTY Drivers	Windows 95, 98, N	ME, NT, 2000, XP x80		, Vista x86/x64, 2008 TR 4.2, QNX 4.25, QN					
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers	Windows 95, 98, 1	ME, NT, 2000, XP x80							
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration	Windows 95, 98, I SCO Unix, SCO Op Linux 2.4.x, 2.6.x	ME, NT, 2000, XP x86 eenServer, UnixWare	7, UnixWare 2.1, SV	'R 4.2, QNX 4.25, QN	X 6, Solaris 10, Fi	reeBSD, AIX 5.x, H	P-UX 11i		
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers	Windows 95, 98, N	ME, NT, 2000, XP x80						√	√
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push	Windows 95, 98, I SCO Unix, SCO Op Linux 2.4.x, 2.6.x	ME, NT, 2000, XP x86 eenServer, UnixWare	7, UnixWare 2.1, SV	'R 4.2, QNX 4.25, QN	X 6, Solaris 10, Fi	reeBSD, AIX 5.x, H	P-UX 11i	V	√
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons	Windows 95, 98, I SCO Unix, SCO Op Linux 2.4.x, 2.6.x	ME, NT, 2000, XP x86 eenServer, UnixWare	7, UnixWare 2.1, SV	'R 4.2, QNX 4.25, QN	X 6, Solaris 10, Fi	reeBSD, AIX 5.x, H	P-UX 11i	√ Metal (IP30)	√ Metal (IP30)
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics	Windows 95, 98, 1 SCO Unix, SCO Op Linux 2.4.x, 2.6.x	ME, NT, 2000, XP x8tenServer, UnixWare	7, UnixWare 2.1, S\	R 4.2, QNX 4.25, QN	X 6, Solaris 10, F	reeBSD, AIX 5.x, H	P-UX 11i		
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing	Windows 95, 98, 1 SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30)	ME, NT, 2000, XP x86 ienServer, UnixWare Metal (IP30) 3460 g	7, UnixWare 2.1, SV	R 4.2, QNX 4.25, QN √ Metal (IP30)	X 6, Solaris 10, Fi √ Metal (IP30)	weeBSD, AIX 5.x, H. √ Metal (IP30) 1170 g	P-UX 11i √ Metal (IP30)	Metal (IP30)	Metal (IP30)
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight	Windows 95, 98, 1 SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3400 g	ME, NT, 2000, XP x86 ienServer, UnixWare Metal (IP30) 3460 g	7, UnixWare 2.1, SV	R 4.2, QNX 4.25, QN √ Metal (IP30)	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g	weeBSD, AIX 5.x, H. √ Metal (IP30) 1170 g	P-UX 11i √ Metal (IP30)	Metal (IP30)	Metal (IP30)
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions	Windows 95, 98, 1 SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3400 g	ME, NT, 2000, XP x86 ienServer, UnixWare Metal (IP30) 3460 g	7, UnixWare 2.1, SV	R 4.2, QNX 4.25, QN √ Metal (IP30)	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g	weeBSD, AIX 5.x, H. √ Metal (IP30) 1170 g	P-UX 11i √ Metal (IP30)	Metal (IP30)	Metal (IP30)
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits	Windows 95, 98, 1 SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3400 g 440 x 45 x 198 mm	ME, NT, 2000, XP x86 ienServer, UnixWare Metal (IP30) 3460 g	7, UnixWare 2.1, S\ √ Metal (IP30) 3440 g	R 4.2, QNX 4.25, QN √ Metal (IP30) 3440 g	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g 197 x 44 x 135.	eeBSD, AIX 5.x, H √ Metal (IP30) 1170 g 5 mm	P-UX 11i √ Metal (IP30) 1770 g	Metal (IP30) 1850 g	Metal (IP30) 1710 g
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture	Windows 95, 98, 1 SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C	ME, NT, 2000, XP x86 ienServer, UnixWare Metal (IP30) 3460 g 0 to 55°C	7, UnixWare 2.1, S\ √ Metal (IP30) 3440 g 0 to 55°C	R 4.2, QNX 4.25, QN √ Metal (IP30) 3440 g 0 to 55°C	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C	Metal (IP30) 1170 g 5 mm 0 to 55°C	P-UX 11i √ Metal (IP30) 1770 g 0 to 55°C	Metal (IP30) 1850 g 0 to 55°C	Metal (IP30) 1710 g 0 to 55°C
Windows Real COM Drivers Fixed TTY Drivers Fixed TTY Drivers Consite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x	ME, NT, 2000, XP x86 venServer, UnixWare Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH	R 4.2, QNX 4.25, QN Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH	P-UX 11i ✓ Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH
Windows Real COM Drivers Fixed TTY Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x	ME, NT, 2000, XP x86 venServer, UnixWare Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH	R 4.2, QNX 4.25, QN Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH	P-UX 11i ✓ Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	ME, NT, 2000, XP x86 tenServer, UnixWare Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mr 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	ME, NT, 2000, XP x86 tenServer, UnixWare √ Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC,	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Consite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	ME, NT, 2000, XP x86 wenServer, UnixWare √ Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz	X 6, Solaris 10, Fi √ Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals	Windows 95, 98, 18 SCO Unix, SCO Opt Linux 2.4.x, 2.6.x Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA	Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals EMC	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mr 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Clas	ME, NT, 2000, XP x86 denServer, UnixWare Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA s A, EN55024), FCC	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Fixed TTY Drivers Consite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals EMC Safety	Windows 95, 98, 18 SCO Unix, SCO Opt Linux 2.4.x, 2.6.x Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA	ME, NT, 2000, XP x86 denServer, UnixWare Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA s A, EN55024), FCC	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA ass A	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Fixed TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Humidity Storage Temperature Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 100/240 VAC Regulatory Approvals EMC	Windows 95, 98, 18 SCO Unix, SCO Opt Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Clas UL (UL60950-1), EN60601-1-2	ME, NT, 2000, XP x86 denServer, UnixWare √ Metal (IP30) 3460 g m 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA s A, EN55024), FCC TÜV (EN60950-1) EN606001-1-2 Class B,	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA Part 15 Subpart B Cl EN60601-1-2 Class B,	Metal (IP30) Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA ass A EN60601-1-2 Class B,	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA CE (EN55022 C	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA FCC Part 15 Subpar	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Linux Real TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Temparture Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 12/24/48 VDC Regulatory Approvals EMC Safety Marine Medical	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mr 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Clas UL (UL60950-1), 1	Metal (IP30) Metal (IP30) 3460 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA s A, EN55024), FCC TÜV (EN60950-1) EN60601-1-2	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA Part 15 Subpart B C EN60601-1-2	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA ass A EN60601-1-2	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA CE (EN55022 C	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Temparture Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 12/24/48 VDC Regulatory Approvals EMC Safety Marine Medical Reliability	Windows 95, 98, 18 SCO Unix, SCO Op Linux 2.4.x, 2.6.x √ Metal (IP30) 3400 g 440 x 45 x 198 mr 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Clas UL (UL60950-1), 1 EN60601-1-2 Class B, EN55011	ME, NT, 2000, XP x86 denServer, UnixWare ✓ Metal (IP30) 3460 g m 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA s.A. EN55024), FCC TÜV (EN60950-1) EN60601-1-2 Class B, EN55011	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA Part 15 Subpart B Cl EN60601-1-2 Class B, EN55011	Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA ass A EN60601-1-2 Class B, EN55011	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA CE (EN55022 C	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA lass A, EN55024),	P-UX 11i ✓ Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA FCC Part 15 Subpa	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA
Windows Real COM Drivers Fixed TTY Drivers Linux Real TTY Drivers Linux Real TTY Drivers Linux Real TTY Drivers Onsite Configuration Mini Screen with Push Buttons Physical Characteristics Housing Weight Dimensions Environmental Limits Operating Temparture Operating Temparture Power Requirements Input Voltage Power Consumption @ 12/24/48 VDC Power Consumption @ 12/24/48 VDC Regulatory Approvals EMC Safety Marine Medical	Windows 95, 98, 18 SCO Unix, SCO Opt Linux 2.4.x, 2.6.x ✓ Metal (IP30) 3400 g 440 x 45 x 198 mm 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 152/98 mA CE (EN55022 Clas UL (UL60950-1), EN60601-1-2	ME, NT, 2000, XP x86 denServer, UnixWare √ Metal (IP30) 3460 g m 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 158/102 mA s A, EN55024), FCC TÜV (EN60950-1) EN606001-1-2 Class B,	7, UnixWare 2.1, SV Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 174/113 mA Part 15 Subpart B Cl EN60601-1-2 Class B,	Metal (IP30) Metal (IP30) 3440 g 0 to 55°C 5 to 95% RH -20 to 75°C 100 to 240 VAC, 47 to 63 hz 164/110 mA ass A EN60601-1-2 Class B,	X 6, Solaris 10, Fi Metal (IP30) 1760 g 197 x 44 x 135. 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA CE (EN55022 C	Metal (IP30) 1170 g 5 mm 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 611/300/140 mA	P-UX 11i Metal (IP30) 1770 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA	Metal (IP30) 1850 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 1066/510/200 mA	Metal (IP30) 1710 g 0 to 55°C 5 to 95% RH -20 to 70°C 12 to 48 VDC 615/300/156 mA

Industrial-grade Device Servers



	200	200	300	200	200	300	309
	NPort® IA5150 NPort® IA5150-T	NPort® IA5150I NPort® IA5150I-T	NPort® IA5150-M-SC NPort® IA5150-M-SC-T	NPort® IA5150I-M-SC NPort® IA5150I-M-SC-T	NPort® IA5150-S-SC NPort® IA5150-S-SC-T	NPort® IA5150I-S-SC NPort® IA5150I-S-SC-T	NPort® IA5250 NPort® IA5250-T
Ethernet Interface							
10/100BaseT(X) Ports	2	2					2
100BaseFX Ports			1 (multi-mode)	1 (multi-mode)	1 (single-mode)	1 (single-mode)	
Connector	RJ45	RJ45	SC	SC	SC	SC	RJ45
Magnetic Isolation Protection	1.5 KV	1.5 KV					1.5 KV
Serial Interface							
RS-232/422/485 Ports	1	1	1	1	1	1	2
Connector	DB9-M/TB	DB9-M/TB	DB9-M/TB	DB9-M/TB	DB9-M/TB	DB9-M/TB	DB9-M
15 KV ESD Protection	√	$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$	\checkmark	\checkmark
2 KV Isolation Protection		\checkmark		√		\checkmark	
Serial Communication Parameters	Data Bits: 5, 6, 7, 8	3; Stop Bits: 1, 1.5, 2; I	Parity: None, Even, Odd, Sp	ace, Mark			
Flow Control	RTS/CTS, XON/XO	FF					
Baudrate	110 bps to 230.4 k	(bps					
Software							
Network Protocols	ICMP, IP, TCP, UDF	, DHCP, BOOTP, Telnet	, Rtelnet, DNS, SNMP V1/V	2c, HTTP, SMTP, SNTP			
Configuration Options	Web Console, Seri	al Console, Telnet Con	sole, Windows Utility				
Windows Real COM Drivers	Windows 95, 98, N	ME, NT, 2000, XP x86/x	x64, 2003 x86/x64, Vista x8	6/x64, 2008 x86/x64, Embed	ded CE 5.0/6.0, XP Embedo	led	
Fixed TTY Drivers	SCO Unix, SCO Op	enServer, UnixWare 7,	UnixWare 2.1, SVR 4.2, QN	IX 4.25, QNX 6, Solaris 10, F	reeBSD, AIX 5.x, HP-UX 11	i	
Linux Real TTY Drivers	Linux 2.4.x. 2.6.x						
Physical Characteristics							
Housing	Plastic (IP30)						
Weight	360 g						
Dimensions	29 x 89.2 x 118.5	mm					
Environmental Limits	20 X 0012 X 11010						
Operating Temparture	0 to 55°C or -40 to	75°C					
Operating Humidity	5 to 95% RH	173 0					
Storage Temperature	-40 to 85°C						
Power Requirements	10 10 00 0						
Input Voltage	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC
Power Consumption	360 mA @ 12 V, 195 mA @ 24 V	420 mA @ 12 V, 215 mA @ 24 V	500 mA @ 12 V, 250 mA @ 24 V	510 mA @ 12 V, 260 mA @ 24 V	470 mA @ 12 V, 210 mA @ 24 V	490 mA @ 12 V, 250 mA @ 24 V	440 mA @ 12 V, 200 mA @ 24 V
Regulatory Approvals			222 1101 10 21 1	222 1111 1 0 2 1 1	2.2.111.0.2.1	222 1111 1 0 2 1 1	220 1111 1 0 2 1 1
EMC	CE (EN55022 Clas	s Δ EN55024) ECC Pa	rt 15 Subpart B Class A				
Safety		JL508, TÜV (EN60950					
Hazardous Location	, , , , , , , , , , , , , , , , , , , ,	vision 2 Groups A, B, C	,				
ATEX	Class I, Zone 2	noion E di oupo A, D, C					
Marine	DNV						
EMS), Level 3; EN61000-4 61000-4-12	-3 (RS), Level 3; EN61000-	4-4 (EFT), Level 4; EN61000-	4-5 (Surge), Level 3; EN61	000-4-6 (CS), Level 3; EN61	000-4-8;
IEC			(Freefall); IEC60068-2-6 (V	ibration)			
Dust-proof	IP30	IP30	IP30	IP30	IP30	IP30	IP30
Reliability							
Buzzer, RTC, WDT	√	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark	\checkmark	V
MTBF	183747 hrs	195614 hrs	183747 hrs	195614 hrs	183747 hrs	195614 hrs	194765 hrs
Warranty	5 years (see www.	moxa.com/warranty)					

Embedded Device Servers















	MiiNePort E1 MiiNePort E1-T	NE-4110S	NE-4110A	NE-4120S	NE-4120A	NE-4100T	WE-2100T
Form Factor							
Туре	Drop-in module	Ready-to-go sta	and-alone modules	S		26-pin dual-in-line package	Small metal housing
Dimensions	33.9 x 16.25 x 13.5 mm	57 × 40 mm	57 × 40 mm	57 × 40 mm	57 × 40 mm	45 × 36 mm	54 x 40 x 13.3 mm
Ethernet Interface							
10/100BaseT(X) Ports	1	1	1	1	1	1	1
Connector	RJ45	RJ45	RJ45	5-pin pin heade	r	26-pin dual-in-line	44-pin dual-in-line
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
WLAN Interface							
Standard Compliance							IEEE 802.11a/b/g
Radio Frequency Type							DSSS, CCK, DFDM
Wireless Security							SEP, SPA, SPA2, 802.11
Network Modes							Infrastructure (a/b/g), Ad Hoc (b/g)
Serial Interface							
TTL Ports	1 (data port)	1 (console port))			2 (1 data port, 1 con	sole port)
RS-232 Ports		1 (data port)		1 (data port)			
RS-232/422 Ports			1 (data port)		1 (data port)		
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: N	None, Even, Odd, S	Space, Mark				
Flow Control	RTS/CTS, XON/XOFF						
Baudrate	50 bps to 230.4 Kbps* (supports non-standard baudrates)	110 bps to 230.	.4 Kbps				50 bps to 921.6 Kbps
Programmable GPIO Pins	3	4	4	4	4	4	
Software							
Network Protocols	ICMP, IP, TCP, UDP, DHCP, Telnet, HTTP, SNMP \ ARP, TFTP, Auto IP, BOOTP	/1/V2c, SMTP ARP					DNS, SNTP, SSH, HTTP:
Configuration Options	Web/Serial/Telnet Console, Windows Utility						
Serial Command Mode	\checkmark						\checkmark
Windows Real COM Drivers	Windows 95, 98, ME, NT, 2000, XP x86/x64, 200	03 x86/x64, Vista	x86/x64, 2008 x86	6/x64, Embedded (CE 5.0/6.0, XP Em	bedded	
Fixed TTY Drivers	SCO Unix, SCO OpenServer, UnixWare 7, UnixW	are 2.1, SVR 4.2,	QNX 4.25, QNX 6,	Solaris 10, FreeBS	SD, AIX 5.x, HP-U	X 11i	
Linux Real TTY Drivers	Linux 2.4.x, 2.6.x						
Operation Modes	TCP Server, TCP Client, UDP, Real COM mode, Modem Mode, RFC2217	Real COM, TCP	Server, TCP Clien	t, UDP			Real COM, TCP Server, TCP Client, UDP, RFC2217
Environmental Limits							III JEETI
Operating Temparture	0 to 55°C or -40 to 85°C	0 to 55°C or -40	0 to 75°C				0 to 55°C
Operating Humidity	5 to 95% RH	,					5 to 95% RH
Storage Temperature	-40 to 85°C	-20 to 70°C					-20 to 70°C
Power Requirements							
Input Voltage	3.3 VDC (±5%)	5 VDC (±5%)	5 VDC (±5%)	5 VDC (±5%)	5 VDC (±5%)	5 VDC (±5%)	3.3 VDC (±5%)
Power Consumption	160 mA @ 3.3 VDC max.	290 mA @ 5 VE		(==,-)	(==)	(10,00)	540 mA (at full speed)
Regulatory Approvals							
EMC	EN55022:1998, Class B (radiated & conducted emissions); EN55024:1998 (direct & indirect ESD, electrical fast-transient/ burst immunity, power frequency magnetic field immunity)	CE (EN55022 C	lass A), FCC Part	15 Subpart B Class	s A		CE (EN55022 and EN55024 Class A, ETSI EN 301 489-17, ETSI EI 301 489-1)
Reliability							
Watchdog Timer	√	\checkmark	√	√	\checkmark	\checkmark	\checkmark
MTBF		290276 hrs	289573 hrs	289573 hrs	289573 hrs	288173 hrs	505288 hrs
Warranty		2002701110	2000701110	2000701110	2000101110	2001101110	000200 1110

