



## Family 2785+01 IBM Infoprint 2085

IBM Universal Sales Manual  
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### Document options

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### IBM U.S. Product Life Cycle Dates

| Type Model | Announced  | Available  | Marketing Withdrawn | Service Discontinued | Replaced By |
|------------|------------|------------|---------------------|----------------------|-------------|
| 2785-001   | 2002/04/30 | 2002/05/24 | 2004/11/12          | -                    | None        |

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### Abstract

The IBM 2785 is the cut-sheet product line 2085 multifunction production device that is a full-function, high-speed printer and duplication system. This and the 2705 are IBM's first products available that effectively combine a true datacenter-centric controller with copier capabilities. The Infoprint 2085 (2785) and 2105 (2705) are cost-efficient, easy-to-use, print-on-demand solutions that can help you gain a competitive edge and win in the marketplace.

#### Model Abstract 2785-001

(No Longer Available as of November 12, 2004)

The IBM 2785 Infoprint 2085 Model 001 allows speeds up to 85 impressions per minute. The Average Monthly Print Volume (AMPV) for the Infoprint 2085 is 300,000 impressions.

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### Highlights

The additional flexibility of the Infoprint 2085 and 2105 products allow you the ability to create professional-quality documents, even with complex multistock composition, at speeds up to 85 and 105 impressions per minute.

This professional multifunction system includes:

- 600 dots-per-inch (dpi) print quality with print volumes of up to 800,000 impressions per month
- Three input drawers with a total capacity for 3,000 sheets and a 3,000 sheet finisher as standard
- Optional additional three drawer, 4,550-sheet paper feeder
- Finishing capabilities that include a stitcher, and 2-, 3-, or 4-hole punch

- IPDS standard on the printers
- Support for a wide selection of paper weights and sizes
- The ability to process content-rich pages, including statements with logos, business graphics, and signatures using the features of Advanced Function Printing (AFP)

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## Description

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The Infoprint 2085 and 2105 are high-end, cut-sheet, multifunction production devices with print speeds up to 85 and 105 impressions-per-minute (ipm), with good print quality at 600 dots-per-inch (dpi) with conversions for 240 and 300 dpi. With these high output speeds, one can create a more productive environment and substantially reduce time waiting at the printer.

IPDS is standard on the Infoprint 2085 and 2105. Optional support for Adobe PostScript, PCL, and PDF is available. The Infoprint 2105 and 2085 provide Ethernet 10/100BaseT for TCP/IP and optional Token-Ring for TCP/IP attachment capability.

As network datacenter printers, the Infoprint 2085 and 2105 offer the following benefits:

- Large paper input capacity of 3,000 sheets in three trays standard
- Finisher with stitcher capability standard
- Optional high-capacity feeder
- Optional 2-, 3-, or 4-hole punch
- Autosensing of data streams
- Printer-resident Web pages
- E-mail notification and status with wireless support
- Custom paper sizes
- Support for a variety of host software including PSF, Infoprint Manager, and Infoprint Server

As copier multifunction printers, the Infoprint 2085 and 2105 offer the following benefits:

- 72 ipm integrated scanner at 600 dpi
- Ability to connect two printers for up to 210 ipm in copy mode
- Standard copying convenience functions
- Automatic reversing document feeder and glass platen

The Infoprint 2085 and 2105 can help transform your business to become more competitive and win in the marketplace. In addition to printing at 85 ipm for Infoprint 2085 and 105 ipm for Infoprint 2105, the printers have a 72 ipm integrated scanner that supports digital copying at 85 copies per minute for Infoprint 2085 and 105 for Infoprint 2105.

### High-Performance Controller

Both Infoprint 2085 and 2105 have high-performance controllers with a 500 MHz PowerPC 750L processor with 1 MB of L2 cache and an IBM printer co-processor. The controller has an onboard 10/100BaseTX Ethernet attachment and a Peripheral Component Interconnect (PCI) Bus for an optional Token-Ring adapter.

Other benefits of the controllers include:

### SDRAM Memory

Standard memory is 256 MB SDRAM. No memory options are available.

### Hard Drive

A 10 GB hard drive comes standard with both printers. IPDS Single Byte Character Set (SBCS) and Double Byte Character Set (DBCS) fonts come stored on the hard drive. With the PCL/PostScript feature installed, SBCS fonts including SEMEA (Southern Europe, Middle East, Africa) PCL fonts are available on the hard drive.

Downloaded fonts and macros may be individually deleted from the hard drive. PCL 6 fonts and PCL 6 macros can be downloaded and stored using the IBM Departmental Printer Resource Utility (DPRU).

## **IBM AFP/IPDS**

Infoprint 2085 and 2105 come standard with IBM's AFP/IPDS.

## **PCL/PostScript**

Infoprint 2085 and 2105 support PCL and Adobe PostScript with the optional PCL/PostScript features. Included in these features are:

- PCL 5e resident fonts - 47 fonts
- PCL 6 resident fonts - 47 fonts
- Adobe PostScript 3 resident fonts - 136 fonts total

The PCL/PostScript feature (feature numbers 4820/4821) includes Single Byte Character Set (SBCS) support. It also comes with a CD-ROM that includes a setup wizard, PCL/PostScript drivers, port monitors, MIBs, and DPRU. The feature is tied to a specific machine and is not interchangeable with other Infoprint 2085 and 2105 machines.

The PostScript Japanese feature (feature numbers 4810/4811) include Double Byte Character Set (DBCS) support with Morisawa fonts (GothicBBB-Medium and Ryumin-Light). This feature should only be ordered if double byte support is required. The PCL/PostScript feature (feature number 4820/4821) is a pre-requisite for this feature. The Japanese PCL/PostScript feature is tied to a specific machine and is not interchangeable with other Infoprint 2085 and 2105 machines.

## **Token-Ring**

Infoprint 2085 and 2105 support an optional Token-Ring 4/16 adapter in addition to the standard Ethernet attachment. However, only one attachment, Ethernet or Token-Ring, can be active at a time.

## **Control Panel**

Infoprint 2085 and 2105 have a full-color 9-inch LCD (D-STN), 640 x 480 dot control panel. It consists of an LCD touch-screen, hard keys, and colored LEDs for status.

Two languages can be loaded into the control panel and the operator may select between the two. If Japanese language is loaded, then only one language can be loaded.

## **Paper Handling**

Infoprint 2085 and 2105 come with 3,000-sheet input capacity standard. This capability includes three input drawers. An optional 4,550-sheet High Capacity Feeder with three drawers is available, which increases the maximum input capacity to 7,550 sheets. Duplex capability comes standard with both printers.

Custom paper sizes are supported in trays 2 and 3. Custom size is 148 mm x 210 mm (SEF) minimum (5.9 in. x 8.3 in.) and 297 mm x 432 mm (SEF) maximum (11.8 in. x 17 in.). Custom paper sizes run at half speed and are supported in PostScript, IPDS, and PCL 6, but not PCL 5.

Infoprint 2085 and 2105 print the front side of duplex pages first. This means preprinted forms that will be used for both simplex and duplex jobs can be loaded in a single tray and used effectively with no extra steps required.

A finisher with stitching capabilities comes standard with both printers. It has a proof bin with 500-sheet capacity (A4/Letter) and a shift bin with 3,000-sheet capacity (A4/Letter). Single page jobs cannot be shifted (offset) and jobs cannot be stapled and shifted. If a job

requires both of these, it will be stapled only.

Optional hole-punching kits are available. See Paper Handling Options section for a description of the punch kits. Only one punch kit may be installed at a time and it requires a CE to install or change the kits. Punch jobs can go to the shift tray or proof tray.

## Paper Handling Options

- 4,550-Sheet High Capacity Feeder (feature numbers 4520/4521)  
This feature has three trays for 4,550-sheet capacity. Trays 4 and 5 have 1,000-sheet capacity each and tray 6 has 2,550-sheet capacity.
- A3/11" x 17" Tray Kit (feature numbers 4500/4501)  
This option supports large size media including A3/11 x 17 in. media. It replaces the standard tray 1 (tandem tray) which cannot be used again without a CE involvement. This tray is supported in tray 1 only and has a capacity of 1,000 sheets. Media supported in this tray include A3 SEF, B4 SEF, A4 SEF, A4 LEF, 11" x 17" SEF, Letter SEF, Letter LEF, and Legal SEF.
- 2-Hole Punch Kit for Finisher (feature numbers 4620/4621)  
This option supports 2-hole punching in the European and Japan format.
- 2-Hole Punch Kit for Finisher (feature numbers 4622/4623)  
This option supports 2-hole punching in the U.S. format.
- 3-Hole Punch Kit for Finisher (feature numbers 4624/4625)  
This option supports 3-hole punching.
- 4-Hole Punch Kit for Finisher (feature numbers 4626/4627)  
This option supports 4-hole punching.
- 4-Hole Swedish Style Punch Kit for Finisher (feature numbers 4628/4629)  
This option supports Swedish style 4-hole punching.

