## MEDIA CONVERTER TECHNICAL SPECIFICATIONS

Standards ANSI/ATA 878

Delay 300ns one-way

Case dimensions 4.75" x 3.0" x 1.0" (119mm x 76mm x 25mm)

Shipping Weight 2 pounds (0.9 kilograms)

**Environment** Temperature: 0-40°C (32° to 104° F)

10-90%, non condensing Humidity

Altitude 0-10,000 feet

Warranty Five years

Power Supply Requirements Replace power supply with only the equivalent input rating (see below) and output rating (regulated 9VDC at 0.2 A).

<u>TN PN</u>	<u>Requirement</u>	<u>Location</u>
3525	240 volts, 50 hertz	United Kingdom
3525	230 volts, 50 hertz	Europe
3518	120 volts, 60 hertz	USA/Canada/Mexico
3514	100 volts, 50-60 hertz	Japan
3525	240 volts, 50 hertz	Australia

NOTE: This product also can be powered by the Transition Networks E-MCR series media converter rack.

#### **Compliance Information**

UL Listed C-UL Listed (Canada)

CISPR/EN55022 Class A

#### **FCC Regulations**

This equipment has been tested and found to comply with the limits for a class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates. uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at the user's own expense.

#### Canadian Regulations

This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the radio interference regulations of the Canadian Department of Communications.

## **European Regulations**

Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

#### Copyright Restrictions

© 1999 TRANSITION Networks.

All rights reserved. No part of this work may be reproduced or used in any form or by any means – graphic, electronic, or mechanical – without written permission from TRANSITION Networks.

#### **Trademark Notice**

ARCNET is a registered trademark of Datapoint Corporation.

All registered trademarks and trademarks are the property of their respective owners. Some and trademarks are the property of their respective owners.



Minneapolis, MN 55344 USA

# ARCNET® Coax Copper/Fiber Media Converter

AR-CF-02, AR-CF-02(SC), AR-CF-02(SM)

## USFR'S GUIDF

The TRANSITION Networks ARCNET® Coax Copper/Fiber Media Converter (AR-CF-02) extends the signal distance of an ARCNET® segment or node link up to 2 kilometers over fiber\*, up to 600 meters over coax cable in a star topology, and up to 300 meters over coax cable in a bus topology.

A switch on the media converter allows the media converter to be used to terminate the link or node signal.

#### AR-CF-02

Provides a BNC connector to coaxial cable and a set of RX (receive) and TX (transmit) **ST** connectors to multimode fiber-optic cable.



## AR-CF-02(SC)

Provides a BNC connector to coaxial cable and an RX (receive) and TX (transmit) SC connector to multimode fiber-optic cable.

## AR-CF-02(SM)

Provides a BNC connector to coaxial cable and an RX (receive) ST and TX (transmit) SC connector to **singlemode** fiber-optic cable.

#### STATUS LEDS

**Power** Steady green LED indicates connection to external AC power.

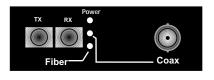
Coax Blinking green LED

> indicates network traffic on coaxial cable

link.

Fiber Blinking green LED

indicates network traffic on fiber link.



\*Consider carefully the network constraints imposed by the maximum latency response time of installed equipment. Some equipment cannot handle the extended

## Installation NOTES

## Install Coax Copper

#### STAR TOPOLOGY

 MAXIMUM coax segment to active hub is 600 meters (2000 feet) on RG-62 cable; minimum does not apply.

#### **BUS TOPOLOGY**

- Devices attached to coax bus must be located AT LEAST six (6) feet apart.
- MAXIMUM coax bus length is 300 meters (1000 feet); minimum is 1.8 meters (6 feet).
- Device(s) attached to EACH END of bus must be terminated. NOTE: If the media converter is installed at one end of the bus, use the configuration switch to terminate the media converter.

#### **CONFIGURATION SWITCH**

NOTE: Set configuration switch (located on the side of media converter) according to site installation requirements:

Switch 1 NOT USED

Switch 2 **UP** = OFF Media converter TRANSFERS signal **DOWN** = ON Media converter TERMINATES signal.

## Install Fiber

- Connect one end of first fiber cable to AR-CF-02 media converter TX connector.
- Connect other end of that fiber cable to second AR-CF-02 media converter RX connector.
- Connect one end of second fiber cable to AR-CF-02 media converter RX connector.
- Connect other end of that fiber cable to AR-CF-02 media converter TX connector.

## **Power**

- Locate correct power supply adapter for site installation.
- Connect media converter power connector at end of power supply adapter cord to AR-CF-02 media converter power receptacle.
- Connect 2-prong or 3-prong external power connector on other end of power supply adapter cord to external AC power.

## CABLE SPECIFICATIONS

The physical characteristics of the cable must meet or exceed the following:

## **FIBER CABLE**

#### MULTIMODE

Fiber Optic Cable Recommended: 62.5 / 125 µm multimode fiber Fiber Optic Transmitter Power: min: -19.0 dBm max: -14.0 dBm Fiber Optic Receiver Sensitivity: min: -32.5 dBm max: -14.0 dBm

Wavelength: 850nM
Bit error rate: ≤10-9
Maximum Cable Distance: 2 kilometers

#### **SINGLEMODE**

Fiber Optic Cable Recommended: 9 µm singlemode fiber

Fiber Optic Transmitter Power: min: -27.0 dBm max: -17.0 dBm Fiber Optic Receiver Sensitivity: min: -32.5 dBm max: -13.0 dBm

Wavelength: 1300nM Bit error rate:  $\leq 10^{-9}$ Maximum Cable Distance: 8 kilometers

## COAX CABLE/STAR TOPOLOGY

#### RG-62 Cable

Cable Characteristics:

Cable type: Coaxial RG-62/u Impedance: 75  $\Omega$  @ 10 MHz

Mutual Capacitance: 13 pF/ft ±20% @ 10 MHz

Maximum Attenuation: 5.5 dB/1000 feet

Maximum Cable Distance: 600 meters (2000 feet)

Minimum Distance/Connection: 0 meters (0 feet)

RG-59 Cable

Cable Characteristics:

Cable type: Coaxial RG-59/u Impedance: 93  $\Omega$  @ 10 MHz

Mutual Capacitance: 13 pF/ft ±20% @ 10 MHz

Maximum Attenuation: 7.0 dB/1000 feet

Maximum Cable Distance: 450 meters (1500 feet)

Minimum Distance/Connection: 0 meters (0 feet)

## **COAX CABLE/BUS TOPOLOGY**

#### RG-62 Cable

Cable Characteristics:

Cable type: Coaxial RG-62/u Impedance: 93  $\Omega$  @ 10 MHz

Mutual Capacitance: 13 pF/ft ±20% @ 10 MHz

Maximum Attenuation: 5.5 dB/1000 feet

Maximum Cable Distance: 300 meters (1000 feet)

Minimum Distance/Connection: 1.8 meters (6 feet)

Free Manuals Download Website

http://myh66.com

http://usermanuals.us

http://www.somanuals.com

http://www.4manuals.cc

http://www.manual-lib.com

http://www.404manual.com

http://www.luxmanual.com

http://aubethermostatmanual.com

Golf course search by state

http://golfingnear.com

Email search by domain

http://emailbydomain.com

Auto manuals search

http://auto.somanuals.com

TV manuals search

http://tv.somanuals.com