^{*} Baudrates up to 921.6 Kbps available by request

Ethernet Fieldbus Gateways















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	MGate™ MB3170 MGate™ MB3170-T	MGate™ MB3170I MGate™ MB3170I-T	MGate™ MB3270 MGate™ MB3270-T	MGate™ MB3270I MGate™ MB3270I-T	MGate™ MB3180	MGate™ MB3280	MGate™ MB3480
Ethernet Interface							
Number of Ports	2 (1 IP)	2 (1 IP)	2 (1 IP)	2 (1 IP)	1	1	1
Speed	10/100 Mbps	10/100 Mbps	10/100 Mbps	10/100 Mbps	10/100 Mbps	10/100 Mbps	10/100 Mbps
Connector	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface							
Number of Ports	1	1	2	2	1	2	4
Serial Standards	RS-232/422/485	RS-232/422/485	RS-232/422/485	RS-232/422/485	RS-232/422/485	RS-232/422/485	RS-232/422/485
Connectors	RS-232: DB9-M; RS-	422/485: Terminal Block	DB9-M	DB9-M	DB9-M	DB9-M	DB9-M
ESD Protection	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
RS-485 Data Direction Control	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®	ADDC®
Serial Communication Parameters	Data Bits: 7, 8; Stop I	Bits: 1, 2; Parity: None, Ev	ren, Odd, Space, Mark				
Parity	None, Even, Odd, Spa						
Flow Control	RTS/CTS, DTR/DSR (
Baudrate	50 bps to 921.6 Kbps	3					
Software							
Operation Modes	RTU Slave, RTU Mast	ter, ASCII Slave, ASCII Ma	ıster				
Utilities	MGate™ Manager Su	ite for Windows 98, ME, N	NT, 2000, XP, 2003, Vista				
Smart Routing	√	√	√	V	$\sqrt{}$	$\sqrt{}$	\checkmark
Serial Redirection	√	V	$\sqrt{}$	V			
Priority Control	√	\checkmark	√	√			
Ethernet Protocol							
Serial Protocol							
Physical Characteristics							
Housing	Plastic	Plastic	Plastic	Plastic	Metal	Metal	Metal (IP30)
Dimensions	29 x 89.2 x 118.5 mn	n			22 x 52 x 80 mm	22 x 77 x 111 mm	35.5 x 103 x 158 mm
Environmental Limits							
Operating Temperature	0 to 55°C or -40 to 7	5°C			0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-40 to 85°C	-40 to 85°C	-40 to 85°C	-40 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C
Power Requirements							
Input Voltage	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC
Power Connector	Terminal block	Terminal block	Terminal block	Terminal block	Power jack	Power jack and termi	nal block
Regulatory Approvals							
EMC	CE (EN55022 Class A	and EN55024), FCC Part	15 Subpart B Class A				
Safety	UL (UL60950-1), TÜ\						
Hazardous Location		ion 2 Groups A, B, C, D; A	TEX Class 1 Zone 2				
Shock	IEC 60068-2-27	, , , , , ,					
Freefall	IEC 60068-2-23						
Vibration	IEC 60068-2-6						
Marine	DNV						
EMS	EN61000-4-2 (ESD): EN61000-4-3 (RS): L EN61000-4-4 (EFT): I EN61000-4-5 (SUrge EN61000-4-8: Passet EN61000-4-11: Passi EN61000-4-12: Passi	evel 3 Level 4): Level 3 evel 3 d d ed			EN61000-4-2 (ESD): EN61000-4-3 (RS): L EN61000-4-4 (EFT): L EN61000-4-5 (Surge) EN61000-4-6 (CS): L EN61000-4-11: Passe EN61000-4-12: Passe EN61000-4-12: Passe	evel 2 evel 2 : Level 2 evel 2 	
Reliability							
Warranty	5 years (see www.mo	oxa com/warranty)					
anuny	o yours (See www.IIII	maiouni, warranty j					

Ethernet Fieldbus Gateways









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	MGate™ EIP3170 MGate™ EIP3170-T	MGate™ EIP3170I MGate™ EIP3170I-T	MGate™ EIP3270 MGate™ EIP3270-T	MGate™ EIP3270I MGate™ EIP3270I-T
Ethernet Interface		<u>'</u>		
Number of Ports	2 (1 IP)	2 (1 IP)	2 (1 IP)	2 (1 IP)
Speed	10/100 Mbps	10/100 Mbps	10/100 Mbps	10/100 Mbps
Connector	RJ45	RJ45	RJ45	RJ45
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface				
Number of Ports	1	1	2	2
Serial Standards	RS-232/422	RS-232/422	RS-232/422	RS-232/422
Connectors	DB9-M (RS-232), TB (RS-422)	DB9-M (RS-232), TB (RS-422)	DB9-M	DB9-M
ESD Protection	15 KV	15 KV	15 KV	15 KV
RS-485 Data Direction Control	ADDC®	ADDC®	ADDC®	ADDC®
Serial Communication Parameters	Data Bits: 7, 8; Stop Bits: 1, 2; Parity: N	None, Even, Odd, Space, Mark		
Parity	None, Even, Odd, Space, Mark			
Flow Control	RTS/CTS, DTR/DSR			
Baudrate	50 bps to 921.6 Kbps			
Software				
Operation Modes				
Jtilities	MGate™ Manager Suite for Windows 9	8. ME. NT. 2000. XP. 2003. Vista		
Smart Routing	√	√ ,	\checkmark	\checkmark
Serial Redirection			√	V
Priority Control				
thernet Protocol	CIP (PCCC) on Ethernet/IP	CIP (PCCC) on Ethernet/IP	CIP (PCCC) on Ethernet/IP	CIP (PCCC) on Ethernet/IP
Serial Protocol	DF1 Full-duplex	DF1 Full-duplex	DF1 Full-duplex	DF1 Full-duplex
Physical Characteristics				·
Housing	Plastic	Plastic	Plastic	Plastic
Dimensions	29 x 89.2 x 118.5 mm	29 x 89.2 x 118.5 mm	29 x 89.2 x 118.5 mm	29 x 89.2 x 118.5 mm
Environmental Limits				
Operating Temperature	0 to 55°C or -40 to 75°C	0 to 55°C or -40 to 75°C	0 to 55°C or -40 to 75°C	0 to 55°C or -40 to 75°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C
Power Requirements	20 10 00 0	20 10 00 0	20 10 00 0	20 10 00 0
nput Voltage	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC
Power Connector	Terminal block	Terminal block	Terminal block	Terminal block
	Terrilliai block	Terrifila block	Terrinia block	Terminal block
Regulatory Approvals				
EMC	CE (EN55022 Class A and EN55024), F	CC Part 15 Subpart B Class A		
Safety	UL (UL60950-1), LVD (EN60950-1)	0. D. ATEV 01 4.7 0		
Hazardous Location	UL/cUL Class 1 Division 2 Groups A, B	, U, D; ATEX Class 1 Zone 2		
Shock	IEC60068-2-27			
Freefall	IEC60068-2-23			
/ibration Marine	IEC60068-2-6			
MS	EN61000-4-2 (ESD): Level 3 EN61000-4-3 (RS): Level 3 EN61000-4-4 (EFT): Level 4 EN61000-4-5 (Surge): Level 3 EN61000-4-6 (GS): Level 3 EN61000-4-8 Passed EN61000-4-11: Passed			
	EN61000-4-12: Passed			
Reliability				

PCI Express Serial Boards



	1	1		4	- shell			-	-
	CP-118EL	CP-168EL	CP-114EL	CP-114EL-I	CP-104EL	CP-102E	CP-102EL	CP-132EL	CP-132EL-I
Hardware		<u>'</u>							
Comm. Controller	MU860		16C550C compa	tible	MU860	16C550C comp	atible		
Bus	PCI Express x1		1000000 compa	icibio	1410000	1000000 00111p	utibio		
Connector	VHDCI 68		DB44 female			DB9 male	DB25 female		
Serial Interface									
RS-232 Ports		8			4	2	2		
RS-422 Ports									
RS-422/485 Ports								2	2
RS-232/422/485 Ports	8		4	4					
Communication Parameters		, 8; Stop Bits: 1, 1.5			Mark				
Flow Control	RTS/CTS, XON/X	OFF						XON/XOFF	
Baudrate	50 bps to 921.6								
ESD Protection	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
Optical Isolation				2 KV					2 KV
Driver Support									
Windows 9X/ME/NT									
Windows 2000	√	√	√	√	√	√	√	√	√
Windows XP/2003/Vista	√ √								
x86/x64		√	√	√	√	√	1	V	V
Windows 2008 x86/x64	√	\checkmark	\checkmark	$\sqrt{}$	\checkmark	√	\checkmark	\checkmark	\checkmark
Windows CE 5.0		$\sqrt{}$			\checkmark				
Windows CE 6.0									
Windows XP Embedded		$\sqrt{}$	$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	V	$\sqrt{}$
DOS		$\sqrt{}$			\checkmark				
Linux 2.4/2.6		$\sqrt{}$	$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$	\checkmark	V	\checkmark
FreeBSD 4/5		$\sqrt{}$			\checkmark				
QNX 4				***			***		***
QNX 6	√	V	V	√	V	V	√	V	√
SCO Open Server 5/6	√	√	√	√	√	√	√	√	√
UnixWare 7	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark		V	$\sqrt{}$
Environmental Factors									
Dimensions (mm)	64.4 x 132	62.7 x 102	67.2 x 136.9	67.2 x 136.9	62.7 x 100	85.0 x 100	67.2 x 102.0	67.2 x 102.0	67.2 x 104.0
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C
Regulatory Approvals									
FCC, Part 15 Class	В	В	В	В	В	В	В	В	В
EN55022 Class B									
EN55022									
EN55024	√	√	√	√	V	V	√	V	√
EN61000-3-2	√	V	√	√	√	√	√	√	√
EN61000-3-3	√	V	√	√	√	√	√	√.	√
EN61000-6-2	√	$\sqrt{}$	$\sqrt{}$	√	\checkmark	√	√	√	√
EN61000-6-4									
IEC 61000-4-2	√ ,	√ ,	√	√	√	V	√	V	√
IEC 61000-4-3	√ ,	√ ,	√	√	√	V	√	V	1
EC 61000-4-4	√	√ ,	√	√	V	V	√	V	1
IEC 61000-4-5	√ ,	√ ,	√	√	√	V	√	√ ,	√
IEC 61000-4-6 IEC 61000-4-8	√	√	√ 	1	V	٧	1	√	1
	$\sqrt{}$	√ ,	√ 	√ √	√ √	V	√	√	√
	1			3/	37	√	√		
IEC 61000-4-11	√	√	√			· ·			
IEC 61000-4-11 IEC 61000-4-11 (DIPS)									
IEC 61000-4-11 IEC 61000-4-11 (DIPS) ENV5204									
IEC 61000-4-11 IEC 61000-4-11 (DIPS)									

Universal PCI Serial Boards



	C320Turbo/PCI	C218Turbo/PCI	CP-118U CP-118U-T	CP-138U CP-138U-T	CP-118U-I CP-118U-I-T	CP-138U-I CP-138U-I-T	CP-168U CP-168U-T	CP-114UL CP-114UL-T	CP-114UL-I CP-114UL-I-T	CP-104UL CP-104UL-T
Hardware		'							<u>' </u>	
Comm. Controller	16C550C or com	patible	MU860							
Bus	32-bit Universal F									
Connector	DB25 female	DB62 female			DB78 female		DB62 female	DB44 female		
Serial Interface										
RS-232 Ports	32	8					8			4
RS-422 Ports										
RS-422/485 Ports				8		8				
RS-232/422/485 Ports			8		8			4	4	
Communication Parameters		8; Stop Bits: 1, 1.5						7	4	
Flow Control			RTS/CTS, XON	J/XOFF			RTS/CTS, XON	I/XOFF		
Baudrate	50 bps to	50 bps to 921.6		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1110/010,71011	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
ESD Protection	460.8 Kbps	Optional	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
Optical Isolation		Optional			2 KV	2 KV	Optional		2 KV	
_		Орнопаі			ZIV	ZIV	Optional		ZIV	
Driver Support	1	1	1	1	1	1	1	1	1	1
Windows 9X/ME/NT	√ 	√ .1	√ 	1	1	√ 	√ 	√ 	√ 	1
Windows 2000	√	√	√	√	√	√	√	√	√	√
Windows XP/2003/Vista x86/x64	√	$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	$\sqrt{}$	\checkmark	$\sqrt{}$	\checkmark
Windows 2008 x86/x64	$\sqrt{}$	$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Windows CE 5.0			\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Windows CE 6.0			√	√	√	V	\checkmark	\checkmark	\checkmark	√
Windows XP Embedded			√	\checkmark	√	V	\checkmark	\checkmark	√	\checkmark
DOS	√	√	\checkmark	\checkmark	√	√	\checkmark	\checkmark	\checkmark	√
Linux 2.4/2.6	\checkmark	√	\checkmark	\checkmark	\checkmark	√	\checkmark	√	√	
FreeBSD 4/5			√	√	√	√	\checkmark	\checkmark	√	√
QNX 4	√	\checkmark								
QNX 6	V	√	V	√	√	V	\checkmark	√	√	√
SCO Open Server 5/6	V	$\sqrt{}$	V	\checkmark	√	√	\checkmark	√	\checkmark	√
UnixWare 7	V	√	V	√	√	V	\checkmark	\checkmark	\checkmark	√
Environmental Factors										
Dimensions (mm)	90 x 120	105 x 180	82 x 135	82 x 135	105 x 133	105 x 133	82 x 120	64.4 x 120	64.4 x 120	64.4 x 120
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C
Regulatory Approvals										
FCC, Part 15 Class	A	A	В	В	В	В	В	В	В	В
EN55022 Class B										
EN55022					√	√	√	V	√	V
EN55024			V	√	√ √	√ √	√ √	1	√ √	√ √
EN61000-3-2			√ √	√ √	√ √	1	1	√ √	√ √	√ √
EN61000-3-3			√ √	√ √	1	1	1	1	√ √	√ √
EN61000-6-2			√ √	√ √						
EN61000-6-4										
IEC 61000-4-2	V	V	V	V	√	√	V	V	V	√
IEC 61000-4-3	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √	V	√ √
IEC 61000-4-4	√ √	√ √	V	√ √	V	V	√ √	√ √	V	1
IEC 61000-4-5		√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √
IEC 61000-4-6		√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √
IEC 61000-4-8			√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √
IEC 61000-4-11										
IEC 61000-4-11 (DIPS)		√	√	√	√	√	√	√	√	√
ENV5204	√	√ √								
	,	1								
Reliability	E (222		4>							
Warranty	5 years (see www	v.moxa.com/warran	ty)							

Universal PCI Serial Boards



	CP-104JU CP-104JU-T	CP-134U CP-134U-T	CP-134U-I CP-134U-I-T	CP-112UL CP-112UL-T	CP-112UL-I CP-112UL-I-T	CP-102U CP-102U-T	CP-102UL CP-102UL-T	CP-132UL CP-132UL-T	CP-132UL-I CP-132UL-I-T	POS-104UL POS-104UL-T
	0. 10.00 .	0. 10.0	00.0	0	0. 1.20211	01 1020 1	0. 10202 .	0. 10202 1	01 1020211	1 00 10102 1
Comm. Controller	MU860									
Bus	32-bit Universa	I PCI								
Connector	RJ45 x 4	DB44 female		DB25 female		DB9 male x 2	DB25 female			DB44 female
	11043 X 4	DD44 lelliale		DD25 Terriale		DD9 IIIale X Z	DD25 leffiale			DD44 lemale
Serial Interface	-					_	_			
RS-232 Ports	4					2	2			4
RS-422 Ports										
RS-422/485 Ports		4	4					2	2	
RS-232/422/485 Ports	***	***		2	2			***		
Communication Parameters		7, 8; Stop Bits: 1,	1.5, 2; Parity: No	ne, Even, Odd, Spa	ace, Mark					
Flow Control	RTS/CTS, XON	/XOFF								
Baudrate	50 bps to 921.6	6 Kbps								
ESD Protection	15 KV	15 KV	15 KV	15 KV	15 KV					
Optical Isolation			2 KV		2 KV				2 KV	
Driver Support										
Windows 9X/ME/NT	\checkmark	√	$\sqrt{}$			$\sqrt{}$	√	\checkmark	√	√
Windows 2000	\checkmark	\checkmark	\checkmark	√	\checkmark	\checkmark	\checkmark	$\sqrt{}$	$\sqrt{}$	\checkmark
Windows XP/2003/Vista x86/x64	√	√	\checkmark	√	√	√	\checkmark	√	√	√
Windows 2008 x86/x64	√	\checkmark	$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	\checkmark
Windows CE 5.0	√	\checkmark	√	\checkmark	\checkmark	√	√	\checkmark	√	√
Windows CE 6.0	√	\checkmark	√	\checkmark	\checkmark	√	√	\checkmark	√	√
Windows XP Embedded	√	\checkmark	√	√	$\sqrt{}$	√	√	$\sqrt{}$	√	√
DOS	√	$\sqrt{}$	√			\checkmark	V	$\sqrt{}$	\checkmark	√
Linux 2.4/2.6	√	\checkmark	√	√	V	√	√	$\sqrt{}$	√	√
FreeBSD 4/5	√	\checkmark	√			√	√	$\sqrt{}$	√	√
QNX 4										
QNX 6	√	\checkmark	√			√	√	$\sqrt{}$	√	√
SCO Open Server 5/6	√	\checkmark	√	√	$\sqrt{}$	√	√	$\sqrt{}$	√	√
UnixWare 7	√	\checkmark	√	√	$\sqrt{}$	√	√	$\sqrt{}$	√	V
Environmental Factors										
Dimensions (mm)	83 x 120	82.5 x 120	115 x 120			120 x 120	64.5 x 120	64.5 x 120	64.5 x 120	64.4 x 120
Operating Temperature	0 to 55°C, or -40 to 85°C	0 to 55°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C					
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH					
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C					
Regulatory Approvals										
FCC, Part 15 Class	В	В	В	В	В	В	В	В	В	В
EN55022 Class B										
EN55022	√	√	√	√	√	√	√	√	√	√
EN55024	1	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √	
EN61000-3-2	1	√ √	√ √	V	√ √	√ √	√ √	1	V	√
EN61000-3-3	1	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √	√ √
EN61000-6-2										1
EN61000-6-4										√ √
IEC 61000-4-2	√	√	√	V	√	√	√	√	V	√ √
IEC 61000-4-3	√ √	√	√	V	V	√ √	V	√ √	V	V
IEC 61000-4-4	√ √	√ √	√ √	V	V	√ √	√ √	1	V	√ √
IEC 61000-4-5	1	√	√ √	V	V	√ √	V	1	V	√ √
IEC 61000-4-6	1	V	√ √	V	1	√ √	√ √	√ √	√ √	√ √
IEC 61000-4-8	1	√ √	√ √	V	√ √	√ √	√ √	1	V	1
IEC 61000-4-11		,								
IEC 61000-4-11 (DIPS)	√	√	√	√	√	√	√	√	√	√
ENV5204	· · ·		V	·				·		
Reliability	E venere (00 =	unu maya aam t	ront ()							
Warranty	o years (see wi	ww.moxa.com/war	railty)							

Fiber Optic Serial Boards









	CP-102UF-M-ST	CP-102UF-M-ST-T	CP-102UF-S-ST	CP-102UF-S-ST-T
Hardware				
Bus	32-bit Universal PCI			
Optical Fiber Interface	32-bit diliversal i di			
Mode	Multi-mode		Single-mode	
Fiber Connectors	ST type		Siligle-Illoue	
Cable Requirements	50/125, 62.5/125, or 100/140 μm		8.3/125, 8.75/125, 9/125 or 10/140	ıım
Transmission Distance	Мах. 5 km		Max. 40 km	μm
Wavelength	820 nm		1310 nm	
Tx Output	-5 dBm			
Rx Sensitivity	-20 dBm		-24 dBm	
Point-to-Point Transmission	Half or full duplex			
Ring Transmission	Half duplex			
Serial Interface	That duplox			
Number of Ports	2	2	2	2
Communication		; Parity: None, Even, Odd, Space, Mark	2	2
Parameters Flow Control		, ·, · ·,, · ·, · ·, · · ·, · · ·, · · · ·		
Baudrate	XON/XOFF 50 bps to 921.6 Kbps			
	oo ups to az i.o kups			
Driver Support Windows 9X/ME/NT				
Windows 9X/ME/NT Windows 2000		 √	 √	√
Windows XP/2003/Vista				
x86/x64	\checkmark	\checkmark	\checkmark	\checkmark
Windows 2008 x86/x64	\checkmark	\checkmark	\checkmark	\checkmark
Windows CE 5.0	\checkmark	\checkmark	\checkmark	\checkmark
Windows CE 6.0	\checkmark	√	\checkmark	√
Windows XP Embedded	√	√	V	√
DOS	√	√	√	√.
Linux 2.4/2.6	√	√	V	1
FreeBSD 4/5				
QNX 4 QNX 6		 √	√	 √
SCO Open Server 5/6	\[\]	V √	V	√ √
UnixWare 7	\ \ \	N N	N N	N N
	V	V	V	V
Environmental Factors	C4.4100	C4.4 · · 100	C4.4 · · 100	C4 4 · · · 100
Dimensions (mm) Operating Temperature	64.4 x 120	64.4 x 120	64.4 x 120	64.4 x 120
Operating Humidity	0 to 55°C 5 to 95% RH	-40 to 85°C 5 to 95% RH	0 to 55°C 5 to 95% RH	-40 to 85°C 5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C
Regulatory Approvals	20 10 03 0	20 10 00 0	20 10 00 0	20 10 03 0
FCC, Part 15 Class	В	В	В	В
EN55022 Class B	√ 	√	√ √	√
EN55022				
EN55024	V	\checkmark	\checkmark	√
EN61000-3-2	√	V	\checkmark	√
EN61000-3-3	√	V	V	√
EN61000-6-2				
EN61000-6-4				
IEC 61000-4-2	V	V	V	V
IEC 61000-4-3	√	√	√	√
IEC 61000-4-4	√	√	√	√
IEC 61000-4-5	1	√ .1	1	√ .!
IEC 61000-4-6	√ -/	√ -/	√ 1	√ -1
IEC 61000-4-8 IEC 61000-4-11	√ 	√ 	√ 	√
IEC 61000-4-11 (DIPS)	√	√		√
ENV5204		V 	V 	·
Reliability				
	5 years (see www.moxa.com/warranty			
Warranty	o years (see www.moxa.com/warramty			