## Print Quality

Infoprint 2085 and 2105 offer high-quality print resolution of 600 x 600 dpi. Both printers support up to 256 levels of gray for IOCA images.

There are three print modes; Refine, Normal, and Econo. Refine mode is the default and offers the best overall print quality. Normal mode is slightly darker than Refine mode and Econo mode is slightly lighter with reduced toner usage.

For AFP/IPDS, resolutions of 240, 600, or AUTO, the print mode must be set to enhanced print mode. Enhanced print mode produces the optimal print quality; however, complex jobs may print slower. Standard print mode is available for optimal performance of complex print jobs.

## Print Area

Both printers support a printable area of within 4 mm of the edge on all sides for IPDS and PCL/PostScript data streams. Edge-to-edge mode allows printing to within 2 mm leading edge and 0 mm on all other edges of the media.

## Maximum Monthly Usage

The maximum monthly usage for both Infoprint 2085 and 2105 is 800,000 impressions. IBM does not recommend printing to this monthly maximum on a consistent basis.

## Average Monthly Usage

The Average Monthly Print Volume (AMPV) for Infoprint 2085 is 300,000 impressions and for Infoprint 2105 is 400,000 impressions.

## Copying Capability

Infoprint 2085 and 2105 printers include a digital copier as standard. The copier is extremely powerful but still easy to use. All copier functions are accessed through the large, user friendly, dual language touch panel. Originals are scanned in and a digital representation of the original is created that can be printed on these printers.

Simplex and duplex originals can be copied by either placing them on the scanner glass or utilizing the ARDF (Auto Reverse Document Feeder). The ARDF is a fast and versatile scan feeder, capable of handling up to 100 sheets at a time (80 g/sm, 20 lb). The ADRF can scan pages up to 72 ppm (8.5" x 11" or A4). The scanner can handle a wide variety of paper sizes from 5.5" x 8.5" (140 mm x 216 mm) to 11" x 17" (279 mm x 432 mm).

The ARDF can scan mixed paper sizes and weights in the same stack. The ARDF is also capable of automatic paper size selection and automatic paper reduction/enlargement on a sheet-by-sheet basis. It scans originals at 8 bits and 600 dpi.

The copier also includes an integrated document server and editor. The document server stores up to 250 jobs or up to 5,000 pages. The document server allows the user to scan originals and save the documents onto the built-in hard drive, and print saved documents. All of the available finishing options are available when printing a stored document. Documents can be protected with user IDs and passwords. The document server also allows the user to print a sample copy, insuring that the full print job will be output correctly.

An optional Copy Connect Cable may be used to connect two printers together to load balance copy jobs between two printers. It does not double the speed of the print job. The cable is 10 meters in length.

Overall, the Infoprint 2085 and 2105 copier functions are full-featured and easy to use. The combination of a high-speed digital scanner, a top-notch printer, and exceptional function creates an extremely effective tool for any business.

## Media Weights

Infoprint 2085 and 2105 support the following media weights:

- ARDF: 52-128 g/m<sup>2</sup> (16-32lb Bond)
- Trays 1,2,3,6: 52-163 g/m<sup>2</sup> (16lb Bond to 90lb Index), tabbed media not supported
- Trays 4,5: 52-216 g/m<sup>2</sup> (16lb Bond to 110lb Index), including tabbed media

For more information, see the IBM Advanced Function Printer Cut-Sheet Paper Reference for use with IBM Electrophotographic Printers, Publication # G544-3915, available at the following:

[www.ibm.com](http://www.ibm.com)

## Third Party Enabler Features

Infoprint 2085 and 2105 support the following third party software enabler features:

- LCDS/Metacode Channel Software Enablement (feature numbers 6120/6121)
- LCDS/Metacode TCP/IP Software Enablement (feature numbers 6130/6131)
- LCDS/Metacode Enablement Accessories (feature numbers 6140/6141)
- LCDS/Metacode Sun Channel Hardware Enablement (feature numbers 6110/6111)
- LCDS/Metacode ESCON Channel Hardware Enablement (feature numbers 6150/6151)
- LCDS/Metacode TCP/IP Sun Blade (feature numbers 6160/6161)

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## Product Positioning

The Infoprint 2085 and 2105 are multifunctional systems that complement the Infoprint 2000 and Infoprint 70. Each Infoprint 2085 and

2105 can be used as a standalone copier, a networked printer, or both a copier and printer. The multifunctional system can also be used in the datacenter as a high-production printer with multiple data stream support.

With a maximum monthly duty cycle of 800K impressions, the Infoprint 2085 and 2105 can be used in conjunction with the Infoprint 70 or as a backup printer for the Infoprint 2000.

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## Models

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### Model Summary Matrix

| Model | Impressions Per Minute | Average Monthly Usage |
|-------|------------------------|-----------------------|
| 001   | 85                     | 300,000               |

### Maximum

#### Maximum Print Speeds

The maximum rated print speeds using A4/Letter paper long edge feed are as follows (Impressions Per Minute):

- Infoprint 2085:
  - 85 ipm
- Infoprint 2105:
  - 105 ipm

#### Maximum Copy Speeds

The maximum rated copy speeds using A4/Letter paper long edge feed once the image has been scanned and paper fed from tray 1 with no duplex, stapling or punching are as follows (Copies Per Minute):

- Infoprint 2085:
  - 85 ipm
- Infoprint 2105:
  - 105 ipm

#### Customer Setup (CSU)

Not available.

#### Devices Supported

Not available.

#### Model Conversions

Not available.

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## Technical Description

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- |   |   |                               |
|---|---|-------------------------------|
| <a href="#">↓ Physical Specifications</a> | <a href="#">↓ Operating Environment</a> | <a href="#">↓ Limitations</a> |
| <a href="#">↓ Hardware Requirements</a>   | <a href="#">↓ Software Requirements</a> |                               |
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## Technical Specifications

## First Print Out Times (FPOT)

First print-out time is the time from when the printer receives a start printing signal in "READY" state until one sheet of paper is printed and delivered. The printer is in READY state <360 seconds after it is powered on at rated voltage.

The minimum engine first print out time for Infoprint 2085 and 2105 are listed below. These times in seconds represent A4 and letter paper from tray 1 (letter) and tray 2 (A4) with no duplex, stapling or punching.

- Infoprint 2085:

| Media               | Shift Bin |
|---------------------|-----------|
| -----               | -----     |
| Letter LEF (tray 1) | 6.2 sec   |
| A4 LEF (tray 2)     | 6.6 sec   |

**Note:** LEF = Long Edge Feed.

- Infoprint 2105:

| Media               | Shift Bin |
|---------------------|-----------|
| -----               | -----     |
| Letter LEF (tray 1) | 5.8 sec   |
| A4 LEF (tray 2)     | 5.8 sec   |

**Note:** LEF = Long Edge Feed.

## First Copy Times

First copy times is with the copier in "READY" state, originals in the ARDF and copy media in tray 1. This represents the time from the user pressing the "START" button until the first simplex copy is delivered.

- Infoprint 2085:

| Media      | Proof Bin |           | Shift Bin |           |
|------------|-----------|-----------|-----------|-----------|
|            | Face-Up   | Face-Down | Face-Up   | Face-Down |
| -----      | -----     | -----     | -----     | -----     |
| A4 LEF     | 4.1 sec   | 5.4 sec   | 4.4 sec   | 5.6 sec   |
| Letter LEF | 4.1 sec   | 5.4 sec   | 4.4 sec   | 5.7 sec   |

**Note:** LEF = Long Edge Feed.

- Infoprint 2105:

| Media      | Proof Bin |           | Shift Bin |           |
|------------|-----------|-----------|-----------|-----------|
|            | Face-Up   | Face-Down | Face-Up   | Face-Down |
| -----      | -----     | -----     | -----     | -----     |
| A4 LEF     | 3.7 sec   | 4.7 sec   | 3.9 sec   | 5.1 sec   |
| Letter LEF | 3.7 sec   | 4.8 sec   | 3.9 sec   | 5.1 sec   |

**Note:** LEF = Long Edge Feed.

## Copying Capability

Infoprint 2085 and 2105 include a digital copier as standard. The copier is capable of a wide range of processing options including:

- Scan once/print many
- Four position stapling
- Integrated 2, 3 or 4 hole punch
- Large memory for storing jobs
- First copy speed of 3.8 seconds
- 1 - 9,999 quantity of any copy job
- Sort and Collate features
- Stack features, including offset

Infoprint 2085 and 2105 also support these advanced copy capabilities:

- Cover/Slip Sheet:
  - Front Cover
  - Back Cover
  - Designate
  - Chapters
  - Slip Sheet
  - Separation
  
- Edit Image:
  - Margin Adjustment
  - Border Erase
  - Center Erase
  - Delete Area
  - 3 Side Full Bleed
  - Image Repeat
  - Double Copies
  - Centering
  
- Duplex:
  - 1 sided -> 2 sided
  - 2 sided -> 2 sided
  
- Combine:
  - 1 sided 2, 4, 8 or 16 pages -> combine 1 side
  - 1 sided 4, 8 or 16 pages -> combine 2 side
  - 2 sided 1, 2 or 4 pages -> combine 1 side
  - 2 sided 2, 4 or 8 pages -> combine 2 side
  
- Series:
  - Book -> 1 sided
  - 2 sided -> 1 sided
  
- Book:
  - Book -> 2 sided
  - Multi -> 2 sided
  - Booklet
  - Magazine
  
- Reduce/Enlarge:
  - Preset Reduce/Enlarge (preset ratios of 25%, 50%, 65%, 73%, 78%, 85%, 93%, 100%, 121%, 129%, 155%, 200%, 400%)
  
  - Zoom of 25% - 400% in 1% increments



- Size Magnification
- Directional Magnification
- Directional Size Magnification
- Stamp:
  - Background numbering
  - Preset stamp
  - User stamp
  - Date stamp
  - Page numbering
- Output:
  - Shift Tray off in sort/stack
  - Separation
  - Copy Face Up

The document editor includes the following features:

- Change file names
- Merge documents
- Insert files
- Delete pages
- Delete saved documents

Possible uses of the document server and editor include the following:

- On demand printing:  
Save documents in the document server. When the documents are needed, print them anytime.
- Scanned file printing:  
To combine several originals that are different such as damaged originals, photos, or one and two sided originals, scan them into the document server using the best settings for each original. Then combine them into one file using the document editor.

## Media Supported for Copying

The following paper sizes are supported in the ARDF:

| Paper Size                  | ARDF<br>NA & AP | ARDF<br>Eur. | ARDF<br>Japan |
|-----------------------------|-----------------|--------------|---------------|
| A4 (210x297 mm) SEF         | Y               | Y            | Y             |
| A4 (210x297 mm) LEF         | Y               | Y            | Y             |
| Letter (8.5"x11") SEF       | Y               | Y            | Y             |
| Letter (8.5"x11") LEF       | Y               | Y            | Y             |
| A5 (148x210 mm) SEF         | N               | Y            | Y             |
| A5 (148x210 mm) LEF         | N               | Y            | Y             |
| B5-JIS (182x257 mm) LEF     | N               | Y            | Y             |
| B5-JIS (182x257 mm) SEF     | N               | Y            | Y             |
| B4 (257x364 mm) SEF         | N               | Y            | Y             |
| A3 (297x420 mm) SEF         | N               | Y            | Y             |
| Ledger (11"x17") SEF        | Y               | Y            | Y             |
| Legal (8.5"x14") SEF        | Y               | N            | N             |
| Statement (5.5"x8.5") SEF   | Y               | N            | N             |
| Statement (5.5"x8.5") LEF   | Y               | N            | N             |
| Executive (7.25"x10.5") SEF | N               | N            | N             |
| Folio (8.5"x13") SEF        | N               | Y            | Y             |

|                            |   |   |   |
|----------------------------|---|---|---|
| 10 x 14 in. (10"x14") SEF  | Y | N | N |
| 11 x 15 in. (11"x15") SEF  | Y | N | Y |
| 8 x 10 in. (8"x10") SEF    | Y | N | N |
| 8 x 10.5 in. (8"x10.5")SEF | N | N | N |
| 8 x 13 in. (8"x13") SEF    | Y | N | N |
| 8.25 x 13 in(8.25"x13")SEF | N | N | N |
| Custom                     | Y | Y | Y |

|                |                               |
|----------------|-------------------------------|
| Original Media | ARDF Tray                     |
| -----          | -----                         |
| Paper          | 16-32 lb bond<br>(52-128 gsm) |
| Card Stock     | 16-32 lb bond<br>(52-128 gsm) |

**Printing Capability**

**Input Media Capacities**

Maximum capacities (sheets) based on 80 gsm, 20 lb bond are listed in the following table:

|           | Tray 1  | Tray 2 | Tray 3 | Tray 4 | Tray 5 | Tray 6 | Total Capacity |
|-----------|---------|--------|--------|--------|--------|--------|----------------|
| -----     | -----   | -----  | -----  | -----  | -----  | -----  | -----          |
| Standard  | 2000(1) | 500    | 500    |        |        |        | 3000           |
| 4.55K HCF | 2000(1) | 500    | 500    | 1000   | 1000   | 2550   | 7550           |
| Installed |         |        |        |        |        |        |                |

**Note:** (1) Tray 1 is a tandem (side-by-side) tray with 1000 x 2-sheets.

**Output Media Capacities**

Maximum capacities (sheets) based on 80 gsm, 20 lb bond are listed in the following table:

| Media                 | Proof Bin | Shift Bin (w/o punch) | Shift Bin (w punch) | Shift Bin (w staple) |
|-----------------------|-----------|-----------------------|---------------------|----------------------|
| -----                 | -----     | -----                 | -----               | -----                |
| A4/Letter or smaller  | 500       | 3000                  | 2500                | 2500                 |
| Larger than A4/Letter | 250       | 1500                  | 1500                | 1500                 |

**Media sizes supported by the input trays**

**North America and Asia Pacific (except for Japan)**

| Paper Size              | Tray 1 | Tray 2 | Tray 3 | Tray 4 | Tray 5 | Tray 6 |
|-------------------------|--------|--------|--------|--------|--------|--------|
| -----                   | -----  | -----  | -----  | -----  | -----  | -----  |
| A4 (210x297 mm) SEF     | Y(1)   | Y(2)   | Y(2)   | N      | N      | N      |
| A4 (210x297 mm) LEF     | Y(3)   | Y(2)   | Y(2)   | Y      | Y      | Y      |
| Letter (8.5"x11") SEF   | Y(1)   | Y      | Y      | N      | N      | N      |
| Letter (8.5"x11") LEF   | Y      | Y      | Y      | Y      | Y      | Y      |
| A5 (148x210 mm) SEF     | N      | Y(2)   | Y(2)   | Y      | Y      | Y      |
| A5 (148x210 mm) LEF     | N      | Y(2)   | Y(2)   | Y      | Y      | Y      |
| B5-JIS (182x257 mm) LEF | N      | Y(2)   | Y(2)   | Y      | Y      | Y      |

|                            |      |      |      |      |      |      |
|----------------------------|------|------|------|------|------|------|
| B5-JIS (182x257 mm) SEF    | N    | Y(2) | Y(2) | N    | N    | N    |
| B4 (257x364 mm) SEF        | Y(1) | Y(2) | Y(2) | N    | N    | N    |
| A3 (297x420 mm) SEF        | Y(1) | Y(2) | Y(2) | N    | N    | N    |
| Ledger (11"x17") SEF       | Y(1) | Y    | Y    | N    | N    | N    |
| Legal (8.5"x14") SEF       | Y(1) | Y    | Y    | N    | N    | N    |
| Statement (5.5"x8.5") SEF  | N    | Y    | Y    | Y    | Y    | Y    |
| Statement (5.5"x8.5") LEF  | N    | Y    | Y    | Y    | Y    | Y    |
| Executive (7.25"x10.5")SEF | N    | Y(2) | Y(2) | N    | N    | N    |
| Folio (8.5"x13") SEF       | N    | Y    | Y    | N    | N    | N    |
| 10 x 14 in. (10"x14") SEF  | N    | Y(2) | Y(2) | N    | N    | N    |
| 11 x 15 in. (11"x15") SEF  | N    | Y    | Y    | N    | N    | N    |
| 8 x 10 in. (8"x10") SEF    | N    | Y    | Y    | N    | N    | N    |
| 8 x 10.5 in. (8"x10.5")SEF | N    | Y    | Y    | N    | N    | N    |
| 8 x 13 in. (8"x13") SEF    | N    | Y    | Y    | N    | N    | N    |
| 8.25 x 13 in(8.25"x13")SEF | N    | Y(2) | Y(2) | N    | N    | N    |
| A4 Tab (210x297 mm) SEF    | N    | N    | N    | Y    | Y    | N    |
| Letter Tab (8.5"x11") SEF  | N    | N    | N    | Y    | Y    | N    |
| Custom (4)                 | N    | Y    | Y    | N    | N    | N    |
| Transparencies             | N    | Y(5) | Y(5) | Y(6) | Y(6) | Y(6) |