ISA Serial Boards













	V/	83								
	C320Turbo	C218Turbo	C168H	C168HS	C104H	C104HS				
Hardware			_							
Comm. Controller	16C550C or compatible									
Bus	16-bit ISA									
Connector	DB25 female	DB62 female			DB37 female					
Serial Interface										
RS-232 Ports	32	8	8	8	4	4				
RS-422 Ports										
RS-422/485 Ports										
RS-232/422/485 Ports										
Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Even, Odd, Space, Mark									
Flow Control										
Baudrate	50 bps to 460.8 Kbps	50 bps to 921.6 Kbps								
ESD Protection		Optional		25 KV		25 KV				
Optical Isolation		Optional	Optional	Optional						
Driver Support										
Windows 9X/ME/NT	√	√	√	√	√	V				
Windows 2000	√	√	√	√	1	√				
Windows XP/2003/Vista x86/x64	√	√	√	√	√	√				
Windows 2008 x86/x64	$\sqrt{}$	V	√	√	$\sqrt{}$	\checkmark				
Windows CE 5.0										
Windows CE 6.0										
Windows XP Embedded			√	√	√	√,				
DOS	√	√,	V	V	√ ,	V				
Linux 2.4/2.6	√	√	V	V	√ ,	V				
FreeBSD 4/5 QNX 4	 √	 √	√ √	√ √	√ √	√ .1				
QNX 6	√ √	√ √	√ √	V √	V	V √				
SCO Open Server 5/6	√ √	√ √	√ √	1	√ √	1				
UnixWare 7	√ √	√ √	√ √	1	V	1				
Environmental Factors			·	,						
Dimensions (mm)	107 x 158	105 x 180	93 x 157	93 x 157	83 x 157	83 x 157				
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C				
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH				
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C				
Regulatory Approvals										
FCC, Part 15 Class	A	A	A	A	A	А				
EN55022 Class B										
EN55022			\checkmark	√	\checkmark	V				
EN55024										
EN61000-3-2										
EN61000-3-3										
EN61000-6-2										
EN61000-6-4										
IEC 61000-4-2 IEC 61000-4-3	√ √	√ √	√ ,	√ √	√ √	1				
IEC 61000-4-3	\ √	√ √	N .	V √	\ \ \ \ \ \	N al				
IEC 61000-4-4			V	V	V	V				
IEC 61000-4-5		√ √								
IEC 61000-4-8										
IEC 61000-4-11										
IEC 61000-4-11 (DIPS)		V								
ENV5204	√	1	√	√	√	V				
Reliability										
Warranty	5 years (see www.moxa.	com/warrantv)								
	, , , , , , , , , , , , , , , , , , , ,									

ISA Serial Boards













	CI-134	CI-134I	CI-134IS	CI-132	CI-132I	CI-132IS
Hardware						
Comm. Controller	16C550C or compatil	ble				
Bus	16-bit ISA					
Connector	DB37 female			DB9 male x 2		
Serial Interface						
RS-232 Ports						
RS-422 Ports						
RS-422/485 Ports	4	4	4	2	2	2
RS-232/422/485 Ports Communication Parameters	Data Bits: 5, 6, 7, 8;	 Stop Bits: 1, 1.5, 2; Parity: N	Ione, Even, Odd, Space, Mark	***	***	***
Flow Control						
Baudrate						
ESD Protection	50 bps to 921.6 Kbps		05.107			05.107
			25 KV			25 KV
Optical Isolation		2 KV	2 KV		2 KV	2 KV
Driver Support						
Windows 9X/ME/NT	\checkmark	√	\checkmark	\checkmark	\checkmark	\checkmark
Windows 2000	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Windows XP/2003/Vista x86/x64	√	\checkmark	√	\checkmark	√	√
Windows 2008 x86/x64	√	√	\checkmark	\checkmark	\checkmark	\checkmark
Windows CE 5.0						
Windows CE 6.0						
Windows XP Embedded	√	√	√	√	V	√
DOS	V	V	V	V	V	V
Linux 2.4/2.6	1	V	√	V	V	√
FreeBSD 4/5	V	V	√	V	√	√
QNX 4	1	V	√	V	V	√
QNX 6	√ √	√	√ √	V	√ √	√
SCO Open Server 5/6	1	· √	√	V	V	√
UnixWare 7	√ √	V	V	V	V	V
Environmental Factors	·	,	1	,	· ·	V
	05 400	440 400	440 400	75 457	105 157	105 157
Dimensions (mm)	85 x 160	110 x 180	110 x 180	75 x 157	105 x 157	105 x 157
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C	-20 to 85°C
Regulatory Approvals						
FCC, Part 15 Class	В	В	В			
EN55022 Class B						
EN55022	$\sqrt{}$	√	\checkmark	√	\checkmark	\checkmark
EN55024						
EN61000-3-2						
EN61000-3-3						
EN61000-6-2						
EN61000-6-4						
IEC 61000-4-2	√	√	V	√	√	V
IEC 61000-4-3	√ √	1	V	1	V	V
IEC 61000-4-4	1	√ √	√ √	√ √	√ √	√ √
IEC 61000-4-5		V		V	V	
IEC 61000-4-6						
IEC 61000-4-8						
IEC 61000-4-8						
IEC 61000-4-11 (DIPS) ENV5204						
EBD/5711/1	\checkmark	\checkmark	$\sqrt{}$	$\sqrt{}$	\checkmark	$\sqrt{}$
Reliability						

PC/104 Modules













Color Colo		4,0	4	4	· · · · · · · · · · · · · · · · · · ·		
Comm. Controller 1855/20 or compatible		CA-108 CA-108-T	CA-114 CA-114-T		CA-104 CA-104-T	CA-132 CA-132-T	CA-132I CA-132I-T
Comm. Controller 1855/20 or compatible	Hardware						
Bus PCP-04 bus PCP-04 bus PCP-06 bus		16C550C or compatible					
Box Hearing Commentary 40-pin 40-pin 40-pin 20-pin 20-							
Serial Literature Serial Content			40-nin	40-nin	40-nin	20-nin	20-nin
## S-222 Parts 8						p	
RS-42248 Ports		Q			Λ		
## SE-222/422.58 Ports ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space, Mark ## Just Bits: 5, 6, 7, 8; Stop Bits: 1, 15, 2; Parity None, Even, Odd, Space,							
Ris 2529/224/245 Ports							
Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1, 5, 2; Parity: Note, Even, Odd, Space, Mark Flow Control Solops to \$21.6 KOps							
Flow Control	Communication			ne, Even, Odd, Space, Mark			
Baudrate							
ESD Pricesion		50 bps to 921.6 Kbps					
Option Deliver Support	ESD Protection		15 KV	15 KV	15 KV	15 KV	15 KV
Driver Support Windows \$2/000 V	Optical Isolation						
Windows SVMENT	Driver Support						
Windows 2000 V		V	V	V	V	V	V
Windows XP2003/Vistal							
Windows 2008 x86/x64	Windows XP/2003/Vista						
Windows CE 5.0 V V V V V V V V V							
Windows XP Embedded			V	V	√	√	V
Windows XP Embedded V				V			√
DOS	Windows XP Embedded						√
FreeBSD 4/5			√	V	V	V	
ONX 4	Linux 2.4/2.6	√	√	√	√	√	\checkmark
ONX 6	FreeBSD 4/5						
SCO Open Server 5/6	QNX 4	\checkmark	\checkmark	$\sqrt{}$	√	V	V
UnixWare 7	QNX 6	\checkmark	V	$\sqrt{}$	√	√	\checkmark
Dimensions (mm)	SCO Open Server 5/6						
Dimensions (mm) 90 x 96 90 x 96 x 96 x 96 90 x 96 x 96 x 96 90 x 96 x 96 90 x 96 x	UnixWare 7						
Operating Temperature 0 to 55°C, or -40 to 85°C 0 to 85°C -40 to 55°C	Environmental Factors						
Comparating Humidity Sto 95% RH Sto 95	Dimensions (mm)	90 x 96	90 x 96	90 x 96	90 x 96	90 x 96	90 x 96
Storage Temperature -40 to 55°C -40 to	Operating Temperature	0 to 55°C, or -40 to 85°C		0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C	0 to 55°C, or -40 to 85°C
Regulatory Approvals FCC, Part 15 Class A	Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
FCC, Part 15 Class A A A A A A A A A A A A A A A A A A	Storage Temperature	-40 to 55°C	-40 to 55°C	-40 to 55°C	-40 to 55°C	-40 to 55°C	-40 to 55°C
EN55022 Class B	Regulatory Approvals						
EN55022	FCC, Part 15 Class	A	A	A	A	A	A
EN55024							
EN61000-3-2							
EN61000-3-3			√	√	√	√	√
EN61000-6-2		√	√	V	√	√	√
EN61000-6-4			√	√	√	√	V
IEC 61000-4-2		√	√	V	V	√	V
IEC 61000-4-3		√	√ ,	V	√ ,	√ ,	V
IEC 61000-4-4		,	V	V	V	V	V
IEC 61000-4-5			√	V	√	V	V
IEC 61000-4-6			V	V	V	٧	V
IEC 61000-4-8 √ √ √ √ √ √ √ IEC 61000-4-11							
IEC 61000-4-11 IEC 61000-4-11 (DIPS) √ √ √ √ √ ENV5204 Reliability							
IEC 61000-4-11 (DIPS) √ √ √ √ ENV5204 Reliability				٧			٧
ENV5204							.1
Reliability	. ,						
Warranty 5 years (see www.moxa.com/warranty)							
	Warranty	5 years (see www.moxa.	com/warranty)				

PC/104-Plus Modules







	•		•
	CB-108 CB-108-T	CB-114 CB-114-T	CB-134l CB-134l-T
Hardware			
Comm. Controller	MU860 (16C550C compatible)		
Bus	PC/104-Plus bus		
Box Header Connector	40-pin	40-pin	40-pin
Serial Interface	чо ріп	TO pill	+ο μπ
RS-232 Ports	8		
RS-422 Ports			
RS-422/485 Ports			
RS-232/422/485 Ports		4	4
Communication	***	4	***
Parameters Flow Control	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, E	Even, Odd, Space, Mark	
Baudrate			1
ESD Protection	50 bps to 921.6 Kbps 15 KV	15 KV	15 KV
Optical Isolation		13 KV	
			2 KV
Driver Support			
Windows 9X/ME/NT			 -l
Windows 2000	√	√	√
Windows XP/2003/Vista x86/x64	\checkmark	\checkmark	\checkmark
Windows 2008 x86/x64	$\sqrt{}$	√	\checkmark
Windows CE 5.0	√	√	√
Windows CE 6.0	√	· √	√
Windows XP Embedded		√	√
DOS	√	√	√
Linux 2.4/2.6	V	√	√ √
FreeBSD 4/5			
QNX 4			
QNX 6	√	V	$\sqrt{}$
SCO Open Server 5/6			
UnixWare 7			
Environmental Factors			
Dimensions (mm)	90 x 96	90 x 96	90 x 96
Operating Temperature	0 to 55°C, or	0 to 55°C, or	0 to 55°C, or
	-40 to 85°C	-40 to 85°C	-40 to 85°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-40 to 55°C	-40 to 55°C	-40 to 55°C
Regulatory Approvals			
FCC, Part 15 Class	A	A	A
EN55022 Class B			
EN55022	1	√	√
EN55024	1	√ ,	√
EN61000-3-2	√	V	√
EN61000-3-3	√	V	V
EN61000-6-2	√	V	V
EN61000-6-4	√ 	V	N.
IEC 61000-4-2	√ 	V	N .
IEC 61000-4-3	√ 	V	N
IEC 61000-4-4 IEC 61000-4-5	√ -1	√ 2	√ 2
	√ √	√ √	√ √
IEC 61000-4-6 IEC 61000-4-8		√ √	
	√		√
IEC 61000-4-11 IEC 61000-4-11 (DIPS)	 √	 √	 √
, ,			√
ENV5204			
Reliability			
Warranty	5 years (see www.moxa.com/warranty)		

USB-to-Serial Converters



		Design of the last	200						
	UPort™ 1110	UPort™ 1130	UPort™ 1150	UPort™ 1150I	UPort™ 1250	UPort™ 1250I	UPort™ 1410	UPort™ 1450	UPort™ 1450I
USB Interface	•	•		•			•	<u> </u>	•
Compliance	USB 1.0/1.1 con	npliant. USB 2.0 com	npatible		USB 1.1/2.0 cor	mpliant			
Connector	USB type A			USB type B					
Speed	12 Mbps (Full-S	peed USB)			480 Mbps (Hi-S	peed USB) and 12 N	Abps (Full-Speed U	SB)	
Serial Interface									
Number of Ports	1 x RS-232	1 x RS-422/485	1 x RS- 232/422/485	1 x RS- 232/422/485	2 x RS- 232/422/485	2 x RS- 232/422/485	4 x RS-232	4 x RS- 232/422/485	4 x RS- 232/422/485
Connector	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male
Communication Parameters	Data Bits: 5, 6, 7	7, 8; Stop Bits: 1, 1.5	, 2; Parity: None, E	ven, Odd, Space, M	ark				
Flow Control	Flow Control: RT	TS/CTS, XON/XOFF							
FIFO	64 bytes	64 bytes	64 bytes	64 bytes	128 bytes	128 bytes	128 bytes	128 bytes	128 bytes
Baudrate	50 bps to 921.6	Kbps							
Embedded ESD Protection	15 KV								
Optical Isolation				2 KV		2 KV			2 KV
Driver Support									
Windows 98/ME	√	√	\checkmark	√					
Windows 2000	√	$\sqrt{}$	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	√	√
Windows XP/2003 x86/ x64	√	\checkmark	√	1	√	\checkmark	1	√	√
Windows Vista x86/x64	√	√	\checkmark	√	√	V	√	√	√
Windows 2008 x86/x64									
WinCE 5.0/6.0	√	\checkmark	\checkmark	\checkmark	√	√	√	$\sqrt{}$	√
Linux 2.4	√	$\sqrt{}$	\checkmark	$\sqrt{}$	√	\checkmark	\checkmark	\checkmark	\checkmark
Linux 2.6 x86/x64	√	\checkmark	\checkmark	\checkmark	\checkmark	$\sqrt{}$	\checkmark	\checkmark	√
Physical Characteristics									
Housing	ABS + PC			SECC sheet meta	al (1 mm), IP30 protection				
Product Weight	65 g			75 g	180 g		720 g		
Packaged Weight	200 g			370 g	370 g	680 g	1320 g		
Dimensions (mm)	38.4 x 60 x 20			52 x 80 x 22	77 x 26 x 111		204 x 30 x 125		
Environmental Limits									
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C
Regulatory Approvals									
EMI	FCC Part 15 Clas	ss B, EN61000-6-4			FCC, Part 15 Cla	ass A, EN61000-6-4			
Safety					UL, CUL, TÜV				
EMS		B, 000-3-2, EN61000-3 N61000-4-5, EN6100				A, 000-3-2, EN61000-3 N61000-4-5, EN610			
Power Requirements									
Power Consumption	30 mA @ 5 VDC	90 mA @ 5 VDC	77 mA @ 5 VDC	260 mA @ 5 VDC	360 mA @ 5 VDC	200 mA @ 12 VDC	290 mA @ 5 VDC	260 mA @ 12 VDC	360 mA @ 12 VDC
Reliabilty									
Warranty	5 years (see ww	w.moxa.com/warran	ty)						

USB-to-Serial Converters

















	100							
	UPort™ 1610-8	UPort™ 1650-8	UPort™ 1610-16	UPort™ 1650-16	UPort™ 2210	UPort™ 2410	UPort™ 2230	UPort™ 2430
USB Interface								
Compliance	USB 1.0/1.1/2.0 cd	ompliant			USB 1.1/2.0 comp	liant		
Connector	USB type B							
Speed	480 Mbps (Hi-Spe	ed USB) and 12 Mbps	(Full-Speed USB)					
Serial Interface								
Number of Ports	8 x RS-232	8 x RS-232/422/485	16 x RS-232	16 x RS-232/422/485	2 x RS-232	4 x RS-232	2 x RS-422/485	4 x RS-422/48
Connector	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male	DB9 male
Communication Parameters	Data Bits: 5, 6, 7, 8	8; Stop Bits: 1, 1.5, 2;	Parity: None, Even, Ode	d, Space, Mark				
Flow Control	RTS/CTS, XON/XO)FF						
FIFO	128 bytes	128 bytes	128 bytes	128 bytes	16 bytes	16 bytes	16 bytes	16 bytes
Baudrate	50 bps to 921.6 KI	bps						
Embedded ESD Protection	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
Optical Isolation								
Driver Support								
Windows 98/ME								
Windows 2000	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Windows XP/2003 x86/ x64	√	√	1	√	\checkmark	\checkmark	√	√
Windows Vista x86/x64	\checkmark	\checkmark	$\sqrt{}$	\checkmark	$\sqrt{}$	\checkmark	\checkmark	\checkmark
Windows 2008 x86/x64					$\sqrt{}$	$\sqrt{}$	\checkmark	$\sqrt{}$
WinCE 5.0/6.0	√	√	√	√				
Linux 2.4 Linux 2.6 x86/x64	√ √	√	√ √	√ √	√ √	√ √	 √	 √
	V	V	V	V	V	V	V	٧
Physical Characteristics	0500 1 1 11	// \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			B			
Housing Product Weight		(1 mm), IP30 protecti		0.475 -	Polycarbonate (PC	,		
Packaged Weight	835 g 1440 g	835 g 1440 g	2475 g 3440 g	2475 g 3440 g	120 g 325 g	210 g 455 g		
Dimensions (mm)	204 x 44 x 125	204 x 44 x 125	440 x 45.5 x 198.1	440 x 45.5 x 198.1	70 x 35 x 120	80 x 35 x 185	70 x 35 x 120	80 x 35 x 185
Environmental Limits								
Operating Temperature	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C	0 to 55°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C	-20 to 70°C
Regulatory Approvals								
EMI	FCC Part 15 Class	A, EN61000-6-4			FCC Part 15 Class	B, EN61000-6-4		
Safety	UL, CUL, TÜV							
EMS	EN55022 Class A, EN55024, EN6100 EN61000-4-4, EN6 EN61000-6-2	0-3-2, EN61000-3-3, I 61000-4-5, EN61000-4	EN61000-4-2, EN61000 I-6, EN61000-4-8, EN6)-4-3, 1000-4-11,		D-3-2, EN61000-3-3, 1000-4-5, EN61000-4		
Power Requirements								
Power Consumption	230 mA @ 12 VDC	340 mA @ 12 VDC	130 mA @ 100 VAC	150 mA @ 100 VAC	140 mA @ 5 VDC	240 mA @ 5 VDC		
Reliabilty								
Warranty	5 years (see www.	moxa.com/warranty)						