**Note:** (1) Supported with optional A3/11" x 17" tray kit only.

**Note:** (2) Media supported in tray but dividers may move.

**Note:** (3) Requires CE setting the tray to support this paper.

**Note:** (4) Custom:

- min. size = 148 mm x 210 mm (SEF)
- max. size = 297 mm x 432 mm (SEF)
- Staple and punch not supported
- No provision for size information in messages

**Note:** (5) SEF and LEF supported.

**Note:** (6) LEF supported only.

## Europe

| Paper Size                 | Tray 1 | Tray 2 | Tray 3 | Tray 4 | Tray 5 | Tray 6 |
|----------------------------|--------|--------|--------|--------|--------|--------|
| A4 (210x297 mm) SEF        | Y(1)   | Y      | Y      | N      | N      | N      |
| A4 (210x297 mm) LEF        | Y      | Y      | Y      | Y      | Y      | Y      |
| Letter (8.5"x11") SEF      | Y(1)   | Y      | Y      | N      | N      | N      |
| Letter (8.5"x11") LEF      | Y(3)   | Y      | Y      | Y      | Y      | Y      |
| A5 (148x210 mm) SEF        | N      | Y      | Y      | Y      | Y      | Y      |
| A5 (148x210 mm) LEF        | N      | Y      | Y      | Y      | Y      | Y      |
| B5-JIS (182x257 mm) LEF    | N      | Y      | Y      | Y      | Y      | Y      |
| B5-JIS (182x257 mm) SEF    | N      | Y      | Y      | N      | N      | N      |
| B4 (257x364 mm) SEF        | Y(1)   | Y      | Y      | N      | N      | N      |
| A3 (297x420 mm) SEF        | Y(1)   | Y      | Y      | N      | N      | N      |
| Ledger (11"x17") SEF       | Y(1)   | Y      | Y      | N      | N      | N      |
| Legal (8.5"x14") SEF       | Y(1)   | Y      | Y      | N      | N      | N      |
| Statement (5.5"x8.5") SEF  | N      | Y      | Y      | Y      | Y      | Y      |
| Statement (5.5"x8.5") LEF  | N      | Y      | Y      | Y      | Y      | Y      |
| Executive (7.25"x10.5")SEF | N      | Y(2)   | Y(2)   | N      | N      | N      |
| Folio (8.5"x13") SEF       | N      | Y      | Y      | N      | N      | N      |
| 10 x 14 in. (10"x14") SEF  | N      | Y(2)   | Y(2)   | N      | N      | N      |

|                            |   |      |      |      |      |      |
|----------------------------|---|------|------|------|------|------|
| 11 x 15 in. (11"x15") SEF  | N | Y    | Y    | N    | N    | N    |
| 8 x 10 in. (8"x10") SEF    | N | Y(2) | Y(2) | N    | N    | N    |
| 8 x 10.5 in. (8"x10.5")SEF | N | Y(2) | Y(2) | N    | N    | N    |
| 8 x 13 in. (8"x13") SEF    | N | Y(2) | Y(2) | N    | N    | N    |
| 8.25 x 13 in(8.25"x13")SEF | N | Y(2) | Y(2) | N    | N    | N    |
| A4 Tab (210x297 mm) SEF    | N | N    | N    | Y    | Y    | N    |
| Letter Tab (8.5"x11") SEF  | N | N    | N    | Y    | Y    | N    |
| Custom (4)                 | N | Y    | Y    | N    | N    | N    |
| Transparencies             | N | Y(5) | Y(5) | Y(6) | Y(6) | Y(6) |

**Note:** (1) Supported with optional A3/11" x 17" tray kit only.

**Note:** (2) Media supported in tray but dividers may move.

**Note:** (3) Requires CE setting the tray to support this paper.

**Note:** (4) Custom:

- min. size = 148 mm x 210 mm (SEF)
- max. size = 297 mm x 432 mm (SEF)
- Staple and punch not supported
- No provision for size information in messages

**Note:** (5) SEF and LEF supported.

**Note:** (6) LEF supported only.

## Japan

| Paper Size                 | Tray 1 | Tray 2 | Tray 3 | Tray 4 | Tray 5 | Tray 6 |
|----------------------------|--------|--------|--------|--------|--------|--------|
| A4 (210x297 mm) SEF        | Y(1)   | Y      | Y      | N      | N      | N      |
| A4 (210x297 mm) LEF        | Y      | Y      | Y      | Y      | Y      | Y      |
| Letter (8.5"x11") SEF      | Y(1)   | Y      | Y      | N      | N      | N      |
| Letter (8.5"x11") LEF      | Y(3)   | Y      | Y      | Y      | Y      | Y      |
| A5 (148x210 mm) SEF        | N      | Y      | Y      | Y      | Y      | Y      |
| A5 (148x210 mm) LEF        | N      | Y      | Y      | Y      | Y      | Y      |
| B5-JIS (182x257 mm) LEF    | N      | Y      | Y      | Y      | Y      | Y      |
| B5-JIS (182x257 mm) SEF    | N      | Y      | Y      | N      | N      | N      |
| B4 (257x364 mm) SEF        | Y(1)   | Y      | Y      | N      | N      | N      |
| A3 (297x420 mm) SEF        | Y(1)   | Y      | Y      | N      | N      | N      |
| Ledger (11"x17") SEF       | Y(1)   | Y      | Y      | N      | N      | N      |
| Legal (8.5"x14") SEF       | Y(1)   | Y      | Y      | N      | N      | N      |
| Statement (5.5"x8.5") SEF  | N      | Y      | Y      | Y      | Y      | Y      |
| Statement (5.5"x8.5") LEF  | N      | Y      | Y      | Y      | Y      | Y      |
| Executive (7.25"x10.5")SEF | N      | Y(2)   | Y(2)   | N      | N      | N      |
| Folio (8.5"x13") SEF       | N      | Y      | Y      | N      | N      | N      |
| 10 x 14 in. (10"x14") SEF  | N      | Y(2)   | Y(2)   | N      | N      | N      |
| 11 x 15 in. (11"x15") SEF  | N      | Y      | Y      | N      | N      | N      |
| 8 x 10 in. (8"x10") SEF    | N      | Y(2)   | Y(2)   | N      | N      | N      |
| 8 x 10.5 in. (8"x10.5")SEF | N      | Y(2)   | Y(2)   | N      | N      | N      |
| 8 x 13 in. (8"x13") SEF    | N      | Y(2)   | Y(2)   | N      | N      | N      |
| 8.25 x 13 in(8.25"x13")SEF | N      | Y(2)   | Y(2)   | N      | N      | N      |
| A4 Tab (210x297 mm) SEF    | N      | N      | N      | Y      | Y      | N      |
| Letter Tab (8.5"x11") SEF  | N      | N      | N      | Y      | Y      | N      |
| 170 x 210 mm LEF           | N      | Y      | Y      | N      | N      | N      |
| 182 x 210 mm LEF           | N      | Y      | Y      | N      | N      | N      |
| 210 x 340 mm LEF           | N      | Y(4)   | Y(4)   | N      | N      | N      |

|                |   |      |      |      |      |      |
|----------------|---|------|------|------|------|------|
| Custom (5)     | N | Y    | Y    | N    | N    | N    |
| Transparencies | N | Y(5) | Y(5) | Y(6) | Y(6) | Y(6) |

**Note:** (1) Supported with optional A3/11" x 17" tray kit only.

**Note:** (2) Media supported in tray but dividers may move.

**Note:** (3) Requires CE setting the tray to support this paper.

**Note:** (4) Supported for copying only and not printing.

**Note:** (5) Custom:

- min. size = 148 mm x 210 mm (SEF)
- max. size = 297 mm x 432 mm (SEF)
- Staple and punch not supported
- No provision for size information in messages