USB Hubs













	UPort™ 404	UPort™ 407	UPort™ 404-T	UPort™ 407-T	UPort™ 204	UPort™ 207					
USB Interface											
Compliance	USB 1.1/2.0 compliant	USB 1.1/2.0 compliant									
Upstream USB Ports	1 (Type B)										
Downstream USB Ports	4 (Type A)	7 (Type A)	4 (Type A)	7 (Type A)	4 (Type A)	7 (Type A)					
Speed	480 Mbps (Hi-Speed US	B) and 12 Mbps (Full-Speed L	JSB)								
Supply Current	500 mA max. per channe	l									
Physical Characteristics											
Housing	Aluminum				Polycarbonate (PC)						
Dimensions (mm)	80 x 35 x 130	100 x 35 x 192	80 x 35 x 130	100 x 35 x 192	80 x 35 x 130	100 x 35 x 195					
Environmental Limits											
Operating Temperature	0 to 60°C	0 to 60°C	-40 to 85°C	-40 to 85°C	0 to 60°C	0 to 60°C					
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH					
Storage Temperature	-20 to 75°C	-20 to 75°C	-40 to 85°C	-40 to 85°C	-20 to 75°C	-20 to 75°C					
Regulatory Approvals											
EMI	FCC, Part 15 Class A, EN	61000-6-4									
Safety	UL508, LVD										
EMS		3-3, EN61000-4-2, EN61000- 4-5, EN61000-4-6, EN61000- I-6-2									
Power Requirements											
Power Consumption	1300 mA @ 12 VDC	2300 mA @ 12 VDC	1300 mA @ 12 VDC	2300 mA @ 12 VDC	1210 mA@ 12 VDC	2170 mA @ 12 VDC					
Reliabilty											
Warranty	5 years (see www.moxa.	com/warranty)									

Chassis Media Converters







	TRC-190-AC TRC-190-DC	TCF-142-M-SC-RM TCF-142-M-ST-RM	TCF-142-S-SC-RM TCF-142-S-ST-RM
Optical Fiber Side			
Fiber Connector		SC or ST	SC or ST
Cables Requirements		50/125, 62.5/125, or 100/140 μm	8.3/125, 8.7/125, 9/125, or 10/125 μm
Transmission Distance		5 km	40 km
Wavelength		850 nm	1310 nm
Tx Output		> -5 dBm	> -5 dBm
Rx Sensitivity		-20 dBm	-25 dBm
Point-to-Point Transmission		Point-to-Point Transmission: Half-duplex or full-duplex	Point-to-Point Transmission: Half-duplex or full-duplex
RS-232/422/485 Side			
Connector		Terminal Block	
RS-232 Signals		TxD, RxD, SGND	
RS-422 Signals		TxD+, TxD-, RxD+, RxD-, SGND	
RS-485-4w Signals		TxD+, TxD-, RxD+, RxD-, SGND	
RS-485-2w Signals		Data+, Data-, SGND	
Baudrate		50 bps to 921.6 Kbps	
ESD Protection		15 KV	15 KV
Physical Characteristics			
Housing	SECC (1.2 mm)	SPCC	SPCC
Dimensions (mm)	440 x 260 x 77 mm	86.8 x 136.5 x 21 mm	86.8 x 136.5 x 21 mm
Weight	5.2 kg (11.4 lbs), with one power module installed		
Installation			
Number of Slots	19 slots in the front for slide-in modules, 2 slots in the back for power supply modules		
Environmental Limits			
Operating Temperature	0 to 60°C	0 to 60°C	0 to 60°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 75°C	-20 to 75°C	-20 to 75°C
Power Requirements			
Input Voltage	Universal 100 to 240 VAC (47 to 63 Hz)	12 VDC	12 VDC
Power Consumption	5.4 A @ 12 V (max. output) or 12 to 48 VDC	150 mA @ 12 V	150 mA @ 12 V
Regulatory Approvals			
CE	Class B	Class B	
FCC	Part 15 sub part B Class A	Part 15 sub part B Class A	
EMI	EN55022 1998, Class B		
EMS	EN61000-4-2 (ESD), Criteria A, Level 4 EN61000-4-3 (RS), Criteria A, Level 2 EN61000-4-4 (EFT), Criteria A, Level 3 EN61000-4-5 (Surge), Criteria A, Level 3 EN61000-4-6 (CS), Criteria A, Level 2 EN61000-4-8 (PFMF), Criteria A, Level 3 EN61000-4-11 (DIPS), Criteria A	EN61000-4-2 (ESD), Criteria A, Level 4 EN61000-4-3 (RS), Criteria A, Level 2 EN61000-4-4 (EFT), Criteria A, Level 3 EN61000-4-5 (Surge), Criteria A, Level 3 EN61000-4-6 (CS), Criteria A, Level 2 EN61000-4-8 (PFMF), Criteria A, Level 3	
Freefall		IEC 60068-2-32	
Reliability			
Warranty	5 years (see www.moxa.com/warranty)		

Serial-to-Fiber Media Converters















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	ICF-1150-M-SC/ST ICF-1150-M-SC/ST-T	ICF-1150I-M-SC/ST ICF-1150I-M-SC/ST-T	ICF-1150-S-SC/ST ICF-1150-S-SC/ST-T	ICF-1150I-S-SC/ST ICF-1150I-S-SC/ST-T	TCF-142-M-SC/ST TCF-142-M-SC/ST-T	TCF-142-S-SC/ST TCF-142-S-SC/ST-T	TCF-90-M/S
Optical Fiber Side							
Fiber Connector	SC or ST	SC or ST	SC or ST		SC or ST	SC or ST	ST
Cables Requirements		8.7/125, 9/125, or 10/12 2.5/125, or 100/140 μm	25 μm				
Transmission Distance	Single-mode: 40 km Multi-mode: 5 km						
Wavelength	Single-mode: 1310 nm Multi-mode: 850 nm	1					
Tx Output	Single-mode: > -5 dBn Multi-mode: > -5 dBm	1					
Rx Sensitivity	Single-mode: -25 dBm Multi-mode: -20 dBm						
Point-to-Point Transmission	Half-duplex or full-dup	lex					
Multi-drop Transmission	Half-duplex, fiber ring						
Ring Transmission					Half-duplex		
RS-232 Side							
Connector							DB9 female
Signals							Tx, Rx, GND (Loop-back wiring: RTS to CTS, DTR to DSR and DCD)
Baudrate							300 bps to 115.2 Kbps
RS-232/422/485 Side							
Connector					Terminal Block		
RS-232 Signals	TxD, RxD, SGND						
RS-422 Signals	TxD+, TxD-, RxD+, RxI						
RS-485-4w Signals	TxD+, TxD-, RxD+, RxI	D-, SGND					
RS-485-2w Signals Baudrate	Data+, Data-, SGND						
ESD Protection	50 bps to 921.6 Kbps 15 KV for all signals						
Isolation	2 KV RMS isolation pe	r I/O port for 1 minute					
Physical Characteristics	2 TV TIMO IOOIAION PO	r we port for 1 minute					
Housing	Aluminum (1 mm)						
							ABS + PC
Dimensions (mm)	30.3 x 70 x 115				67 x 100 x 22 mm		ABS + PC 42 x 80 x 22 mm
					67 x 100 x 22 mm		
Dimensions (mm)		°C			67 x 100 x 22 mm		
Dimensions (mm) Environmental Limits	30.3 x 70 x 115	°C			67 x 100 x 22 mm		42 x 80 x 22 mm
Dimensions (mm) Environmental Limits Operating Temperature	30.3 x 70 x 115 0 to 60°C or -40 to 85°	°C			67 x 100 x 22 mm		42 x 80 x 22 mm 0 to 60°C
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH	°C			67 x 100 x 22 mm		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH	°C			67 x 100 x 22 mm		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH -40 to 85°C	°C					42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH -40 to 85°C 12 to 48 VDC				 12 to 48 VDC		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V	 163 mA @ 12 V			 12 to 48 VDC 140 mA @ 12 V		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled)
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT)	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV				 12 to 48 VDC 140 mA @ 12 V 2 KV		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled)
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled)
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection Voltage Reversal Protection	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V-	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled)
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V-	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled)
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled)
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508	163 mA @ 12 V			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508	163 mA @ 12 V reversal			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1		42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class I EN61000-4-2 (ESD), C EN61000-4-4 (EFD), C EN61000-4-4 (EFD), C EN61000-4-6 (CS), Gri EN61000-4-8 (PFMF), Gri	B riteria A, Level 4 teria A, Level 3 triteria A, Level 3 triteria A, Level 3 treira A, Level 3 Criteria A, Level 3 Criteria A, Level 5 Criteria A, Level 5			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), (EN61000-4-4 (ET), CEN61000-4-6 (CS), CEN61000-4-6 (CS), CEN61000-4-6 (CS), CEN61000-4-8 (SFMF),	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 Criteria A, Level 3 riteria A, Level 2 Criteria A, Level 1	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI EMS	30.3 x 70 x 115 0 to 60°C or -40 to 85° 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class I EN55022-1998, Class I EN61000-4-2 (ESD), C EN61000-4-3 (RF), Ci EN61000-4-5 (Surge), EN61000-4-5 (Surge), EN61000-4-6 (CS), Cri EN61000-4-8 (PFMF), Class 1, Zone 2, EEx nl	B riteria A, Level 4 teria A, Level 3 riteria A, Level 3 riteria A, Level 3 riteria A, Level 3 Criteria A, Level 3 Criteria C, Level 3 Criteria C, Level 5 C IIC (pending)			12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), EN61000-4-5 (Surge) EN61000-4-6 (CS), C; EN61000-4-8 (SFMF), C	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 , Criteria A, Level 3 riteria A, Level 2 Criteria A, Level 1	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI ATEX Hazardous Location	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class I EN61000-4-3 (RS), Cri EN61000-4-4 (EFT), Cri EN61000-4-5 (Surge), EN61000-4-6 (CS), Cri EN61000-4-6 (CS), Cri EN61000-4-8 (PFMF), Class 1, Zone 2, EEx II UL/cUL Class 1, Div. 2	B riteria A, Level 4 teria A, Level 3 triteria A, Level 3 triteria A, Level 3 treira A, Level 3 Criteria A, Level 3 Criteria A, Level 5 Criteria A, Level 5	ending)		12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), EN61000-4-3 (RS), CI EN61000-4-6 (SGP), EN61000-4-6 (SGP) EN61000-4-8 (SFMF),	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 Criteria A, Level 3 riteria A, Level 2 Criteria A, Level 1	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TXD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI EMS ATEX Hazardous Location TÜV	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class B UL 508 EN61000-4-3 (RS), Cr EN61000-4-3 (RS), Cr EN61000-4-4 (EFT), Cr EN61000-4-5 (Surge), EN61000-4-6 (CS), Cri EN61000-4-8 (DRMF), Class 1, Zone 2, EEX nf UL/CUL Class 1, Div. 2, EN 60950-1	B riteria A, Level 4 teria A, Level 3 riteria A, Level 3 riteria A, Level 3 riteria A, Level 3 Criteria A, Level 3 Criteria C, Level 3 Criteria C, Level 5 C IIC (pending)	ending)		12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), EN61000-4-3 (RS), C EN61000-4-6 (GCS), C EN61000-4-8 (SFMF), EN60950-1	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 Criteria A, Level 3 riteria A, Level 1 Criteria A, Level 1	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI EMS ATEX Hazardous Location TÜV Freefall	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class I EN61000-44-2 (ESD), C EN61000-4-3 (RS), Cri EN61000-4-5 (Surge), EN61000-4-6 (CS), Cri EN61000-4-6 (CS), Cri EN61000-4-6 (SS), Cri EN61000-4-8 (PFMF), Class 1, Zone 2, EEX nI UL/GUL Class 1, Div. 2, EN 60950-1 IEC 60068-2-32	B riteria A, Level 4 teria A, Level 3 riteria A, Level 3 riteria A, Level 3 riteria A, Level 3 Criteria A, Level 3 Criteria C, Level 3 Criteria C, Level 5 C IIC (pending)	ending)		12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), EN61000-4-3 (RS), CI EN61000-4-6 (SGP), EN61000-4-6 (SGP) EN61000-4-8 (SFMF),	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 , Criteria A, Level 3 riteria A, Level 2 Criteria A, Level 1	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TXD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI EMS ATEX Hazardous Location TÜV Freefall Water and Dust Proof	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class B UL 508 EN61000-4-3 (RS), Cr EN61000-4-3 (RS), Cr EN61000-4-4 (EFT), Cr EN61000-4-5 (Surge), EN61000-4-6 (CS), Cri EN61000-4-8 (DRMF), Class 1, Zone 2, EEX nf UL/CUL Class 1, Div. 2, EN 60950-1	B riteria A, Level 4 teria A, Level 3 riteria A, Level 3 riteria A, Level 3 riteria A, Level 3 Criteria A, Level 3 Criteria C, Level 3 Criteria C, Level 5 C IIC (pending)	ending)		12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), EN61000-4-3 (RS), C EN61000-4-6 (GCS), C EN61000-4-8 (SFMF), EN60950-1	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 (Criteria A, Level 3 riteria A, Level 1 	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B
Dimensions (mm) Environmental Limits Operating Temperature Operating Humidity Storage Temperature Power Requirements Source of Input Power Input Voltage Power Consumption Burst Protection (EFT) Surge Protection Voltage Reversal Protection Over Current Protection Regulatory Approvals CE FCC Safety UL/CUL EMI EMS ATEX Hazardous Location TÜV Freefall	30.3 x 70 x 115 0 to 60°C or -40 to 85°C 5 to 95% RH -40 to 85°C 12 to 48 VDC 127 mA @ 12 V 4 KV 2 KV Protects against V+/V- 1.1 A Class B Part 15 sub Class B UL 508 EN55022 1998, Class I EN61000-44-2 (ESD), C EN61000-4-3 (RS), Cri EN61000-4-5 (Surge), EN61000-4-6 (CS), Cri EN61000-4-6 (CS), Cri EN61000-4-6 (SS), Cri EN61000-4-8 (PFMF), Class 1, Zone 2, EEX nI UL/GUL Class 1, Div. 2, EN 60950-1 IEC 60068-2-32	reversal Briteria A, Level 4 iteria A, Level 3 iteria A, Level 3 criteria A, Level 3 Criteria A, Level 3 Criteria A, Level 5 C IIC (pending) , Group A, B, C and D (Po	ending)		12 to 48 VDC 140 mA @ 12 V 2 KV 2 KV Protects against V+/V 1.1 A Part 15 Subclass B UL60950-1 EN55022 1998, Class EN61000-4-2 (ESD), EN61000-4-3 (RS), C EN61000-4-6 (GCS), C EN61000-4-8 (SFMF), EN60950-1	B Criteria A, Level 3 riteria A, Level 2 riteria A, Level 2 (Criteria A, Level 3 riteria A, Level 1 	42 x 80 x 22 mm 0 to 60°C 5 to 95% RH -20 to 75°C RS-232 port (TxD signal) or power input jack 12 to 48 VDC 20 mA @ 5 V (with termination disabled) Class B Class B

Serial Converters and Repeaters















	TCC-100 TCC-100-T	TCC-100I TCC-100I-T	TCC-80	TCC-80I	TCC-120	TCC-120I	TCC-82
RS-232 Side							
Connector	DB9 female		DB9 female				
			TxD. RxD. RTS. CTS	TxD, RxD, RTS, CTS, DTR, DSR, DCD, GND			
Signals	TxD, RxD, RTS, CT	S, DTR, DSR, DCD, GND	(Loop-back wiring: F DSR and DCD)	(Loop-back wiring: RTS to CTS, DTR to DSR and DCD)			
RS-422/485 Side							
Connector	Terminal Block		Terminal Block or DI	B9 male			
Signals	(interface selected I RS-422: TxD+, TxD RS-485-4w: TxD+, RS-485-2w Signals	by DIP switch) -, RxD+, RxD-, GND TxD-, RxD+, RxD-, GND : Data+, Data-, GND	(interface selected b RS-422: TxD+, TxD- RS-485-4w: TxD+, T RS-485-2w Signals:	, RxD+, RxD-, GND 「xD-, RxD+, RxD-, GND			
RS-485 Data Direction Control			ADDC®	butur, butur, GND			
Serial Communication							
Connectors					Terminal Block on both	ande	DB9 male/female
Baudrate	50 bps to 921.6 Kb		50 bps to 921.6 Kbp		50 bps to 921.6 Kbps	inuo	50 bps to 921.6 Kbp
	00 500 10 02 110 115	po	00 500 10 02 110 1150	,,,	00 500 10 02 110 1150		RS-232: TxD. RxD.
Signals					RS-422/485-4w: TxD+, RS-485-2w: Data+, Data	TxD-, RxD+, RxD- -	RTS, CTS (Loop-back wiring: DTR to DSR and DC
RS-485 Data Direction Control					ADDC®		
Pull High Resistance	150K ohm or 1K oh	ım (default)					
Pull Low Resistance	130K UIIII UI TK UII	iii (ueiauit)					
ESD Protection	15 KV		15 KV		15 KV for all signals		15 KV for all signals
Optical Isolation		2 KV		2.5 KV rms for 1 minute		2 KV for power and signal	4 KV for 1 minute
Physical Characteristics							
Housing	Aluminum		ABS + PC		Aluminum		ABS
Dimensions (mm)	67 x 100.4 x 22 mn	1	42 x 80 x 22 mm		67 x 100.4 x 22 mm		42 x 80 x 23.6 mm
Weight	148 ± 5 g		50 ± 5 g		148 ± 5 g		60 ± 5 g
Environmental Limits							
Operating Temperature	-20 to 60°C, or -40	to 85°C	0 to 60°C		-20 to 60°C		0 to 60°C
Operating Humidity	5 to 95% RH		5 to 95% RH		5 to 95% RH		5 to 95% RH
Storage Temperature	-20 to 85°C		-20 to 75°C		-20 to 85°C		-20 to 75°C
Power Requirements							
Source of Input Power	Power input jack		RS-232 port (TxD, Finput jack	RTS, DTR) or power	RS-232 port (TxD signal	RS-232 port (TxD signal) or power input jack	
Input Voltage	12 to 48 VDC		5 to 12 VDC		12 to 48 VDC		jack 5 to 12 VDC
Power Consumption	300 mA @ 12 V	400 mA @ 12 V	10 mA @ 5 V (with termination disabled)	20 mA @ 5 V (with termination disabled)	98 mA @ 12 V, 1.18 W	234 mA @ 12 V, 2.81 W	20 mA @ 5 V
Connection				´			
Overload Current Protection							
Reverse Polarity Protection							
Burst Protection (EFT)							
Surge Protection							
Voltage Reversal Protection	Protects against V+	/V- reversal			Protects against V+/V- r	eversal	
Over Current Protection	\checkmark	V			√	\checkmark	
Regulatory Approvals							
CE	Class B		Class B		Class B		Class B
FCC	Class B		Class B		Class B		Class B
Reliability							