## Finishing Supported

| Paper Size                  | Duplex | Staple(1) | Holes Punched(2) |
|-----------------------------|--------|-----------|------------------|
| -----                       | -----  | -----     | -----            |
| A4 (210x297 mm) SEF         | Y      | Y         | 2                |
| A4 (210x297 mm) LEF         | Y      | Y         | 2,3,4            |
| Letter (8.5"x11") SEF       | Y      | Y         | 2                |
| Letter (8.5"x11") LEF       | Y      | Y         | 2,3,4            |
| A5 (148x210 mm) SEF         | Y      | N         | 2                |
| A5 (148x210 mm) LEF         | Y      | N         | 2                |
| B5-JIS (182x257 mm) LEF     | Y      | Y         | 2,3              |
| B5-JIS (182x257 mm) SEF     | Y      | Y         | 2                |
| B4 (257x364 mm) SEF         | Y      | Y         | 2,3              |
| A3 (297x420 mm) SEF         | Y      | Y         | 2,3,4            |
| Ledger (11"x17") SEF        | Y      | Y         | 2,3,4            |
| Legal (8.5"x14") SEF        | Y      | Y         | 2                |
| Statement (5.5"x8.5") SEF   | Y      | N         |                  |
| Statement (5.5"x8.5") LEF   | Y      | N         | 2                |
| Executive (7.25"x10.5")SEF  | N      | Y         |                  |
| Folio (8.5"x13") SEF        | N      | Y         | 2                |
| 10 x 14 in. (10"x14") SEF   | Y      | Y         | 2,3              |
| 11 x 15 in. (11"x15") SEF   | N      | N         | 2,3              |
| 8 x 10 in. (8"x10") SEF     | Y      | Y         | 2                |
| 8 x 10.5 in. (8"x10.5")SEF  | Y      | Y         | 2                |
| 8 x 13 in. (8"x13") SEF     | Y      | Y         | 2                |
| 8.25 x 13 in(8.25"x13")SEF  | N      | Y         | 2                |
| 170 x 210 mm (170x210mm)LEF | N      | Y         | 2                |
| 182 x 210 mm (182x210mm)LEF | N      | Y         | 2                |
| 210 x 340 mm (210x340mm)LEF | N      | Y         |                  |
| Custom (3)                  | Y      | N         |                  |
| Transparencies              | N      | N         |                  |

Notes: (1) When stapling all sheets must be the same size

(2) Punch designations refer to 2, 3, or 4 hole punch capability

(3) Custom: min. size = 148 mm x 210 mm (SEF)

max. size = 297 mm x 432 mm (SEF)

Note regarding media support:

**Note:** Refer to IBM Document G544-3915 for paper specifications. Some print media, although they may conform to size and weight specifications, may still not perform to your expectations. Print quality, jam rates, fuser life and output stacking can be affected by the printing environment (temperature and humidity) and characteristics of the paper (structure, moisture content, smoothness and thickness); IBM STRONGLY RECOMMENDS YOU TEST ADEQUATE AMOUNTS OF YOUR PRINT MEDIA USING YOUR PRINTING APPLICATION TO ENSURE THAT YOUR PERFORMANCE EXPECTATIONS ARE MET PRIOR TO PURCHASING THIS PRINTER OR LARGE QUANTITIES OF THE MEDIA OR RUNNING LARGE PRINT VOLUMES.

### Media Sizes Supported by the Output Trays

Capacities based on 80 gsm, 20 lb bond.

All paper sizes are supported for duplex and jogging:

| Paper Size                  | Proof<br>Bin | Shift<br>Bin |
|-----------------------------|--------------|--------------|
| A4 (210x297 mm) SEF         | Y            | Y            |
| A4 (210x297 mm) LEF         | Y            | Y            |
| Letter (8.5"x11") SEF       | Y            | Y            |
| Letter (8.5"x11") LEF       | Y            | Y            |
| A5 (148x210 mm) SEF         | Y            | Y            |
| A5 (148x210 mm) LEF         | Y            | Y            |
| B5-JIS (182x257 mm) LEF     | Y            | Y            |
| B5-JIS (182x257 mm) SEF     | Y            | Y            |
| B4 (257x364 mm) SEF         | Y            | Y            |
| A3 (297x420 mm) SEF         | Y            | Y            |
| Ledger (11"x17") SEF        | Y            | Y            |
| Legal (8.5"x14") SEF        | Y            | Y            |
| Statement (5.5"x8.5") SEF   | Y            | Y            |
| Statement (5.5"x8.5") LEF   | Y            | Y            |
| Executive (7.25"x10.5")SEF  | Y            | Y            |
| Folio (8.5"x13") SEF        | Y            | Y            |
| 10 x 14 in. (10"x14") SEF   | Y            | Y            |
| 11 x 15 in. (11"x15") SEF   | Y            | Y            |
| 8 x 10 in. (8"x10") SEF     | Y            | Y            |
| 8 x 10.5 in. (8"x10.5")SEF  | Y            | Y            |
| 8 x 13 in. (8"x13") SEF     | Y            | Y            |
| 8.25 x 13 in(8.25"x13")SEF  | Y            | Y            |
| 170 x 210 mm (170x210mm)LEF | Y            | Y            |
| 182 x 210 mm (182x210mm)LEF | Y            | Y            |
| 210 x 340 mm (210x340mm)LEF | Y            | Y            |
| Custom                      | Y            | Y            |
| Card Stock                  | Y            | Y            |
| Transparencies              | Y            | Y            |

### Media Supported

| Print Media | Trays 1,2,3  | Trays 4,5   | Tray 6   |
|-------------|--|---|--|
| Paper       | 52-163 gsm<br>(16-42 lb Bond)<br>(40-60 lb Cover)<br>(90 lb Index-no<br>tab) | 52-216 gsm<br>(16-52 lb Bond)<br>(40-80 lb Cover)<br>(90-110 lb Index<br>-no tab) | 52-163 gsm<br>(16-42 lb Bond)<br>(40-60 lb Cover)<br>(90 lb Index-no<br>tab) |

|            |               |   |               |
|------------|---------------|---|---------------|
| Card Stock | Not Supported | 52-216 gsm<br>(16-52 lb Bond)<br>(40-80 lb Cover)<br>(90-110 lb Index<br>-no tab) | Not Supported |
| Tab Stock  | Not Supported | 52-216 gsm<br>(16-52 lb Bond)<br>(40-80 lb Cover)<br>(90-110 lb Index<br>-no tab) | Not Supported |
| Labels (1) | Not Supported | 52-216 gsm<br>(16-52 lb Bond)   | Not Supported |

**Note:** (1) Labels supported in tray 5 only.

Infoprint 2085 and 2105 supports the following third party software enablers:

| Third Party Company                 | Products Supported  |
|-------------------------------------|---|
| Rochester Software Associates (RSA) | M.I.S. Print, WebCRD, DTPrint   |
| Objectif Lune                       | PlanetPress Design, PlanetPress Watch, PlanetPress Search, PlanetPress Fax, PlanetPress Image |
| Solimar                             | Print Director/2000, SOLSearcher, XIMAGE, Tukanda, iConvert, aConvert                         |
| Atlas Software                      | PrintShop Mail  |
| AHT                                 | Squadron, Fiber Gateway   |
| XLPrint                             | Paris, Paris Designer   |
| T/R Systems                         | MicroPress, Digital StoreFront, M@estro, MicroImager  |

### Safety Agency Approvals

- UL
- CSA (by c-UL)
- CE Mark (IEC 950)
- CS Mark (Germany)
- c-Tick (Australia)
- NOM (Mexico)
- VCCI Class A

### Other Certifications

- FCC part 15 Class A
- CE Mark:
  - EN55022 Class A
  - EN55024 Class A

- Energy Star
- SAP Barcode
- EuroReady
- OCR-A, OCR-B
- Microsoft Windows logo (available on the web at 06/28, 2002)
- Adobe PostScript (PCL/PostScript feature)
- Novell Netware (PCL/PostScript feature)

**Note:** The Energy Star emblem does not represent EPA endorsement of any product or service.

## Software

### Attachment/Operating System Support

| Physical                | Protocol                 | Operating System/Application(2)   |
|-------------------------|--------------------------|---|
| Ethernet/<br>Token-Ring | IPX/SPX                  | Novell NetWare 3.12, 4.11, 4.2, 5.0, 3.12J,<br>4.11J(3)   |
|                         | TCP/IP                   | Novell NetWare 5.0, 5.1, 6.0(3)<br>Windows 95/98/Me/XP, Windows NT 4.0/2000(3)<br>AIX 4.3x and higher(3)<br>OS/400 4.5, 5.1<br>Sun Solaris 2.5 and higher(3)<br>HP-UX 10, HP-UX 11(3)<br>SCO-UNIX 3, SCO-UNIX 5(3)<br>Infoprint Manager for AIX (specific release<br>support information will be provided May 2002)<br>Infoprint Manager for Windows (specific release<br>support information will be provided May 2002)<br>PSF for OS/390 V3.1.0 or later<br>PSF for VM V2.1<br>PSF for VSE V2.2<br>PSF/400 V5R1 and above<br>Linux(3) |
|                         | NETBIOS/<br>NETBEUI      | Windows 95/98/Me/XP, Windows NT 4.0/2000(3)   |
|                         | EtherTalk/<br>TokenTalk* | Apple System 8.0 and higher(3)<br>KanjiTalk 8.0 and higher(3)   |

**Note:** (2) Some of the versions listed in this table may be withdrawn and no longer maintained.

**Note:** (3) This operating system requires PCL/PostScript feature be installed.

## IBM AFP/IPDS

Infoprint 2085 and 2105 supports these AFP/IPDS functional enhancements:

- Simulation of color using grey scales



- AFP/IPDS dialog management (MID)
- Enhanced N-Up and power positioning
- Finishing support for hole punching
- Nested staple and punch finishing operations
- Define Forms (name, size, duplex, orientation):
  - Page Orientation (edge/side sensitivity)
  - Adjust Print (simplex/duplex/(normal/tumble))
- Media selection by object ID (supported by PSF Version 3 for OS/390 and PPFA)
- Dutch KIX postal bar code
- Australia Post bar code
- Japan Postal bar code support.
- Two-dimensional bar codes:
  - Maxicode
  - PDF417
- Printer identification by name.
- Outline font, 240 pel raster fonts and font resource capture (hard disk).
- Resolution independent raster font support.
- Double Byte Character Set (DBCS) font support (resident and download).
- Partial Arc drawing order support.
- Box drawing order support.

In addition to the AFP/IPDS enhancements, a Hard Disk Drive (HDD) is provided with preloaded Double Byte Character Set (DBCS) Outline Font Resources. This is important for applications that use double byte characters.

### **Managed IPDS Dialog (MID)**

When some printers connected to an IPDS host end a session, the job resource containing information such as page segment and overlays are discarded. If these resources are required by subsequent IPDS jobs from the same host system, then they must be downloaded again. When a new session is established using the MID function, the host system can release the printer to print other jobs, such as PCL or PostScript without immediately discarding the IPDS resources. The IPDS dialog may be resumed at a later time.

The IPDS resources are only discarded if a new IPDS connection and dialog is established with a different host system. If the IPDS resources are still available when the original host dialog is resumed, then they do not have to be retransmitted. This can save a significant amount of time. Host system support for MID is already available with MVS, iSeries and AIX systems.

### **AFP/IPDS SBCS Resident Font Support**

Printer resident fonts are supported using outline font technology. Under native mode, all printer-resident AFP/IPDS fonts are accessible to PSF.

- IBM 4028 Compatibility AFP/IPDS Resident Font Set (supported using outline font technology).

| Typeface               | FGID | Typeface                  | FGID |
|------------------------|------|---------------------------|------|
| -----                  | ---- | -----                     | ---- |
| APL                    | 76   | Prestige Pica 10 Pitch    | 12   |
| Boldface               | 159  | Prestige Pica Bold        | 60   |
| Courier 5 Pitch        | 244  | Prestige Elite Bold 12    | 111  |
| Courier 10 Pitch       | 11   | Prestige Elite Italic 12  | 112  |
| Courier 12 Pitch       | 85   | Times Roman Typo 6 pt     | 5687 |
| Courier 15 Pitch       | 223  | Times Roman Typo 8 pt     | 5687 |
| Courier 17.1 Pitch     | 252  | Times Roman Typo 10 pt    | 5687 |
| Courier 17.1 Pitch     | 254  | Times Roman Typo 12 pt    | 5687 |
| Courier Bold 10 Pitch  | 46   | Times Roman Bold Typo 10  | 5707 |
| Courier Bold 12 Pitch  | 108  | Times Roman Bold Typo 12  | 5707 |
| Courier Italic 10      | 18   | Times Roman Bold Typo 14  | 5707 |
| Courier Italic 12      | 92   | Times Roman Bold Typo 18  | 5707 |
| Gothic Text 13.3 Pitch | 203  | Times Roman Bold Typo 24  | 5707 |
| Gothic Text 20 Pitch   | 283  | Times Roman Ital. Typo 10 | 5815 |
| Gothic Text 26.7 Pitch | 290  | Times Roman Ital. Typo 12 | 5815 |
| Letter Gothic 20       | 281  | Times Roman Bold Italic   | 5835 |
| Prestige 12 Pitch      | 86   | Typo 12 pt                |      |
| Prestige (PSM)         | 164  |                           |      |
| Prestige Roman Bold    | 701  |                           |      |
| Prestige 15 Pitch      | 221  |                           |      |
| Prestige 17.1 Pitch    | 256  |                           |      |

Note on 4028 Font Compatibility:

**Note:** (1) "Gothic Text" added to "391X" and "311X" printers.

- IBM Core Interchange Resident Scalable Font Set:

| Typeface                                    | FGID |
|---|------|
| -----                                       | ---- |
| Latin 1/2/3/4/5 with Euro (All GCSGID 1355) |      |
| Times New Roman** Medium                    | 2308 |
| Times New Roman Bold                        | 2309 |
| Times New Roman Italic Medium               | 2310 |
| Times New Roman Italic Bold                 | 2311 |
| Helvetica** Roman Medium                    | 2304 |
| Helvetica Roman Bold                        | 2305 |
| Helvetica Italic Medium                     | 2306 |
| Helvetica Italic Bold                       | 2307 |
| Courier Roman Medium                        | 416  |
| Courier Roman Bold                          | 420  |
| Courier Italic Medium                       | 424  |
| Courier Italic Bold                         | 428  |
| Symbols (GCSGID - 1275)                     |      |
| Times New Roman Medium                      | 2308 |
| Times New Roman Bold                        | 2309 |
| Helvetica Roman Medium                      | 2304 |
| Helvetica Roman Bold                        | 2305 |
| Courier Roman Medium                        | 416  |
| Courier Roman Bold                          | 420  |
| Cyrillic Greek (GCSGID - 1300)              |      |
| Times New Roman Medium                      | 2308 |
| Times New Roman Bold                        | 2309 |
| Times New Roman Italic Medium               | 2310 |
| Times New Roman Italic Bold                 | 2311 |
| Helvetica Roman Medium                      | 2304 |

|  |      |
|--|------|
| Helvetica Roman Bold                   | 2305 |
| Helvetica Italic Medium                | 2306 |
| Helvetica Italic Bold                  | 2307 |
| Courier Roman Medium                   | 416  |
| Courier Roman Bold                     | 420  |
| Courier Italic Medium                  | 424  |
| Courier Italic Bold                    | 428  |
| Arabic (GCSGID - 1264)                 |      |
| ITC Boutros Setting Medium             | 2308 |
| ITC Boutros Setting Bold               | 2309 |
| ITC Boutros Setting Italic Medium      | 2310 |
| ITC Boutros Setting Italic Bold        | 2311 |
| ITC Boutros Modern Rokaa Medium        | 2304 |
| ITC Boutros Modern Rokaa Bold          | 2305 |
| ITC Boutros Modern Rokaa Italic Medium | 2306 |
| ITC Boutros Modern Rokaa Italic Bold   | 2307 |
| Boutros Typing Medium                  | 416  |
| Boutros Typing Bold                    | 420  |
| Boutros Typing Italic Medium           | 424  |
| Boutros Typing Italic Bold             | 428  |
| Hebrew (GCSGID - 1265)                 |      |
| Narkissim Medium                       | 2308 |
| Narkissim Bold                         | 2309 |
| Narkissim Italic Medium                | 2310 |
| Narkissim Italic Bold                  | 2311 |
| Narkiss Tam Medium                     | 2304 |
| Narkiss Tam Bold                       | 2305 |
| Narkiss Tam Italic Medium              | 2306 |
| Narkiss Tam Italic Bold                | 2307 |
| Shalom Medium                          | 416  |
| Shalom Bold                            | 420  |
| Shalom Italic Medium                   | 424  |
| Shalom Italic Bold                     | 428  |

- IBM Coordinated Scalable Font Set

| Typeface           | FGID | GCSGID |  |
|--------------------|------|--------|--|
| -----              | ---- | -----  |  |
| APL                | 307  | 1304   |  |
| APL Bold           | 322  | 1304   |  |
| Boldface           | 224  | 2039   |  |
| Gothic Text        | 304  | 2039   |  |
| Letter Gothic      | 400  | 2039   |  |
| Letter Gothic Bold | 404  | 2039   |  |
| OCR A              | 305  | 968    | This font is supported for<br>OCR readability applications |
| OCR B              | 306  | 969    | This font is supported for<br>OCR readability applications |
| Prestige           | 432  | 2039   |  |
| Prestige Bold      | 318  | 2039   |  |
| Prestige Italic    | 319  | 2039   |  |
| Katakana Gothic    | 304  | 1306   |  |

- AFP/IPDS Barcode Printing

To support the BCOCA tower for printing of bar codes, the OCR-A and OCR-B fonts and their corresponding codes pages (892 and 893) must be resident in the printer. These are supported as shown in the "4028 Compatibility AFP/IPDS Resident Font Set" table. Code page 1303 is also resident to be used for 128 bar codes.