Ethernet-to-Fiber Media Converters













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	IMC-101G INC-101G-T	IMC-101-M-SC/ST IMC-101-M-SC/ST-T	IMC-101-S-SC IMC-101-S-SC-T	IMC-101-S-SC-80 IMC-101-S-SC-80-T	IMC-21-M-SC/ST	IMC-21-S-SC	
IEEE Standards							
IEEE 802.3	√	√	√	√	√	\checkmark	
IEEE 802.3u	\checkmark	√	$\sqrt{}$	√	\checkmark	\checkmark	
IEEE 802.3ab	\checkmark						
IEEE 802.3z	√						
IEEE 802.3x					√	\checkmark	
Interface							
RJ45 Ports	10/100/1000BaseT(X)	10/100BaseT(X)			10/100BaseT(X)		
Fiber Ports	Optional 1000BaseSX/LX/LHX/ZX (LC connector)	100BaseFX (SC or ST co	nnectors)		100BaseFX (SC or ST)		
LED Indicators	PWR1, PWR2, FAULT, 10/100M (TP port), 1000M (TP and Fiber port) Port break alarm mask	PWR1, PWR2, FAULT, 19 (Fiber port)	0/100M (TP port), 100M (Fiber port), FDX/COL	Power, 10/100M (TP po FDX/COL (fiber port) TP port's 10/100M, Half,	,, , , , , , , , , , , , , , , , , , , ,	
DIP Switches	Fault Pass-Through Fiber AN/Force	100BaseFX Full/Half dup	lex selection, port break a	larm mask	Auto modes, fiber conne Link Fault Pass-Through	ection's Full/Half mode,	
Alarm Contact	One relay output with current carrying capacity of 1 A @ 24 VDC	One relay output with cu	rrent carrying capacity of	1A @ 24 VDC			
Multi-mode Transmission							
1000BaseSX	• 0 to 500 m, 850 nm (50/125 µm, 400 MHz*km) • 0 to 275 m, 850 nm (62.5/125 µm, 200 MHz*km)						
1000BaseLX	• 0 to 1100 m, 1310 nm (50/125 μm, 800 MHz*km) • 0 to 550 m, 1310 nm (62.5/125 μm, 500 MHz*km)						
Single-mode Transmission							
1000BaseLX	0 to 10 km, 1310 nm (9/125 μm, 3.5 PS/(nm*km))						
1000BaseLHX	0 to 40 km, 1310 nm (9/125 μm, 3.5 PS/(nm*km)) 0 to 80 km, 1550 nm (9/125 μm, 19						
1000BaseZX	PS/(nm*km))						
Physical Characteristics							
Housing	Metal (IP30)	Metal (IP30)			Plastic (IP30)		
Dimensions (mm)	53.6 x 135 x 105 mm	53.6 x 135 x 105 mm			25 x 109 x 97 mm		
Weight Installation	630 g	630 g			125 g		
	DIN-Rail mounting, wall mounting (with	орионагки)			DIN-Rail mounting		
Environmental Limits Operating Temperature	0 to 60°C or 40 to 75°C				0 to 60°C		
Operating Humidity	0 to 60°C or -40 to 75°C 5 to 95% RH						
Storage Temperature	-40 to 85°C				5 to 95% RH -40 to 70°C		
Power Requirements	.0 10 00 0				10 10 10 0		
Input Voltage	24 VDC (12 to 45 VDC), redundant input	S			12 to 45 VDC, 18 to 30 V	/AC (47-63 Hz)	
Input Current	0.11A (@ 24 V)	0.16A (@ 24 V)			0.15 A (@ 24 V)	(
Connection	Removable terminal block				Removable 3-contact ter	rminal block	
Overload Current	1.1 A				1.1 A		
Protection Reverse Polarity Protection	√	√	√	V	√	V	
Regulatory Approvals							
ricgulatory Approvais		UL508			UL508		
Safety	UL508	UL60950-1 CSA C22.2 No. 60950-1 EN60950-1			UL60950-1 CSA C22.2 No. 60950-1 EN60950-1		
EMI	FCC Part 15, CISPR (EN55022) class A				FCC Part 15, CISPR (EN	55022) class A	
	EN61000-4-2 (ESD), level 3 EN61000-4-3 (RS), level 3 EN61000-4-4 (EFT), level 3				EN61000-4-2 (ESD) EN61000-4-3 (RS)		
EMS	EN61000-4-5 (Surge), level 3 EN61000-4-6 (CS), level 3 EN61000-4-8 EN61000-4-11				EN61000-4-4 (EFT) EN61000-4-5 (Surge) EN61000-4-6 (CS)		
Hazardous Location		UL/cUL Class1, Division Ex nC IIC (IMC-101-M-S	2, Groups A, B, C, and D, T, IMC-101-S-SC-80 pend	ATEX Class1, Zone 2, ling)			
Freefall	IEC60068-2-32				IEC60068-2-32		
Shock	IEC60068-2-27				IEC60068-2-27		
Vibration	IEC60068-2-6	DMV OI			IEC60068-2-6		
Maritime MTBF	 500 000 bro	DNV, GL			252 000 bro		
	500,000 hrs	401,000 hrs			353,000 hrs		
Reliability Warranty	5 years (see www.moxa.com/warranty)						
vvarranty	o yours (see www.iiiuxa.com/waifality)						

Industrial AP/Bridge/Client Solutions









	The same of	And have been	434	(A)
	AWK-4222-T	AWK-4121-T	AWK-3222 AWK-3222-T	AWK-3121 AWK-3121-T
WLAN			ANN OLLE I	74411 0121 1
IEEE Standards	IEEE 802.11a/b/g/i, IEEE 802.3a/u, IEEE 8	02.2nf		
Spread Spectrum and Modulation (typical)	DSSS with DBPSK, DQPSK, CCK OFDM with BPSK, QPSK, 16QAM, 64QA 64QAM @ 54Mbps, 16QAM @ 24/36Mbp CCK @ 11/5.5Mbps, DQPSK @ 2Mbps, D	M s, QPSK @ 12/18Mbps		
Operating Channels (central frequency)	US: 2.412 to 2.462 GHz (11 channels); 5. EU: 2.412 to 2.472 GHz (13 channels); 5. JP: 2.412 to 2.472 GHz (13 channels, OFI		SS): 5.18 to 5.24 GHz (4 channels for W52)	
Number of RF modules	2	1	2	1
Interfaces				
Number of Antenna Connectors	4	2	4	2
Antenna Connector Type	N-type (female)	N-type (female)	RP-SMA (female)	RP-SMA (female)
10/100BaseT(X) LAN Port	2	1	2	1
RS-232 Console Port	1, waterproof RJ-45	1, waterproof RJ-45	1, RJ-45	1, RJ-45
LED Indicators	PWR, FAULT, STATE, WLAN1, WLAN2, LAN1, LAN2	PWR, FAULT, STATE, WLAN, LAN	PWR1, PWR2, PoE, FAULT, STATE, WLAN1, WLAN2, 10M, 100M	PWR1, PWR2, PoE, FAULT, STATE, signal strength, CLIENT MODE, BRIDG MODE, WLAN, 10M, 100M
Alarm Contact (Digital Output)	1	1	1	1
Digital Inputs	2	2	2	2
DI/DO Connector Type	8-pin M12 (A-coding)		10-pin terminal block	
Physical Characteristics				
Housing	Metal (IP67)	Metal (IP67)	Metal (IP30)	Metal (IP30)
Weight	1.22 kg	1.2 kg	880 g	850 g
Dimensions Installation	224 x 147.7 x 66.5 mm Wall mounting (standard), DIN-Rail mounting (optional), pole mounting	Wall mounting (standard), DIN-Rail mounting (optional), pole mounting	62.05 x 135 x 105 mm DIN-Rail mounting (standard), Wall mounting (optional)	53.6 x 135 x 105 mm DIN-Rail mounting (standard), Wall mounting (optional)
Facility and sector I invite	(optional)	(optional)	3 (4)	3 (4)
Environmental Limits	40.1. 7500	40.1. 7500	0.1000040.17500	0.1000040.17500
Operating Temperature	-40 to 75°C	-40 to 75°C	0 to 60°C or -40 to 75°C	0 to 60°C or -40 to 75°C
Operating Humidity Storage Temperature	5% to 95% -40 to 85°C	5% to 95% -40 to 85°C	5% to 95% -40 to 85°C	5% to 95% -40 to 85°C
Power Requirements	-40 to 60 t	-40 t0 63 C	-40 t0 00 t	-40 (0 00 0
	D. I. alast I. alast a in the (10 to 40 V	DO)		
Input Voltage	Redundant dual power inputs (12 to 48 V	טט)	10	
Connector IEEE 802.3af 48 VDC PoE	5-pin M12 (A-coding) √	\checkmark	10-pin terminal block √	√
Reverse Polarity Protection	√	√	√	√
Regulatory Approvals				
Radio	EN300 328, EN301 893, ARIB STD-33/T6	6/T71 (Japan)		
EMC	EN301 489-1/-17, FCC Part 15, EN55022, EN55024	EN301 489-1/-17, FCC Part 15, EN55022, EN55024, IEC61000-6-2/-4	EN301 489-1/-17, FCC Part 15, EN55022, EN55024	EN301 489-1/-17, FCC Part 15, EN55022, EN55024, IEC61000-6-2/-4
Safety		EN60950-1, UL60950-1		EN60950-1, UL60950-1
Environment/EMC compliance		EN50155, EN50121-4		EN50155, EN50121-4
Reliability				
Warranty	5 years (see www.moxa.com/warranty)			

Wireless Serial Device Servers







	1	The state of the s	and the same of th
	NPort® W2004	NPort® W2150 Plus NPort® W2150 Plus-T	NPort® 2250 Plus NPort® 2250 Plus-T
WLAN Interface			
IEEE 802.11b/g	V		
IEEE 802.11a/g/b		 √	√ √
Radio Frequency Type	DSSS/OFDM	DSSS/OFDM	DSSS/OFDM
WEP	64/128-bit data encryption	DOUG/OI DIM	BOOO/OT BIW
WPA, WPA2, 802.11i	Enterprise mode and Pre-Share Key (PSK) mode		
Encryption		128-bit TKIP/AES-CCMP EAP-TLS, PEAP/GTC, PEAP/M EAP-TTLS/MSCHAP, EAP-TTLS/MSCHAPV2, EAP-TTLS EAP-MD5, LEAP	ID5, PEAP/MSCHAPV2, EAP-TTLS/PAP, EAP-TTLS/CHAP, /EAP-MSCHAPV2, EAP-TTLS/EAP-GTC, EAP-TTLS/
Max. Transmission Rate	54 Mbps	54 Mbps	54 Mbps
Max. Transmission Distance	300 m	100 m	100 m
LAN Interface			
Ethernet Ports	1 x 10/100 Mbps (RJ45)	1 x 10/100 Mbps (RJ45)	1 x 10/100 Mbps (RJ45)
1.5 KV Magnetic Isolation Protection	√ / · · · · · · · · · · · · · · · · · ·	1	√ , , , ,
Serial Interface			
Number of Ports	4	1	2
Serial Standards	RS-232/422/485	RS-232/422/485	RS-232/422/485
Connector	RJ45	DB9-M	DB9-M
Console Port	$\sqrt{}$		
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Even, Odd, Space, Mark	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Even, Odd, Space, Mark	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Even, Odd, Space, Mark
Flow Control	RTS/CTS, XON/XOFF, DTR/DSR	RTS/CTS, XON/XOFF	RTS/CTS, XON/XOFF
Baudrate	50 bps to 460.8 Kbps	50 bps to 921.6 Kbps	50 bps to 921.6 Kbps
Serial Data Log	64 KB	64 KB	64 KB
Software			
Network Protocols	ICMP, IP, TCP, UDP, DHCP, Telnet, DNS, SNMP V1/V2c,	HTTP, SMTP, SNTP, SSH, HTTPS	
Configuration Options	Web Console, Serial Console, Telnet Console, Windows	Utility	
Management		SNMP MIB-II	SNMP MIB-II
Secure Configuration Options	HTTPS, SSH	HTTPS, SSH	HTTPS, SSH
Utilities	NPort® Search Utility and NPort® Windows Driver man	nager	
Windows Real COM Drivers	Windows 95, 98, ME, NT, 2000, XP x86/x64, 2003 x86/	x64, Vista x86/x64, 2008 x86/x64, Embedded CE 5.0/6.0, 2	XP Embedded
Fixed TTY Drivers		, SVR 4.2, QNX 4.25, QNX 6, Solaris 10, FreeBSD, AIX 5.x,	, HP-UX 11i
Linux Real TTY Drivers	Linux 2.4.x/2.6.x		
Physical Characteristics			
Housing	Metal (IP30)	Aluminum	
Weight	1730 g	780 g	
Dimensions	45.8 x 135 x 105 mm	77 x 111 x 26 mm	
Environmental Limits			
Operating Temperature	0 to 60°C	0 to 55°C or -40 to 75°C	
Operating Humidity	5% to 95%	5% to 95%	
Storage Temperature	-20 to 85°C	-40 to 85°C	
Power Requirements			
Input Voltage	12 to 48 VDC	12 to 48 VDC	
Power Consumption	685 mA @ 12 V, 340 mA @ 24 V, 185 mA @ 48 V	560 mA @ 12 V, 294 mA @ 24 V, 162 mA @ 48 V	
Regulatory Approvals			
Safety	UL (UL60950-1), TÜV (EN60950-1)	UL (UL60950-1), TUV (EN60950-1)	
Radio	CE (ETSI EN 300 328)	CE (ETSI EN 301 893, ETSI EN 300 328), ARIB RCR ST	D-33, ARIB STD-66
EMC	CE (EN55022 and EN55024 Class A, ETSI EN 301 489-17, ETSI EN 301 489-1)	CE (EN55022 and EN55024 Class A, ETSI EN 301 489-	,
EMI	FCC (Part 15 Subpart B Class A, Subpart C)	FCC Part 15 (Subpart B Class A, Subpart C, Subpart E),	VCCI
Reliability			
MTBF	81,501 hrs	352,547 hrs	352,034 hrs
Warranty	5 years (see www.moxa.com/warranty)		

Cellular Routers and IP Gateways

















	THE REAL PROPERTY.		The same of	E.			g	8
	OnCell 5004-HSDPA	OnCell 5104-HSDPA	OnCell 5004	OnCell 5104	OnCell G3110-HSDPA	OnCell G3150-HSDPA	OnCell G3110	OnCell G3150
Cellular Interface	<u> </u>		<u> </u>				<u> </u>	
Standards	UMTS/HSDPA		GSM/GPRS		UMTS/HSDPA		GSM/GPRS/EDGE	
Tri-band Options	850/1900/2100 MH	Z			850/1900/2100 MHz	Z		
Quad-band Options	850/900/1800/1900		850/900/1800/1900) Mhz	850/900/1800/1900			
EDGE Multi-slot	Class 10	Class 10			Class 10	Class 10	Class 12	Class 12
EDGE Terminal Device	Class B	Class B			Class B	Class B	Class B	Class B
GPRS Multi-slot	Class 10	Class 10	Class 10	Class 10	Class 10	Class 10	Class 12	Class 12
GPRS Terminal Device	Class B	Class B	Class B	Class B	Class B	Class B	Class B	Class B
GPRS Coding Schemes	CS1 to CS4	CS1 to CS4	CS1 to CS4	CS1 to CS4	CS1 to CS4	CS1 to CS4	CS1 to CS4	CS1 to CS4
WAN Interface								
Number of Ports	1	1	1	1				
Ethernet		10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)				
Isolation	1.5 KV Magnetic Iso	olation Protection						
LAN Interface								
Number of Ports	4	4	4	4	1	1	1	1
Ethernet	10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)	10/100M (RJ45)
Isolation	1.5 KV Magnetic Is	olation Protection						
SIM Interface								
Number of SIMs	2	2	2	2	1	1	1	1
SIM Control	3 V	3 V	3 V	3 V	3 V	3 V	3 V	3 V
Serial Interface								
Number of Ports					1	1	1	1
Serial Standards					RS-232	RS-232/422/485	RS-232	RS-232/422/485
Connector					DB9-M	DB9-M and TB	DB9-M	DB9-M and TB
15 KV ESD Protection					√	\checkmark	√	V
2 KV Power EFT/Surge					√	\checkmark	√	√
Serial Parameters					Data Bits: 5, 6, 7, 8;	Stop Bits: 1, 1.5, 2; F	Parity: None, Even, Oc	dd, Space, Mark
Flow Control					RTS/CTS, XON/XOF			
Baudrate					50 bps to 921.6 Kbp)S		
I/O Interface								
Alarm Contacts		1		1	1	1	1	1
Digital Inputs		2		2	2	2	2	2
Software								
Network Protocols	UDP/TCP, SNTP, ICI Telnet	MP, DDNS, DHCP/BO	OTP, PPPoE, PPP, DNS	Relay, HTTPS,	ICMP, TCP/IP, UDP,	DHCP, Telnet, DNS, S	NMP, HTTP, SMTP, H	TTPS, SNTP, ARP, SSL
Router/Firewall	NAT, port forwardin	g, routing			NAT, port forwarding	9		
Authentication	Local user-name an	d password			Local user-name an	d password		
Security	IP filtering				Accessible IP list			
Operation Modes					TCP Client, UDP, RF	C2217, Ethernet Mod	r, Secure TCP Server, em, Virtual Modem, S	SMS Tunnel
Configuration and Management Options					Serial-Console/SSH	, -	v1/v2c/v3, DDNS, IP	
Utilities					Server-2008, Windo	ws XP/2003/Vista/Se	ws NT, Windows 2000 erver-2008 x64 Edition	n
Windows Real COM Drivers					Windows XP/2003/\	/ista/Server 2008 x64		
Fixed TTY Drivers						nServer 5, SCO Open FreeBSD 5, FreeBSD 6	Server 6, UnixWare 7	, SVR4.2, QNX 4.25,
Linux Real TTY Drivers					Linux kernels 2.2.x,	2.4.x, 2.6.x		
OnCell Central					Centralized manager	ment solution for acc	essing private IPs fro	m the Internet
Physical Characteristics								
Housing	Aluminum (IP30)	Aluminum (IP30)	Aluminum (IP30)	Aluminum (IP30)	Aluminum (IP30)			
Weight	505±5 g	645±5 g	505±5 g	645±5 g	440±5 g			
Dimensions (mm)	158 x 103 x 34	160 x 103 x 50	158 x 103 x 34	160 x 103 x 50	28 x 126 x 93			
Environmental Limits								
Operating Temperature	-30 to 55°C	-30 to 55°C	-30 to 55°C	-30 to 55°C	-30 to 55°C	-30 to 55°C	-30 to 55°C	-30 to 55°C
Operating Humidity	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%	5% to 95%
Storage Temperature	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C
Power Requirements								
Input Voltage	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC	12 to 48 VDC
-	1 TB, 1 power		1 TB, 1 power					
Connector	jack	2 TBs	jack	2 TBs	2 TBs	2 TBs	2 TBs	2 TBs
Regulatory Approvals								
Safety	UL (UL60950-1)							
RF	/	PART24F, EN301 489-	1, EN301 489-7, EN30	1 511				
PTCRB						V		V
EMC	CE: EN55022 Class (Surge) Level 3, EN	A / EN55024. FCC: FC 61000-4-8 Level 3, E	CC part 15 subpart B. (N61000-4-12 Level 3	Class A, EN61000-4-2	2 (ESD) Level 4, EN610		EN61000-4-4 (EFT) L	evel 4, EN61000-4-5
Reliability								
Warranty	5 years (see www.n	noxa.com/warranty)						