## AFP/IPDS DBCS Resident Raster Font Support

The following AFP font products are available in resident form as a feature on Infoprint 2085 and 2105. These fonts provide 240 pel capability for Japanese, Korean, Simplified Chinese, Traditional Chinese and Thai languages.

- AFP Japanese Object Font V2R1.1 for MVS and VSE (5771-AGB)
- AFP Japanese Object Font V2R1.0 for MVS and VSE (5771-AGB) **Except for Section 68**
- AFP Korean Object Font V1R1.1 and V1R1.0 for MVS and VSE (5771-AFW)
- AFP Traditional Chinese Object Font V1R1.2 and V1R1.1 for MVS and VSE (5771-AFZ)
- AFP Simplified Chinese Object Font V1R1.1 and V1R1.0 for MVS and VSE (5771-AEK)
- AFP Thai Object Font V1R1.1 and V1R1.0 for MVS and VSE (5771-AEN)

### These fonts are only available in raster form at 240 pel

**Note:** Though AFP Japanese Font 5771-AGB consists of 23 sizes of DBCS fonts and 20 sizes of SBCS fonts, the SBCS fonts are NOT available in this resident raster font set.

## EBCDIC Attachment Language Support

The language and associated code page support below is based on the current SAA Core Interchange Resident Code Page Support and 4028 Compatibility Resident Code Page Set. Only EBCDIC code pages are listed.

| Language               | Code Page     | Character Set |
|------------------------|---------------|---------------|
| -----                  | -----         | -----         |
| APL (4028)             | CP310         | 963           |
| APL (Exp. Core)        | CP293         | 380           |
| Arabic Bilingual       | CP420         | 235           |
| - GML List Symbols     | CP1039        | 1258          |
| Austrian/German        | CP273 (1141@) | 697 (695@)    |
| - Publishing           | CP382         | 1145          |
| - Alternate (4028)     | CP286         | 317           |
| Belgian                | CP274         | 697           |
| - Publishing           | CP383         | 1145          |
| Brazilian              | CP275         | 697           |
| Brazilian Portuguese   | CP037 (1140@) | 697           |
| - Publishing           | CP384         | 1145          |
| Canadian French (4028) | CP260         | 341           |
| - Publishing           | CP385         | 1145          |
| - DP94 (4028)          | CP276         | 277           |
| Cyrillic/Multilingual  | CP880         | 960           |
| - Primary              | CP1025        | 1150          |
| - GML List Symbols     | CP1039        | 1258          |
| Danish/Norwegian       | CP277 (1142@) | 697 (695@)    |
| - Publishing           | CP386         | 1145          |
| - Alternate (4028)     | CP287         | 321           |
| Dutch                  | CP037         | 697           |
| English (UK)           | CP285 (1146@) | 697 (695@)    |
| - Publishing           | CP394         | 1145          |
| Finnish/Swedish        | CP278 (1143@) | 697 (695@)    |
| - Publishing           | CP387         | 1145          |
| - Alternate (4028)     | CP288         | 325           |
| French                 | CP297 (1147@) | 697 (695@)    |
| - Publishing           | CP388         | 1145          |

|                       |               |            |
|-----------------------|---------------|------------|
| Greek 183             | CP423         | 218        |
| - Primary             | CP875         | 925        |
| Hebrew (Israel)       | CP424         | 941        |
| - Publishing          | CP1028        | 1199       |
| - GML List Symbols    | CP1039        | 1258       |
| - Char. Set A         | CP803         | 1147       |
| Iceland               | CP871 (1149@) | 697 (695@) |
| Italian               | CP280 (1144@) | 697 (695@) |
| - Publishing          | CP389         | 1145       |
| Japanese (English)    | CP281         | 697        |
| - Publishing          | CP390         | 1145       |
| - Katakana            | CP290         | 1172       |
| - Katakana Extended   | CP1027        | 1172       |
| Latin 2 Multilingual  | CP870         | 959        |
| Latin 3 Multilingual  | CP905         | 1286       |
| Latin 4 EBCDIC        | CP1069        | 1256       |
| Latin 5               | CP1026        | 1152       |
| Latin DCF             |               |            |
| - Rel. 2 Compat.      | CP1002        | 1132       |
| - US Text Subset      | CP1003        | 1133       |
| - Numeric Spacing     | CP1068        | 1259       |
| - GML List Symbols    | CP1039        | 1258       |
| Multilingual          | CP500 (1148@) | 697 (695@) |
| - Publishing          | CP361         | 1145       |
| OCR-A                 | CP892         | 968        |
| OCR-B                 | CP893         | 969        |
| Portuguese            | CP282         | 697        |
| - Alternate           | CP037         | 697        |
| - Publishing          | CP391         | 1145       |
| Spanish               | CP284 (1145@) | 697 (695@) |
| - Castillian          | CP392         | 1145       |
| - Latin America       | CP393         | 1145       |
| Symbols, Set 7        | CP259         | 340        |
| - Modified Set 7      | CP1091        | 1191       |
| - Set 8               | CP363         | 630        |
| - Math Symbols        | CP829         | 909        |
| Symbols, Adobe        | CP1087        | 1257       |
| Turkey (Latin 2)      | CP870         | 959        |
| US/Canadian (English) | CP037 (1140@) | 697 (695@) |
| - Publishing          | CP395         | 1145       |

**Note:** @ Equivalent Euro Code Page.

### PSF/VSE, PSF/VM, PSF for OS/390 Support Summary

|                      | PSF/VSE<br>V2.2.1 | PSF/VM<br>V2.1.1 | PSF V3.3.0<br>OS/390 |
|----------------------|-------------------|------------------|----------------------|
|                      | -----             | -----            | -----                |
| Base Support:        |                   |                  |                      |
| - 4028 Dev. Type     | Yes               | Yes              | Yes                  |
| - Native             | Yes               | Yes              | Yes                  |
| - 240 DPI Resolution | Yes               | Yes              | Yes                  |
| - 300 DPI Resolution | Yes               | Yes              | Yes                  |
| - Auto Resolution    | Yes               | No               | Yes                  |

(OPC will report LF1 240 or 300 DPI printer, printer converts to 600 DPI)

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| Paper Input | Yes         | Yes         | Yes         |
|             | (6 Sources) | (5 Sources) | (6 Sources) |

## Paper Output

|                        |     |     |     |
|------------------------|-----|-----|-----|
| Primary Bin            | Yes | Yes | Yes |
| Offset Jogging         | Yes | Yes | Yes |
| Face-Up/Card Stock Bin | Yes | Yes | Yes |

## Finisher

|               |     |     |     |
|---------------|-----|-----|-----|
| Stacking      | Yes | Yes | Yes |
| Stapling      | No  | No  | Yes |
| Hole Punching | No  | No  | Yes |

AFP/IPDS Towers: All All All

## Printer Connectivity:

|                   |     |     |     |
|-------------------|-----|-----|-----|
| - Ethernet TCP/IP | Yes | Yes | Yes |
| - T/R TCP/IP      | Yes | Yes | Yes |

## Font Download

|           |     |     |     |
|-----------|-----|-----|-----|
| - Outline | Yes | No  | Yes |
| - Raster  | Yes | Yes | Yes |

## Resident AFP Font Collection

|                   |     |     |     |
|-------------------|-----|-----|-----|
| - 4028            | Yes | Yes | Yes |
| - Core            | Yes | Yes | Yes |
| - Coordinated     | Yes | Yes | Yes |
| -DBCS Outline (1) | Yes | Yes | Yes |
| -DBCS Raster (1)  | Yes | Yes | Yes |

**PSF/400 Support Summary**

PSF/400  
V5R1 and above  
-----

## Base Support:

|                      |     |
|----------------------|-----|
| - 4028 Dev. Type     | Yes |
| - Native             | Yes |
| - 240 DPI Resolution | Yes |
| - 300 DPI Resolution | Yes |
| - Auto Resolution    | Yes |

(OPC will report LFl 240 or 300 DPI printer, printer converts to 600 DPI)

Paper Input Yes  
(6 Sources)

## Paper Output

|                        |     |
|------------------------|-----|
| Primary Tray           | Yes |
| Offset Jogging         | Yes |
| Face-Up/Card Stock Bin | Yes |

## Finisher

|               |      |
|---------------|------|
| Stacking      | Yes  |
| Stapling      | Yes  |
| Hole Punching | V5R2 |

AFP/IPDS Towers: All

## Printer Connectivity:

|                     |     |
|---------------------|-----|
| - Ethernet TCP/IP   | Yes |
| - Token-Ring TCP/IP | Yes |

Font Download  
 - Raster Yes  
 - Outline Yes

Resident AFP Font Collection  
 - 4028 Yes  
 - Core Yes  
 - Coordinated Yes  
 - DBCS Raster Yes  
 - DBCS Outline Yes

Note: V4R5 requires PTFs SF67256, SF67257, SF67258 and V5R1 requires PTF SIO3186.