Cellular IP and GSM/GPRS Modems













Collus Territoria						V-SEE	
Studentick SSM/GPRS		OnCell G3111	OnCell 3151	OnCell 3211	OnCell 3251	OnCell G2100 OnCell G2100-T	OnCell G2150I
Class 10	Cellular Interface			<u>' </u>			
GRES Naminal Device Class 8	Standards	GSM/GPRS	GSM/GPRS	GSM/GPRS	GSM/GPRS	GSM/GPRS	GSM/GPRS
Class B Class A Class Clas	Quad-band Options	850/900/1800/1900 MHz					
Class Uasts 9 Uasts	GPRS Multi-slot Class	Class 10	Class 10	Class 10	Class 10	Class 10	Class 10
United Control Control		Class B	Class B	Class B	Class B	Class B	Class B
Name		CS1 to CSA	CS1 to CS4	CS1 to CS/	CS1 to CS/	CS1 to CS4	CS1 to CSA
Fluence 10100 Mpps (RJ45) 10100 Mpps (RJ45) 10100 Mpps (RJ45) 10100 Mpps (RJ45)		031 10 034	031 10 004	00110004	031 10 034	03110004	031 10 034
Elbernet		1	1	1	1		
Six Mannetics Six							
Number of SIME 1	1.5 KV Magnetic						
Serial Communication Serial Serial Serial Serial Communication Serial Seria		V	V	V	V		
SM Control 3 V							
Serial Standards							
Number of Ports		3 V	3 V	3 V	3 V	3 V	3 V
Serial Standards							
DBS-M							
SERVE Distriction V							
2.5 KV Power ET/TSurp V V V V V V V V V							
V V V V V V V V V V							
Data Bits: 7, 8, Stop Bits: 1, 1, 5, 2; Parity: None, Even, Odd, Space, Mark							
Data Bits. 3, 6, 7, 6, 5 (Up Bits. 1, 1.3, 2; Parity, Notice, Event, USD, Space, Mark Odd, Space, Mark Filor Control					*		L. 2: Parity: None, Even.
Raufrate 50 bps to 921.6 kbps Software Software	Parameters		its: 1, 1.5, 2; Parity: None, i	Even, Odd, Space, Mark		Odd, Space, Mark	., _, , , ,
Network Protocols ICMP, TCP/IP, UDP, DHCP, Teinet, DNS, SNMP, HTTP, HTTPS, SMTP, SNTP, ARP							
Network Protocols ICMP, TCP/IP, UDP, DHCP, Telnet, DNS, SNMP, HTTP, HTTPS, SMTP,		50 bps to 921.6 Kbps				300 bps to 115.2 Kbps	
Authentication Local user-name and password							
Security				ITTPS, SMTP, SNTP, ARP			
Operation Modes			word				
Configuration and Management Options	-		O Client LIDD CMC Tunnel I	Davaraa Daal COM			
Management Options	•						
Windows Real COM Drivers Vista/Server-2008 x64 Windows Real COM Drivers Server-2008 x64 Management Software OnCell Central Centralized management solution for accessing private IPs from the Internet Physical Characteristics Housing Aluminum (IP30) ABS + PC (IP30) Weight 165±5 g 150±5 g Dimensions 111 x 77 x 26 mm 27 x 123 x 79 mm					0000 Windows VD/0000/		
Management Software		Vista/Server-2008 x64					
OnCell Central Centralized management solution for accessing private IPs from the Internet			ows NT, Windows 2000/XP/	2003/Vista/Server-2008, Wir	dows XP/2003/Vista/		
Physical Characteristics	Management Software						
Housing	OnCell Central	Centralized management s	olution for accessing private	IPs from the Internet			
Weight	Physical Characteristics						
Dimensions	Housing	Aluminum (IP30)				ABS + PC (IP30)	
Environmental Limits	Weight	165±5 g		185±5 g		150 ± 5 g	
Operating Temperature		111 x 77 x 26 mm				27 x 123 x 79 mm	
Operating Humidity 5% to 95% 5% to 9	Environmental Limits						
Storage Temperature	Operating Temperature	-30 to 55°C		-30 to 55°C	-30 to 55°C	0 to 55°C or -30 to 75°C	0 to 55°C
Power Requirements							
Input Voltage	0 1	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C	-40 to 75°C
Connector	· ·						
Regulatory Approvals							
Safety		1 power jack	1 power jack	1 power jack	1 power jack	1 power jack	1 power jack
### FCC part22H, FCC PART24F, EN301 489-1, EN301 489-7, EN301 511 CE: EN55022 Class A / EN55024 FCC: FCC part 15 subpart B, Class A EN61000-4-2 (ESD) EMC							
CE: EN55022 Class A / EN55024 FCC: FCC part 15 subpart B, Class A EN61000-4-2 (ESD) EMC EMC EMC EN61000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-5 (Surge) EN61000-4-5 (Surge) EN61000-4-8 EN61000-4-12 Reliability							
FCC: FCC part 15 subpart B, Class A EN61000-4-2 (ESD) ENG 1000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-4 (EFT) EN61000-4-8 EN61000-4-8 EN61000-4-12 Reliability CE (EN55022 Class A, EN55024) FCC part 15 subpart B Class A FCC part 15 subpart B Class A	RF			-7, EN301 511			
	EMC	FCC: FCC part 15 subpart E EN61000-4-2 (ESD) EN61000-4-3 (RS) EN61000-4-4 (EFT) EN61000-4-5 (Surge) EN61000-4-8	,5024 8, Class A				
Warranty 5 years (see www.moxa.com/warranty)	Reliability						
	Warranty	5 years (see www.moxa.co	m/warranty)				

Wallmount Computers





















	V462-CE V462-T-CE	V462-XPE V462-T-XPE	V464-CE V464-T-CE	V464-XPE V464-T-XPE	V466-CE V466-T-CE	V466-XPE V466-T-XPE	V468-CE V468-T-CE	V468-XPE V468-T-XPE	V481-CE V481-T-CE	V481-XPE V481-T-XPE
Computer					<u> </u>					
CPU Speed	500 MHz	500 MHz	500 MHz	500 MHz	500 MHz	500 MHz	500 MHz	500 MHz	1 GHz	1 GHz
OS (pre-installed)	WinCE 6.0	WinXP Emb.	WinCE 6.0	WinXP Emb.	WinCE 6.0	WinXP Emb.	WinCE 6.0	WinXP Emb.	WinCE 5.0	WinXP Emb
DRAM										
SRAM	256 KB	256 KB	256 KB	256 KB	256 KB	256 KB	256 KB	256 KB		
FSB	400 MHz	400 MHz	400 MHz	400 MHz	400 MHz	400 MHz	400 MHz	400 MHz	400 MHz	400 MHz
Flash										
System Memory	256 MB (1 GB max.)	512 MB (1 GB max.)	256 MB (1 GB max.)	512 MB (1 GB max.)	256 MB (1 GB max.)	512 MB (1 GB max.)	256 MB (1 GB max.)	512 MB (1 GB max.)	256 MB (1 GB max.)	512 MB (1 GB max.
PCMCIA	√	√								
Expansion Bus	PC/104-Plus on	board								
USB Ports	4 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	4 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0
Digital I/O							8 DIs, 8 DOs	8 DIs, 8 DOs		
Storage										
Built-in	256 MB	1 GB	256 MB	1 GB	256 MB	1 GB	256 MB	1 GB	256 MB	1 GB
CompactFlash Socket	√	\checkmark	\checkmark	\checkmark	V	\checkmark	\checkmark	\checkmark	\checkmark	$\sqrt{}$
SD Slot										
Other Peripherals										
KB/MS	1 PS/2 interface	e supporting star	ndard PS/2 keyboa	ard and mouse thr	ough Y-type cable					
Audio	AC97 audio, wit	th speaker-out in	terface							
Display										
Graphics Controller	√	\checkmark	√	\checkmark	√	\checkmark	$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$
Mini Screen with Push Buttons										
LAN Interface										
10/100 Mbps Ethernet										
Ports	2	2	4	4	4	4	4	4	1	1
10/100/1000 Mbps									1	1
Ethernet Ports										
Switch Ports Controller	Dooltok DTI 010				8	8				
Magnetic Isolation	Realtek RTL810									
Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface										
RS-232 Ports	2 (DB9 male)	2 (DB9 male)	2 (DB9 male)	2 (DB9 male)	2 (DB9 male)	2 (DB9 male)	2 (DB9 male)	2 (DB9 male)		
RS-485										
RS-232/422/485 Ports	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	8 (DB9-M)	8 (DB9-M)
ESD Protection		15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
District Includios	15 KV									
•										
Console Port										
•										
		 7, 8; Stop Bits: 1								
Console Port Serial Communication Parameters	Data Bits: 5, 6,	 7, 8; Stop Bits: 1 XOFF, ADDC®	 , 1.5, 2; Parity: No	 one, Even, Odd, S _l						
Console Port Serial Communication Parameters Flow Control Baudrate	 Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	7, 8; Stop Bits: 1 XOFF, ADDC® Kbps (non-stan	 , 1.5, 2; Parity: No dard baudrates su	 one, Even, Odd, Sp upported)	 pace, Mark					
Console Port Serial Communication Parameters Flow Control Baudrate CANbus	Data Bits: 5, 6,	 7, 8; Stop Bits: 1 XOFF, ADDC®	 , 1.5, 2; Parity: No	 one, Even, Odd, S _l						
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	7, 8; Stop Bits: 1 XOFF, ADDC® Kbps (non-stan	 , 1.5, 2; Parity: No dard baudrates su	 one, Even, Odd, Sp upported)	 pace, Mark					
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	7, 8; Stop Bits: 1 XOFF, ADDC® Kbps (non-stan	 , 1.5, 2; Parity: No dard baudrates su 	 one, Even, Odd, S _l ipported)	ace, Mark				Power, Storage	
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	7, 8; Stop Bits: 1 XOFF, ADDC® Kbps (non-stan	 , 1.5, 2; Parity: No dard baudrates su	 one, Even, Odd, Sp upported)	 pace, Mark					
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan	 , 1.5, 2; Parity: No dard baudrates su 10M, 100M	one, Even, Odd, Sp ipported) 10M, 100M	 Dace, Mark		 10M, 100M	 10M, 100M	Power, Storage	 10M, 100M
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M	dard baudrates su	one, Even, Odd, Sp pported) 10M, 100M	 pace, Mark 10M, 100M, Sv	 vitch	10M, 100M	 10M, 100M	Power, Storage 10M, 100M	10M, 100M
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum	dard baudrates su 10M, 100M Aluminum	one, Even, Odd, Sp apported) 10M, 100M Aluminum	10M, 100M, Sv	 vitch 	10M, 100M	10M, 100M	Power, Storage 10M, 100M	10M, 100M
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg	T, 8; Stop Bits: 1 XOFF, ADDC® S Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg	dard baudrates su	one, Even, Odd, Sp pported) 10M, 100M	 pace, Mark 10M, 100M, Sv	 vitch	10M, 100M	 10M, 100M	Power, Storage 10M, 100M Aluminum 2.2 kg	10M, 100M
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5	37, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm	1.5, 2; Parity: No dard baudrates su 10M, 100M 1.32 kg	one, Even, Odd, Springported) 10M, 100M Aluminum 1.32 kg	10M, 100M, Sv Aluminum 1.32 kg	vitch Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70	10M, 100M Aluminum 2.2 kg
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5	T, 8; Stop Bits: 1 XOFF, ADDC® S Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg	1.5, 2; Parity: No dard baudrates su 10M, 100M Aluminum 1.32 kg	one, Even, Odd, Sp apported) 10M, 100M Aluminum	10M, 100M, Sv	 vitch 	10M, 100M	10M, 100M	Power, Storage 10M, 100M Aluminum 2.2 kg	10M, 100M Aluminum 2.2 kg
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall	1.5, 2; Parity: No dard baudrates su 10M, 100M 1.32 kg	one, Even, Odd, Springported) 10M, 100M Aluminum 1.32 kg	10M, 100M, Sv Aluminum 1.32 kg	vitch Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall	10M, 100N Aluminum 2.2 kg mm DIN-Rail, w
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall	1.5, 2; Parity: No dard baudrates su 10M, 100M 1.32 kg	one, Even, Odd, Springported) 10M, 100M Aluminum 1.32 kg	10M, 100M, Sv Aluminum 1.32 kg	vitch Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70	10M, 100N Aluminum 2.2 kg mm DIN-Rail, v
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall	1.5, 2; Parity: No dard baudrates su 10M, 100M 1.32 kg	one, Even, Odd, Springported) 10M, 100M Aluminum 1.32 kg	10M, 100M, Sv Aluminum 1.32 kg	vitch Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall	10M, 100N Aluminum 2.2 kg mm DIN-Rail, w
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or -5 to 95% RH -20 to 80°C or -5	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall40 to 75°C	1.5, 2; Parity: No dard baudrates st 10M, 100M Aluminum 1.32 kg	pported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv Aluminum 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall -10 to 60°C or	10M, 100M Aluminum 2.2 kg mm DIN-Rail, v
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall	1.5, 2; Parity: No dard baudrates su 10M, 100M 1.32 kg	one, Even, Odd, Springported) 10M, 100M Aluminum 1.32 kg	10M, 100M, Sv Aluminum 1.32 kg	vitch Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	10M, 100M Aluminum 1.32 kg	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall	10M, 100N Aluminum 2.2 kg mm DIN-Rail, v
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C or	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall -40 to 75°C	1.5, 2; Parity: No dard baudrates su 10M, 100M Aluminum 1.32 kg	one, Even, Odd, Spipported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv Aluminum 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall -10 to 60°C or	10M, 100M Aluminum 2.2 kg mm DIN-Rail, v
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C or	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall -40 to 75°C	1.5, 2; Parity: No dard baudrates su 10M, 100M Aluminum 1.32 kg	one, Even, Odd, Spipported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv Aluminum 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall -10 to 60°C or	10M, 100N Aluminum 2.2 kg mm DIN-Rail, w
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or -5 to 95% RH -20 to 80°C or CE (EN55022 C	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall -40 to 75°C lass A, EN61000	ard baudrates su 10M, 100M 1.32 kg DIN-Rail, wall	pported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall -10 to 60°C or	10M, 100N Aluminum 2.2 kg mm DIN-Rail, v
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C or CE (EN55022 C	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall40 to 75°C lass A, EN61000	1.5, 2; Parity: No dard baudrates su 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	one, Even, Odd, Spipported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall -10 to 60°C or	10M, 100M Aluminum 2.2 kg mm DIN-Rail, v
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety Green Product	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C or CE (EN55022 C	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall -40 to 75°C lass A, EN61000	ard baudrates su 10M, 100M 1.32 kg DIN-Rail, wall	pported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall10 to 60°C or UL/cUL (UL60s C22.2 No. 6098	10M, 100N Aluminum 2.2 kg mm DIN-Rail, w -35 to 75°C
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety Green Product Reliability	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C or CE (EN55022 C UL/cUL (UL609	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall40 to 75°C lass A, EN61000 150-1, CSA C22.2	1.5, 2; Parity: Nodard baudrates su 10M, 100M Aluminum 1.32 kg DIN-Rail, wall 3-2 Class A, EN6	pported) 10M, 100M 132 kg DIN-Rail, wall 1000-3-3, EN5500	10M, 100M, Sv Aluminum 1.32 kg DIN-Rail, wall 24), FCC (Part 15	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall 22 Class A), CCC	10M, 100M Aluminum 1.32 kg DIN-Rail, wall (GB9254, GB 170	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall10 to 60°C or 625.1) UL/CUL (UL605 C22.2 No. 6095 (EN60950-1), C	10M, 100M Aluminum 2.2 kg mm DIN-Rail, w -35 to 75°C 050-1, CSA 0-1-03), LVD
Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety Green Product	Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 Power, Battery, 10M, 100M Aluminum 1.32 kg 223 x 120.5 x 5 DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C or CE (EN55022 C) UL/cUL (UL609	7, 8; Stop Bits: 1 XOFF, ADDC® 6 Kbps (non-stan Storage 10M, 100M Aluminum 1.32 kg 67 mm DIN-Rail, wall40 to 75°C lass A, EN61000	1.5, 2; Parity: Nodard baudrates su 10M, 100M Aluminum 1.32 kg DIN-Rail, wall 3-2 Class A, EN6	pported) 10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M, Sv 1.32 kg DIN-Rail, wall	vitch Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	10M, 100M Aluminum 1.32 kg DIN-Rail, wall	Power, Storage 10M, 100M Aluminum 2.2 kg 225 x 140 x 70 DIN-Rail, wall10 to 60°C or UL/cUL (UL60s C22.2 No. 6098	10M, 100M Aluminum 2.2 kg mm DIN-Rail, w -35 to 75°C

Wallmount Computers



















	UC-8410-LX	UC-8416-LX	UC-8418-LX		UC-7402-LX	UC-7408-LX	UC-7408-LX Plus	UC-7408-CE		UC-7410-
	UC-8410-T-LX	UC-8416-T-LX	UC-8418-T-LX	UC-7402-LX	Plus	UC-7408-T-LX	UC-7408-T-LX Plus	UC-7408-T-CE	UC-7410-LX	LX Plus
Computer										
CPU Speed	533 MHz	533 MHz	533 MHz	266 MHz	533 MHz	266 MHz	533 MHz	266 MHz	266 MHz	533 MHz
OS (pre-installed)	Linux			Embedded Lir				WinCE 5.0	Embedded Lii	
DRAM	256 MB	256 MB	256 MB	256 MB	256 MB	256 MB	256 MB	256 MB	256 MB	256 MB
SRAM FSB										
Flash	16 MB (OS);	16 MB (OS);	16 MB (OS);	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB
System Memory	32 MB (data)	32 MB (data)	32 MB (data)							
PCMCIA				√	V	V	√	√		
Expansion Bus										
USB Ports										
Digital I/O	4 DIs, 4 DOs	4 DIs, 4 DOs	12 DIs, 12 DOs			8 DIs, 8 DOs	8 DIs, 8 DOs	8 DIs, 8 DOs		
Storage										
Built-in										
CompactFlash Socket SD Slot	√ 	√ 	√ 	√ 	√ 	√ 	√ 	√ 		
Other Peripherals										
KB/MS										
Audio										
Display										
Graphics Controller										
Mini Screen with Push									√	√
Buttons										
LAN Interface 10/100 Mbps Ethernet										
Ports	3	3	3	2	2	2	2	2	2	2
10/100/1000 Mbps										
Ethernet Ports Switch Ports		8								
Controller										
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
	1.0 10	1.5 10	1.0 117			1.5 10		1.0 10		
Serial Interface										
Serial Interface RS-232 Ports										
Serial Interface										
Serial Interface RS-232 Ports RS-485										
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	 15 KV	 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	8 (RJ45) 15 KV
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port	 8 (RJ45) 15 KV 	 8 (RJ45) 15 KV √	 8 (RJ45) 15 KV √	 15 KV	 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV	8 (RJ45) 15 KV
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation	 8 (RJ45) 15 KV √ Data Bits: 5, 6, 7	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1,	 8 (RJ45) 15 KV √	 15 KV	 15 KV	 8 (RJ45) 15 KV √	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV √	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV √
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication	 8 (RJ45) 15 KV 	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1,	 8 (RJ45) 15 KV √	 15 KV	 15 KV	 8 (RJ45) 15 KV √	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √	 8 (RJ45) 15 KV	 8 (RJ45) 15 KV √
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters	 8 (RJ45) 15 KV √ Data Bits: 5, 6, None, Even, Od RTS/CTS, XON/ 50 bps to 921.6	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1,	 8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √	 15 KV 	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	 8 (RJ45) 15 KV √
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control	 8 (RJ45) 15 KV √ Data Bits: 5, 6, 100, None, Even, Od/ RTS/CTS, XON/	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC®	8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √	 15 KV \day	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	 8 (RJ45) 15 KV √
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate	8 (RJ45) 15 KV V Data Bits: 5, 6, None, Even, Odd RTS/CTS, XOM/ 50 bps to 921.6 supported)	 8 (RJ45) 15 KV √, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® iKbps (non-standa	 8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √	 15 KV \day	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus	8 (RJ45) 15 KV V Data Bits: 5, 6, None, Even, Odd RTS/CTS, XOM/ 50 bps to 921.6 supported)	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa	8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √	 15 KV \day	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs	 8 (RJ45) 15 KV √ Data Bits: 5, 6, None, Even, Od RTS/CTS, XOM/ 50 bps to 921.6 supported)	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa	8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √ 	 15 KV \day	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial	 8 (RJ45) 15 KV √ Data Bits: 5, 6, None, Even, Od RTS/CTS, XON/ 50 bps to 921.6 supported) 	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa	8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √ OS Ready	 15 KV \day	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics	8 (RJ45) 15 KV Data Bits: 5, 6, 100, 100, 100, 100, 100, 100, 100,	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa	8 (RJ45) 15 KV √ 1.5, 2; Parity:	 15 KV √ OS Ready 10M, 100M	 15 KV \day	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing	8 (RJ45) 15 KV 15 KV Data Bits: 5, 6, 100 Mone, Even, Odd RTS/CTS, XON/ 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD	8 (RJ45) 15 KV √, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	15 KV √ 0S Ready 10M, 100M TxD, RxD	 15 KV √ 	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	 8 (RJ45) 15 KV √, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b.	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV V en, Odd, Space,	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight	8 (RJ45) 15 KV V Data Bits: 5, 6, 1 None, Even, Ode RTS/CTS, XOM/ 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa) Storage, Battery	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	 15 KV √ OS Ready 10M, 100M TxD, RxD	 15 KV √ 	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/	 8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2	 8 (RJ45) 15 KV √ ?; Parity: None, Eve	 8 (RJ45) 15 KV √ en, Odd, Space,	8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions		8 (RJ45) 15 KV √, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	15 KV √ 0S Ready 10M, 100M TxD, RxD	 15 KV √ 	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	 8 (RJ45) 15 KV √, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b.	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV V en, Odd, Space,	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting	8 (RJ45) 15 KV √ Data Bits: 5, 6, 1 None, Even, Od RTS/CTS, XON/ 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa) Storage, Battery	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	 15 KV √ OS Ready 10M, 100M TxD, RxD	 15 KV √ 830 g	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	 8 (RJ45) 15 KV √, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b.	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV V en, Odd, Space,	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits	B (RJ45) 15 KV Data Bits: 5, 6, None, Even, Odd RTS/CTS, XOM/ 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® 6 Kbps (non-standa) Storage, Battery atal (1 mm) 930 g 200 x 56 x 120	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	15 KV √ 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall	 15 KV √ 830 g	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature	8 (RJ45) 15 KV V Data Bits: 5, 6, 1 None, Even, Ode RTS/CTS, XOM/ 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® 6 Kbps (non-standa) Storage, Battery atal (1 mm) 930 g 200 x 56 x 120	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	15 KV √ 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall	 15 KV √ 830 g	 8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity	Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or 5 to 95% RH	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa Storage, Battery tal (1 mm) 930 g 200 x 56 x 120	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	15 KV √ 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH	 15 KV √ 830 g	8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature	Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or - 5 to 95% RH -20 to 80°C or -	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa Storage, Battery tal (1 mm) 930 g 200 x 56 x 120 40 to 75°C	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M) 1 kg	15 KV √ 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C	 15 KV √ 5 mm	8 (RJ45) 15 KV Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH -20 to 80°C	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b.	8 (RJ45) 15 KV √ Parity: None, Evo	 8 (RJ45) 15 KV √ en, Odd, Space, d) 810 g	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock	Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or 5 to 95% RH	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa Storage, Battery tal (1 mm) 930 g 200 x 56 x 120	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M)	15 KV √ 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH	 15 KV √ 830 g	8 (RJ45) 15 KV √ Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b	8 (RJ45) 15 KV √ 2; Parity: None, Eve audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature	8 (RJ45) 15 KV	8 (RJ45) 15 KV 8, (Stop Bits: 1, d, Space, Mark XOFF, ADDC® Kbps (non-standa Storage, Battery 1al (1 mm) 930 g 200 x 56 x 120 40 to 75°C 40 to 85°C 1g/5g 1ass B, EN55024-4 N55024-4-4), FCC	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M) 1 kg mm	15 KV √ 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	 15 KV √ 10/5g	8 (RJ45) 15 KV V Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH -20 to 80°C 1g/5g	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b.	 8 (RJ45) 15 KV √ 2; Parity: None, Even audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 810 g	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC	8 (RJ45) 15 KV Data Bits: 5, 6, 1 None, Even, Od. RTS/CTS, XON/. 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or - 5 to 95% RH -20 to 80°C or - 1g/5g CE (EN55024-4-3, ESubpart B, Class	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® Storage, Battery tal (1 mm) 930 g 200 x 56 x 120 40 to 75°C 40 to 85°C 1g/5g ass B, EN55024-4 NS5024-4-4), FCC 8 B)	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M) 1 kg mm	15 KV 15 KV 15 KV 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022	 15 KV 5 mm	8 (RJ45) 15 KV Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH -20 to 80°C 1g/5g D-3-2 Class A, EN6	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard bill) 870 g 40 to 75°C 19/5g	 8 (RJ45) 15 KV √ 2; Parity: None, Even audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 810 g	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals	8 (RJ45) 15 KV Data Bits: 5, 6, 1 None, Even, Od. RTS/CTS, XON/. 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or - 5 to 95% RH -20 to 80°C or - 1g/5g CE (EN55024-4-3, ESubpart B, Class	8 (RJ45) 15 KV 8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® 6 Kbps (non-standa) Storage, Battery 200 x 56 x 120 40 to 75°C 40 to 85°C 1g/5g 2ass B, EN55024-4 N55024-4-4), FCC 8 B) 50-1), CCC, LVD	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M) 1 kg mm	15 KV 15 KV 15 KV 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022	 15 KV 5 mm	8 (RJ45) 15 KV Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH -20 to 80°C 1g/5g D-3-2 Class A, EN6	8 (RJ45) 15 KV 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard b) 870 g	 8 (RJ45) 15 KV √ 2; Parity: None, Even audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 810 g	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety	8 (RJ45) 15 KV 9 Data Bits: 5, 6, None, Even, Odd RTS/CTS, XONV, 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or - 5 to 95% RH -20 to 80°C or - 1g/5g CE (EN55022 CI EN55024-4-3, E Subpart B, Class UL/cUL (UL609)	8 (RJ45) 15 KV 8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® 6 Kbps (non-standa) Storage, Battery 200 x 56 x 120 40 to 75°C 40 to 85°C 1g/5g 2ass B, EN55024-4 N55024-4-4), FCC 8 B) 50-1), CCC, LVD	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M) 1 kg mm	15 KV 15 KV 15 KV 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022	 15 KV 5 mm	8 (RJ45) 15 KV Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH -20 to 80°C 1g/5g D-3-2 Class A, EN6	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard bill) 870 g 40 to 75°C 19/5g	 8 (RJ45) 15 KV √ 2; Parity: None, Even audrates supporte	 8 (RJ45) 15 KV √ en, Odd, Space, d) 810 g	 8 (RJ45) 15 KV √ Mark
Serial Interface RS-232 Ports RS-485 RS-232/422/485 Ports ESD Protection Digital Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety Green Product	8 (RJ45) 15 KV 9 Data Bits: 5, 6, None, Even, Odd RTS/CTS, XONV, 50 bps to 921.6 supported) Power, Ready, S 10M, 100M TxD, RxD SECC sheet met 850 g 200 x 36.5 x 120 mm DIN-Rail, wall -10 to 60°C or - 5 to 95% RH -20 to 80°C or - 1g/5g CE (EN55022 CI EN55024-4-3, E Subpart B, Class UL/cUL (UL609)	8 (RJ45) 15 KV 8 (RJ45) 15 KV 7, 8; Stop Bits: 1, d, Space, Mark XOFF, ADDC® 6 Kbps (non-standa) Storage, Battery 200 x 56 x 120 40 to 75°C 40 to 85°C 1g/5g 2ass B, EN55024-4 N55024-4-4), FCC 8 B) 50-1), CCC, LVD	 8 (RJ45) 15 KV √ 1.5, 2; Parity: ard baudrates 2 (DB9-M) 1 kg mm	15 KV 15 KV 15 KV 0S Ready 10M, 100M TxD, RxD 830 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022	 15 KV 5 mm	8 (RJ45) 15 KV Data Bits: 5, 6, RTS/CTS, XON/ 50 bps to 921.6 870 g -10 to 60°C or - 5 to 95% RH -20 to 80°C 1g/5g D-3-2 Class A, EN6	8 (RJ45) 15 KV √ 7, 8; Stop Bits: 1, 1.5, 2 XOFF, ADDC® Kbps (non-standard bill) 870 g 40 to 75°C 19/5g	8 (RJ45) 15 KV V; Parity: None, Everaudrates supporte 870 g	 8 (RJ45) 15 KV √ en, Odd, Space, d) 810 g	 8 (RJ45) 15 KV √ Mark

Wallmount Computers



	UC-7420-LX	UC-7420-LX Plus	UC-7410-CE	UC-7420-CE	UC-7122-CE UC-7122-T-CE	UC-7124-CE UC-7124-T-CE	UC-7110-LX UC-7110-T-LX	UC-7112-LX	UC-7112-LX Plus	UC-7101-LX UC-7101-T-LX
Computer										
CPU Speed	266 MHz	533 MHz	266 MHz	533 MHz	200 MHz	200 MHz	192 MHz	192 MHz	192 MHz	192 MHz
OS (pre-installed)	Embedded Lir		WinCE 5.0	000 111112	200 11112	EUO IVIIIE	μClinux	TOE WITE	Linux	μClinux
DRAM	128 MB	128 MB	128 MB	128 MB	32 MB	32 MB	16 MB	16 MB	32 MB	16 MB
SRAM										
FSB										
Flash	32 MB	32 MB	32 MB	32 MB	16 MB	16 MB	8 MB	8 MB	16 MB	8 MB
System Memory										
PCMCIA	√	√		√						
Expansion Bus										
USB Ports										
Digital I/O										
Storage										
Built-in										
CompactFlash Socket	√	V		√						
SD Slot					\checkmark	\checkmark		$\sqrt{}$	$\sqrt{}$	\checkmark
Other Peripherals										
KB/MS										
Audio										
Display										
Graphics Controller										
Mini Screen with Push	√	V	√	√						
Buttons		,	,							
LAN Interface										
10/100 Mbps Ethernet Ports	2	2	2	2	2	2	2	2	2	1
10/100/1000 Mbps										
Ethernet Ports										
Switch Ports										
Controller										
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface										
RS-232 Ports										
RS-485										
DC-030/400/40E Dast-		8 (RJ45)	8 (RJ45)	8 (RJ45)	2 (RJ45)	4 (RJ45)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)	2 (DB9-M)
RS-232/422/485 Ports	8 (RJ45)									
ESD Protection	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
ESD Protection Optical Isolation	15 KV	15 KV								
ESD Protection Optical Isolation Console Port	15 KV	15 KV								
ESD Protection Optical Isolation	15 KV	15 KV √	√	 √						
ESD Protection Optical Isolation Console Port Serial Communication	15 KV √ Data Bits: 5, 6	15 KV √	 √ : 1, 1.5, 2; Parit	 √	√					
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control	15 KV √ Data Bits: 5, 6	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC®	 √ : 1, 1.5, 2; Parit	 √ y: None, Even, (√ Odd, Space, Mark	√				
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st	 √ : 1, 1.5, 2; Parit o andard baudrate	y: None, Even, (√ Odd, Space, Mark ee user's manual f	√ vor details)	 √	 √	 √	 √
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus	15 KV √ Data Bits: 5, 6	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC®	 √ : 1, 1.5, 2; Parit	 √ y: None, Even, (√ Odd, Space, Mark	√				
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st	 √ : 1, 1.5, 2; Parit o andard baudrate	y: None, Even, (√ Odd, Space, Mark ee user's manual f	√ vor details)	 √	 √	 √	 \(\)
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st	 \sqrt{1, 1.5, 2; Parit} andard baudrate	y: None, Even, Q es supported; se	Ddd, Space, Mark see user's manual f Ready, SD	or details)	 √ OS Ready	√	√	 √ Ready
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st	 \[\square\] : 1, 1.5, 2; Parit andard baudrate 10M, 100M	y: None, Even, (es supported; sa 10M, 100M	 √ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M	or details)	 √ OS Ready 10M, 100M	 √	 √	 √ Ready 10M, 100M
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st	 \sqrt{1, 1.5, 2; Parit} andard baudrate	y: None, Even, Q es supported; se	Ddd, Space, Mark see user's manual f Ready, SD	or details)	 √ OS Ready	√	√	 √ Ready
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD	 \[\square\] : 1, 1.5, 2; Parit andard baudrate 10M, 100M	y: None, Even, (es supported; sa 10M, 100M	odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD	or details) 10M, 100M TxD, RxD	 √ OS Ready 10M, 100M	 √	 √	 √ Ready 10M, 100M
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD netal (1 mm)	 √ : 1, 1.5, 2; Parit) andard baudrate 10M, 100M TxD, RxD	y: None, Even, (ys supported; so 10M, 100M TxD, RxD	odd, Space, Mark be user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m	or details) 10M, 100M TxD, RxD	OS Ready 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	 N Ready 10M, 100M TxD, RxD
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD netal (1 mm) 875 g	 \[\square\] : 1, 1.5, 2; Parit andard baudrate 10M, 100M	y: None, Even, (es supported; sa 10M, 100M	Ddd, Space, Mark be user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m	√ or details) 10M, 100M TxD, RxD m) 200 g	 √ OS Ready 10M, 100M	 √	 √	Ready 10M, 100M TxD, RxD
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TXD, RXD SECC sheet m 875 g 197 x 44 x 12	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD tetal (1 mm) 875 g 5 mm	 √ : 1, 1.5, 2; Parit) andard baudrate 10M, 100M TxD, RxD	y: None, Even, (ys supported; so 10M, 100M TxD, RxD	odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n	√ or details) 10M, 100M TxD, RxD m) 200 g	OS Ready 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	Ready 10M, 100M TXD, RxD 130 g 67 x 22 x 100.4 mm
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD tetal (1 mm) 875 g 5 mm	 √ : 1, 1.5, 2; Parit) andard baudrate 10M, 100M TxD, RxD	y: None, Even, (ys supported; so 10M, 100M TxD, RxD	Ddd, Space, Mark be user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m	√ or details) 10M, 100M TxD, RxD m) 200 g	OS Ready 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	Ready 10M, 100M TxD, RxD
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TXD, RXD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD hetal (1 mm) 875 g 5 mm	10M, 100M TxD, RxD	y: None, Even, (es supported; se 10M, 100M TxD, RxD	odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TXD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall	or details) 10M, 100M TxD, RxD	OS Ready 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	Ready 10M, 100M TXD, RxD 130 g 67 x 22 x 100.4 mm
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wali -10 to 60°C	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TXD, RxD netal (1 mm) 875 g 5 mm -10 to 60°C	10M, 100M TxD, RxD	y: None, Even, (y: None, Even, (y: Supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C	odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall	or details) 10M, 100M TxD, RxD m) 200 g mm	 √ OS Ready 10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD 190 g	 √ 10M, 100M TxD, RxD	Ready 10M, 100M TXD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TXD, RXD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD ietal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH	10M, 100M TxD, RxD 0 to 60°C 5 to 95% RH	y: None, Even, () es supported; se 10M, 100M TXD, RXD 875 g -10 to 60°C 5 to 95% RH	Didd, Space, Mark be user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 m DIN-Rail, wall -10 to 60°C or 5 to 95% RH	or details) 10M, 100M TxD, RxD	 √ OS Ready 10M, 100M TxD, RxD 190 g	10M, 100M TxD, RxD	 √ 10M, 100M TxD, RxD	Ready 10M, 100M TXD, RxD 130 g 67 x 22 x 100.4 mm
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TXD, RXD SECC sheet m 875 g 197 x 44 x 12: DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD tetal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C	27.	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TXD, RXD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C	or details) 10M, 100M TxD, RxD mm) 200 g mm 40 to 75°C 5 to 95% RH	 OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or -	10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	 √ 10M, 100M TxD, RxD 190 g 5 to 95% RH	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TXD, RXD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD ietal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH	10M, 100M TxD, RxD 0 to 60°C 5 to 95% RH	y: None, Even, () es supported; se 10M, 100M TXD, RXD 875 g -10 to 60°C 5 to 95% RH	Didd, Space, Mark be user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 m DIN-Rail, wall -10 to 60°C or 5 to 95% RH	or details) 10M, 100M TxD, RxD m) 200 g mm	 √ OS Ready 10M, 100M TxD, RxD 190 g	10M, 100M TxD, RxD	10M, 100M TxD, RxD	Ready 10M, 100M TXD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD tetal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C	10M, 100M TxD, RxD 10M 200 g 10M 5°C 5 to 95% RH	 OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or	 √ 10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	 √ 10M, 100M TxD, RxD 190 g 5 to 95% RH	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD tetal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TXD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C EN55024), FCC (P	√ or details) 10M, 100M TxD, RxD m) 200 g m 40 to 75°C 5 to 95% RH art 15 Subpart B, 0	 OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or -	 √ 10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	 √ 10M, 100M TxD, RxD 190 g 5 to 95% RH	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall 5 to 95% RH
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022 UL/cUL (UL60	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD tetal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g 10.75, 2; Parito	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g EN61000-3-3, E	Ddd, Space, Mark Ddd, Space, Mark De user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C EN55024), FCC (P	√ or details) 10M, 100M TxD, RxD m) 200 g nm 40 to 75°C 5 to 95% RH art 15 Subpart B, (1), UL/cUL	OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or CISPR 22 Class A) UL/cUL (UL609:	10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	10M, 100M TxD, RxD 190 g	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall 5 to 95% RH
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TXD, RXD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TxD, RxD atetal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g Class A, EN610	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g 10.75, 2; Parito	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g EN61000-3-3, E	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TXD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C EN55024), FCC (P	√ or details) 10M, 100M TxD, RxD m) 200 g nm 40 to 75°C 5 to 95% RH art 15 Subpart B, (1), UL/cUL	OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or CISPR 22 Class A)	10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	10M, 100M TxD, RxD 190 g	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall 5 to 95% RH
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022 UL/cUL (UL60	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TXD, RXD letal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g Class A, EN6100 0950-1, CSA C22	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g 10.75, 2; Parito	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g EN61000-3-3, E	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C EN55024), FCC (P LVD (EN60950-1, CC) (UL60950-1, CC)	√ or details) 10M, 100M TxD, RxD m) 200 g nm 40 to 75°C 5 to 95% RH art 15 Subpart B, (1), UL/cUL	OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or CISPR 22 Class A) UL/cUL (UL609:	10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	10M, 100M TxD, RxD 190 g	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall 5 to 95% RH
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDs System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety Green Product Reliability	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022 UL/cUL (UL60 (EN60950-1)	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TXD, RXD letal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g Class A, EN6100 0950-1, CSA C22	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g 10.75, 2; Parito	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g EN61000-3-3, E	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C EN55024), FCC (P LVD (EN60950-1, CC) (UL60950-1, CC)	√ or details) 10M, 100M TxD, RxD m) 200 g nm 40 to 75°C 5 to 95% RH art 15 Subpart B, (1), UL/cUL	OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or CISPR 22 Class A) UL/cUL (UL609:	10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	10M, 100M TxD, RxD 190 g	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall 5 to 95% RH
ESD Protection Optical Isolation Console Port Serial Communication Parameters Flow Control Baudrate CANbus LEDS System LAN Serial Physical Characteristics Housing Weight Dimensions Mounting Environmental Limits Operating Temperature Operating Humidity Storage Temperature Anti Vibration/Shock Regulatory Approvals EMC Safety Green Product	15 KV √ Data Bits: 5, 6 RTS/CTS, XOI 50 bps to 921 OS Ready 10M, 100M TxD, RxD SECC sheet m 875 g 197 x 44 x 12 DIN-Rail, wall -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g CE (EN55022 UL/cUL (UL60 (EN60950-1)	15 KV √ 5, 7, 8; Stop Bits N/XOFF, ADDC® .6 Kbps (non-st 10M, 100M TXD, RXD letal (1 mm) 875 g 5 mm -10 to 60°C 5 to 95% RH -20 to 80°C 19/5g Class A, EN6100 0950-1, CSA C22	10M, 100M TxD, RxD 10 to 60°C 5 to 95% RH -20 to 80°C 19/5g 10.75, 2; Parito	√ y: None, Even, (gs supported; so 10M, 100M TxD, RxD 875 g -10 to 60°C 5 to 95% RH -20 to 80°C 1g/5g EN61000-3-3, E	√ Odd, Space, Mark ee user's manual f Ready, SD 10M, 100M TxD, RxD Aluminum (1 m 190 g 77 x 111 x 26 n DIN-Rail, wall -10 to 60°C or 5 to 95% RH -20 to 80°C EN55024), FCC (P LVD (EN60950-1, CC) (UL60950-1, CC)	√ or details) 10M, 100M TxD, RxD m) 200 g nm 40 to 75°C 5 to 95% RH art 15 Subpart B, (1), UL/cUL	OS Ready 10M, 100M TxD, RxD 190 g 5 to 95% RH -20 to 80°C or CISPR 22 Class A) UL/cUL (UL609:	10M, 100M TxD, RxD 190 g 5 to 95% RH 40 to 85°C	10M, 100M TxD, RxD 190 g	Ready 10M, 100M TxD, RxD 130 g 67 x 22 x 100.4 mm DIN-Rail, wall 5 to 95% RH LVD (EN60950-1), UL/cUL (UL60950, CAN/

Rackmount Computers



Rackmount Computers



	DA-660-8-LX	DA-660-8-CE	DA-660-16-LX	DA-660-16-CE	DA-661-16-LX	DA-661-16-CE	DA-662-16-LX	DA-662-16-CE	DA-662-I-16- LX	DA-662-I-16- CE
Computer										
CPU Speed	266 MHz	266 MHz	266 MHz	266 MHz	533 MHz	533 MHz	533 MHz	533 MHz	533 MHz	533 MHz
OS (pre-installed)	Emb. Linux	WinCE 5.0	Emb. Linux	WinCE 5.0	Emb. Linux	WinCE 5.0	Emb. Linux	WinCE 5.0	Emb. Linux	WinCE 5.0
DRAM	128 MB	128 MB	128 MB	128 MB	128 MB	128 MB	128 MB	128 MB	128 MB	128 MB
FSB										
Flash	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB	32 MB
System Memory										
PCMCIA					√	√	√	√	√	V
Expansion Bus										
USB Ports					2	2	2	2	2	2
Storage										
Built-in										
CompactFlash Socket					\checkmark	\checkmark	\checkmark	√	\checkmark	$\sqrt{}$
HDD Support										
Other Peripherals										
KB/MS										
Display										
Graphics Controller		***								
Mini Screen with Push Buttons	√	√	\checkmark	\checkmark	\checkmark	√	\checkmark	√	√	√
LAN Interface										
10/100 Mbps Ethernet										
Ports	2	2	2	2	2	2	4	4	4	4
10/100/1000 Mbps Ethernet Ports										
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
100BaseFX Fiber Ports (multi-mode)										
Serial Interface										
RS-232 Ports										
RS-485										
RS-232/422/485 Ports	8 (RJ45)	8 (RJ45)	16 (RJ45)	16 (RJ45)	16 (RJ45)	16 (RJ45)	16 (RJ45)	16 (RJ45)	16 (RJ45)	16 (RJ45)
ESD Protection	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV	15 KV
Digital Isolation									2 KV	2 KV
Console Port	√	\checkmark	√	\checkmark		√	\checkmark	√	$\sqrt{}$	\checkmark
Serial Communication Parameters	Data Bits: 5, 6	, 7, 8; Stop Bits: 1	, 1.5, 2; Parity: No	one, Even, Odd, S _l	pace, Mark					
Flow Control	RTS/CTS, XON	I/XOFF, ADDC®								
Baudrate	50 bps to 921.	6 Kbps (non-stan	ıdard baudrates sı	upported; see user	's manual for deta	ils)				
LEDs										
System	OS Ready	OS Ready	OS Ready	OS Ready	OS Ready	OS Ready	OS Ready	OS Ready	OS Ready	OS Ready
LAN	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M
Serial	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD
Physical Characteristics										
Housing	SECC sheet m	etal (1 mm)								
Weight	2600 g	2600 g	2600 g	2600 g	2600 g	2600 g	2600 g	2600 g	2940 g	2940 g
Dimensions	440 x 45 x 198								440 x 45 x 228	3 mm
Mounting	Standard 19-ir	nch rackmount								
Environmental Limits										
Operating Temperature	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C	-10 to 60°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RF
Storage Temperature	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C	-20 to 80°C
Regulatory Approvals	OF (FNEEOCO	Oless A E8104000	0.000 1.510	24000 0 C ENESS	24) 500 (5. 145)	Outrant D. Ologo	00.01 *>			
EMC Safety					24), FCC (Part 15 S	SUDPART B, CISPR	ZZ Ulass A)			
Safety Green Product	RoHS, CRoHS		2 140. 60950-1-03)), TÜV (EN60950-	1)					
Reliability	nuno, ununo	, WEEE								
THEIRIGINITY										
Buzzer, RTC, WDT			$\sqrt{}$	\checkmark	\checkmark	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	\checkmark	

Module/Board Computers









			10000	
	EM-2260-CE	EM-2260-LX	EM-1240-LX EM-1240-T-LX	EM-1220-LX EM-1220-T-LX
Computer				
CPU Speed	200 MHz	200 MHz	192 MHz	192 MHz
OS (pre-installed)	WinCE 6.0	Linux	Embedded µClinux	
DRAM	128 MB	128 MB	16 MB	16 MB
Flash	32 MB	32 MB	8 MB	8 MB
Digital I/O	8 DIs, 8 DOs	8 DIs, 8 DOs		
Storage				
SD Slot			\checkmark	√
EIDE Interface	$\sqrt{}$	$\sqrt{}$		
Display				
Graphics Controller	V	V		
LAN Interface				
10/100 Mbps Ethernet Ports	2	2	2	2
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface				
RS-232/422/485 Ports	4	4	4	2
ESD Protection	15 KV	15 KV	15 KV	15 KV
Console Port	√	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; F	Parity: None, Even, Odd, Space, Mark		
Flow Control	RTS/CTS, XON/XOFF, ADDC®			
Baudrate	50 bps to 921.6 Kbps (non-standard bau	drates supported; see user's manual for det	ails)	
Physical Characteristics				
Weight	70 g	70 g	50 g	40 g
Dimensions	106 x 87 mm	106 x 87 mm	90 x 80 mm	80 x 50 mm
Module Interface			Two 2 x 28 pin-headers (1.27 x 1.27 mm	pitch)
Environmental Limits				
Operating Temperature	-10 to 60°C	-10 to 60°C	-10 to 60°C or -40 to 75°C	
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 80°C	-20 to 80°C	-20 to 80°C or -40 to 85°C	
Regulatory Approvals				
EMC	CE (Class A), FCC		CE (EN55022 Class A, EN61000-3-2 Clas 15 Subpart B, CISPR 22 Class A)	s A, EN61000-3-3, EN55024), FCC (Part
Green Product	RoHS, CRoHS, WEEE			
Reliability				
Buzzer, RTC, WDT	\checkmark	\checkmark	\checkmark	\checkmark
Warranty	5 years (see www.moxa.com/warranty)			

DIN-Rail Computers



	IA260-CE IA260-T-CE	IA260-LX IA260-T-LX	IA261-I-LX IA261-I-T-LX	IA261-I-CE IA261-I-T-CE	IA262-I-LX IA262-I-T-LX	IA262-I-CE IA262-I-T-CE	IA240-LX IA240-T-LX	IA241-LX IA241-T-LX
Computer	1		1					
CPU Speed	200 MHz	200 MHz	200 MHz	200 MHz	200 MHz	200 MHz	192 MHz	192 MHz
OS (pre-installed)	WinCE 6.0	Linux	Linux	WinCE 6.0	Linux	WinCE 6.0	Embedded Linux	132 1/1112
DRAM	128 MB (256 MB		LIIIux	WIIIOL 0.0	LIIIux	WIIIOL 0.0	64 MB	64 MB
Flash	32 MB (64 MB ma		32 MB	32 MB				
PCMCIA	02 IVID (04 IVID III		32 IVID	32 IVID	32 IVID	OZ IVID	32 IVID	√ VIII
USB Ports	2 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0)	2 (USB 2.0)	1 (USB 2.0)	1 (USB 2.0)
Digital I/O	8 DIs, 8 DOs	8 DIs, 8 DOs	8 DIs, 8 DOs	8 DIs, 8 DOs	8 DIs, 8 DOs	8 DIs, 8 DOs	4 DIs, 4 DOs	4 DIs, 4 DOs
Storage	0 013, 0 003	0 013, 0 003	0 013, 0 003	0 013, 0 003	0 013, 0 003	0 013, 0 003	7 013, 7 003	4 DI3, 4 DO3
CompactFlash Socket		V	V	V	V	V		
SD Slot	V	V		V			 √	 √
							V	V
Display			,	,	,	,		
Graphics Controller			$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$		
LAN Interface								
10/100 Mbps Ethernet Ports	2	2	2	2	2	2	2	2
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV	1.5 KV
Serial Interface								
RS-232/422/485 Ports	4 (DB9-M)	4 (DB9-M)	4 (DB9-M)	4 (DB9-M)	2 (DB9-M)	2 (DB9-M)	4 (RJ45)	4 (RJ45)
ESD Protection			15 KV	15 KV				
Digital Isolation			2 KV	2 KV	2 KV	2 KV		
Console Port	V	V	\checkmark	√	\checkmark	\checkmark	\checkmark	$\sqrt{}$
Serial Communication Parameters	Data Bits: 5, 6, 7,	8; Stop Bits: 1, 1.5, 2;	Parity: None, Even, O	dd, Space, Mark				
Flow Control	RTS/CTS, XON/XC	FF, ADDC®						
Baudrate	50 bps to 921.6 K	bps (non-standard bau	drates supported)					
CANbus					2 (DB9-M)	2 (DB9-M)		
LEDs								
System	Power, Ready, Sto	rage						
LAN	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M	10M, 100M
Serial	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD	TxD, RxD
Physical Characteristics			,			,		
Housing	Aluminum indust	rial vertical form factor					Aluminum (1 mm)	
Weight	1 kg	1 kg	950 g	950 g	950 g	950 g	430 g	500 g
Dimensions	52 x 112.6 x 162	52 x 112.6 x 162	60 x 115 x 152	60 x 115 x 152	60 x 115 x 152 mm	60 x 115 x 152 mm	60 x 137 x 100 mm	60 x 137 x 100
Mounting	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall
Environmental Limits								
Operating Temperature	-10 to 60°C or -40) to 75°C						
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 80°C or -40		5 to 00 /0 IIII	0.000701111	0.10 0070 1111	0.10 0070 1111	0.00 00 /0 1111	0 10 00 /0 1111
Regulatory Approvals	201000001140							
EMC	CE (EN55022 Clas (GB9254, GB 1762	s A, EN61000-3-2 Clas 25.1)	ss A, EN61000-3-3, E	N55024), FCC (Part 1	5 Subpart B, CISPR 22	2 Class A), CCC	CE (EN55022 Class Class A, EN61000-3 (Part 15 Subpart B,	3-3, EN55024), F
Safety	UL/cUL (UL60950	-1, CSA C22.2 No. 609	950-1-03), LVD (EN60	950-1), CCC (GB4943	3)		UL/cUL (UL60950- 60950-1-03), TÜV	
Green Product	RoHS, CRoHS, W	EEE						,
Reliability								
Buzzer, RTC, WDT	V	V	V	V	V	V	V	V
Warranty		.moxa.com/warranty)						

RISC-based WLAN Computers



	W311-LX	W321-LX	W341-LX
Computer			
CPU Speed	192 MHz	192 MHz	192 MHz
OS (pre-installed)	Embedded Linux with MMU support	132 WHZ	TOE WITE
DRAM	32 MB	32 MB	64 MB
Flash	16 MB	16 MB	16 MB
USB Ports			2 (USB 2.0)
Relay Output			√ (305 ±1.5)
Storage			
SD Slot	√	V	\checkmark
LAN Interface			
10/100 Mbps Ethernet Ports	1	1	1
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV
100BaseFX Fiber Ports (multi-mode)			
WLAN Interface			
Standard Compliance	802.11a/b/g		
Radio Frequency Type	DSSS, CCK, OFDM		
Transmission Rate	54 Mbps (max.) with auto fallback (54, 48, 36, 24, 18, 1 • 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps • 802.11b: 1, 2, 5.5, 11 Mbps	2, 11, 9, 6, 5.5, 2, 1 Mbps)	
Transmission Distance	Up to 100 meters (@ 11 Mbps in open areas)		
Wireless Security	WEP: 64-bit/128-bit, WPA, WPA2 data encryption		
WLAN Modes	Ad-hoc (802.11b/g), Infrastructure		
Serial Interface			
RS-232/422/485 Ports	1 (DB9-M)	2 (DB9-M)	4 (DB9-M)
ESD Protection	15 KV	15 KV	15 KV
Console Port	√	\checkmark	\checkmark
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None, Ev	ren, Odd, Space, Mark	
Flow Control	RTS/CTS, XON/XOFF, ADDC™		
Baudrate	50 bps to 921.6 Kbps (non-standard baudrates supported	ed)	
LEDs			
System	Ready, SD	Ready, SD	Ready, SD
LAN	10M, 100M	10M, 100M	10M, 100M
WLAN	Enable, Signal Strength		
Serial	TxD, RxD	TxD, RxD	TxD, RxD
Physical Characteristics			
Housing	Aluminum (1 mm)		
Weight	170 g	185 g	390 g
Dimensions	77 x 111 x 26 mm	77 x 111 x 26 mm	150 x 100 x 38 mm
Mounting	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall
Environmental Limits			
Operating Temperature	-10 to 60°C	-10 to 60°C	-10 to 60°C
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH
Storage Temperature	-20 to 80°C	-20 to 80°C	-20 to 80°C
Anti Vibration/Shock	5g/50g	5g/50g	5g/50g
Regulatory Approvals			
EMC	CE (ETSI EN 301 489-1/-17, ETSI EN 301 893, ETSI EN	300 328, EN50392), FCC Part 15C & Part 15E	
Safety	UL/cUL (UL60950-1), TÜV (EN60950-1)		
Green Product	RoHS, CRoHS, WEEE		
Reliability			
Buzzer, RTC, WDT	√	\checkmark	$\sqrt{}$
Warranty	5 years (see www.moxa.com/warranty)		

Cellular Computers







	W315-LX	W325-LX	W345-LX		
Computer					
CPU Speed	192 MHz	192 MHz	192 MHz		
OS (pre-installed)	Embedded Linux with MMU support				
DRAM	32 MB	32 MB	64 MB		
Flash	16 MB	16 MB	16 MB		
USB Ports			2 (USB 2.0)		
Relay Output			$\sqrt{}$		
Storage					
SD Slot	√	√	√		
LAN Interface					
10/100 Mbps Ethernet Ports	1	1	1		
Magnetic Isolation Protection	1.5 KV	1.5 KV	1.5 KV		
100BaseFX Fiber Ports (multi-mode)					
Cellular Interface					
Cellular Modes	GSM, GPRS				
Radio Frequency Bands	850/900/1800/1900 MHz				
GPRS Class	10				
Coding Schemes	CS1 to CS4				
Serial Interface					
RS-232/422/485 Ports	1 (DB9-M)	2 (DB9-M)	4 (DB9-M)		
ESD Protection	15 KV	15 KV	15 KV		
Console Port	\checkmark	$\sqrt{}$	$\sqrt{}$		
Serial Communication Parameters	Data Bits: 5, 6, 7, 8; Stop Bits: 1, 1.5, 2; Parity: None	, Even, Odd, Space, Mark			
Flow Control	RTS/CTS, XON/XOFF, ADDC™				
Baudrate	50 bps to 921.6 Kbps (non-standard baudrates supp	orted)			
LEDs					
System	Ready, SD	Ready, SD	Ready, SD		
LAN	10M, 100M	10M, 100M	10M, 100M		
Cellular	GPRS Enabled, GSM Signal Strength				
Serial	TxD, RxD	TxD, RxD	TxD, RxD		
Physical Characteristics					
Housing	Aluminum (1 mm)				
Weight	195 g	195 g	400 g		
Dimensions	77 x 111 x 26 mm	77 x 111 x 26 mm	150 x 100 x 38 mm		
Mounting	DIN-Rail, wall	DIN-Rail, wall	DIN-Rail, wall		
Antenna Length	110 mm	110 mm	110 mm		
Environmental Limits	40.4.0000	40.10000	40.10000		
Operating Temperature	-10 to 60°C	-10 to 60°C	-10 to 60°C		
Operating Humidity	5 to 95% RH	5 to 95% RH	5 to 95% RH		
Storage Temperature	-20 to 80°C	-20 to 80°C	-20 to 80°C		
Anti Vibration/Shock	5g/50g	5g/50g	5g/50g		
Regulatory Approvals	500 0 445 0 40494				
EMC	FCC: Part 15, Part 24/24				
CE R&TTE	EN55022, EN61000				
Safety	EN301 489-1, EN301 489-7, EN301 511 LVD: EN60950-1 LV CHI - LU 60050 1 CSA C32 2 No 60050 1 03				
Green Product	UL/cUL: UL60950-1, CSA C22.2 No. 60950-1-03 GCF-CC, RoHS, CRoHS, WEEE				
Reliability	doi do, nono, onono, well				
Buzzer, RTC, WDT	√	V			
Warranty	5 years (see www.moxa.com/warranty)	V	√		
Trailaity	o yours (see www.moxa.com/warranty)				

Notes	

Notes	

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