## Infoprint Manager Summary

|   | Infoprint<br>Manager for<br>AIX | Infoprint<br>Manager for<br>Windows |
|---|---------------------------------|-------------------------------------|
|   | -----                           | -----                               |
| Base Support:   |                                 |                                     |
| - 4028 Dev. Type  | Yes                             | Yes                                 |
| - Native  | Yes                             | Yes                                 |
| - 240 DPI Resolution  | Yes                             | Yes                                 |
| - 300 DPI Resolution  | Yes                             | Yes                                 |
| - Auto Resolution   | Yes                             | Yes                                 |
| (OPC will report LF1 240 or 300 DPI printer, printer converts to 600 DPI) |                                 |                                     |
| Paper Input   | Yes                             | Yes                                 |
|   | (6 Sources)                     | (6 Sources)                         |
| Paper Output  |                                 |                                     |
| Primary tray  | Yes                             | Yes                                 |
| Offset Jogging  | Yes                             | Yes                                 |
| Face-Up/Card Stock<br>Bin   | Yes                             | Yes                                 |
| Finisher  |                                 |                                     |
| Stacking  | Yes                             | Yes                                 |
| Stapling  | Yes                             | Yes                                 |
| Hole Punching   | Yes                             | Yes                                 |
| AFP/IPDS Towers:  | All                             | All                                 |
| Printer Connectivity:   |                                 |                                     |
| - Ethernet TCP/IP   | Yes                             | Yes                                 |
| - T/R TCP/IP  | Yes                             | Yes                                 |
| Font Download   |                                 |                                     |
| - Raster  | Yes                             | Yes                                 |
| - Outline   | Yes                             | Yes                                 |
| Resident AFP Font Collection  |                                 |                                     |
| - 4028  | Yes                             | Yes                                 |
| - Core  | Yes                             | Yes                                 |
| - Coordinated   | Yes                             | Yes                                 |
| - DBCS Raster (1)   | Yes                             | Yes                                 |
| - DBCS Outline (1)  | Yes                             | Yes                                 |

## ASCII Attachment to iSeries

### IBM OS/400 ASCII Printer Support

Infoprint 2085 and 2105 are supported as an ASCII (PCL) printer via a Workstation Customization Object under the Host Print Transform (HPT) facility.

HPT transforms the AFPDS data stream to ASCII for printing to iSeries ASCII printers.

The ASCII data stream can be sent to this printer when attached to a Token-Ring or Ethernet LAN via TCP/IP. That connection can use either of the following two TCP/IP drivers:

- OS/400 SNMP printer driver.
- OS/400 TCP/IP Line Printer Requester (LPR) and Line Printer Daemon (LPD), also known as remote output queue.

HPT support (AFP to ASCII) includes the following limitations:

- AFP graphics (GOCA) commands not supported
- Multiple-up not supported
- BGU and GDF graphics files not supported
- GDDM scalable fonts not supported
- CHRSIZE font keyword not supported
- Edge to edge not supported
- FIDELITY keyword not supported
- AFP to ASCII may need to be run in raster mode in order to produce accurate results

### Optional Fonts

#### PCL\*\* Font Support

The standard resident fonts include the following:

- 45 PCL Outline Fonts:
  - 4 CG Times\*\*
  - 4 Univers\*\*
  - 4 Univers Condensed
  - 4 Courier
  - 3 Letter Gothic
  - 2 Albertus\*\*
  - 3 Antique Olive\*\*
  - 1 Clarendon Condensed
  - 1 Coronet
  - 4 Garamond
  - 1 Marigold\*\*
  - 4 CG Omega\*\*
  - 4 Arial
  - 4 Times New
  - 1 Symbol
  - 1 Wingdings\*\*
- 2 PCL Bitmapped Fonts:
  - LinePrinter 16.7 pitch, 8.5 Pt (Portrait)
  - LinePrinter 16.7 pitch, 8.5 Pt (Landscape)
- PCL fonts are not accessible via AFP/IPDS, nor can PCL access AFP/IPDS fonts.



## PCL Symbols Set Support

Infoprint 2085 and 2105 support the following PCL Symbol sets.

| Name                            | Abbreviation | ID    |
|---------------------------------|--------------|-------|
| -----                           | -----        | ----- |
| Desktop                         | Desktop      | 7J    |
| ISO 11 Swedish                  | ISO11        | OS    |
| ISO 15 Italian                  | ISO15        | O1    |
| ISO 17 Spanish                  | ISO17        | 2S    |
| ISO 21 German                   | ISO21        | 1G    |
| ISO 4 UK                        | ISO4         | 1E    |
| ISO 60 Danish/Norwegian         | ISO60        | OD    |
| ISO 69 French                   | ISO69        | 1F    |
| ISO 6 ASCII                     | ISO6         | OU    |
| ISO 8859/1 Latin 1              | ISOL1        | ON    |
| ISO 8859/2 Latin 2              | ISOL2        | 2N    |
| ISO 8859/9 Latin 5              | ISOL5        | 5N    |
| ISO 8859/10 Latin 6             | ISOL6        | 6N    |
| Legal                           | LEGAL        | 1U    |
| Math-8                          | MATH8        | 8M    |
| MC Text                         | MCText       | 12J   |
| Microsoft Publishing            | MSPUB        | 6J    |
| PC-1004                         | PC1004       | 9J    |
| PC-775                          | PC775        | 26U   |
| PC-850 (euro)                   | PC850        | 12U   |
| PC-852                          | PC852        | 17U   |
| PC-858 (euro)                   | PC858        | 13U   |
| PC-8 D/N                        | PC8DN        | 11U   |
| PC-8 Turkish                    | PC8TK        | 9T    |
| PC-8 Multilingual Code Page 437 | PC8          | 10U   |
| Pi Font                         | PIFONT       | 15U   |
| PS Math                         | PSMATH       | 5M    |
| PS Text                         | PSText       | 10J   |
| Roman-8                         | Roman        | 8U    |
| Ventura International           | VNINTL       | 13J   |
| Ventura Math                    | VNMATH       | 6M    |
| Ventura US                      | VNUS         | 14J   |
| Windows 3.0 Latin 1             | WIN30        | 9U    |
| Windows Baltic                  | WINBALT      | 19L   |
| Wingdings                       | WINGDINGS    | 579L  |
| Windows 3.1 Latin 1 (Euro)      | WINL1        | 19U   |
| Windows 3.1 Latin 2 (Euro)      | WINL2        | 9E    |
| Windows 3.1 Latin 5 (Euro)      | WINL5        | 5T    |

## PCL SEMEA Support

The standard fonts for SEMEA (Southern Europe, Middle East, Africa) include the following:

- Courier
- Courier Bold
- Courier Bold Italic
- Helvetica
- Helvetica Bold
- Helvetica Italic
- Helvetica Bold Italic
- Times New Roman
- Times New Roman Bold
- Times New Roman Italic
- Times New Roman Bold Italic

## SEMEA PCL Symbols Set Support

Infoprint 2085 and 2105 support the following PCL Symbol sets for SEMEA.

| Name                           | ID   |
|--------------------------------|------|
| -----                          | ---- |
| Latin/Greek                    | 12N  |
| Latin/Cyrillic                 | 10R  |
| Latin/Hebrew                   | 15H  |
| Latin/Arabic                   | 10V  |
| Cyrillic-Russia                | 3R   |
| Latin/Greek                    | 11G  |
| Latin/Cyrillic (code page 915) | 10N  |
| Latin/Hebrew                   | 7H   |
| Latin/Arabic                   | 11N  |
| Hebrew 7-bit                   | 0H   |

## PostScript Font Support

The standard Adobe PostScript 3 fonts includes the following 136 fonts:

| Typeface         | # of Fonts | Typeface         | # of Fonts |
|------------------|------------|------------------|------------|
| -----            | -----      | -----            | -----      |
| Albertus         | 3          | Marigold         | 1          |
| AntiqueOlive     | 4          | Monaco           | 1          |
| AppleChancery    | 1          | MonaLisa-Recut   | 1          |
| ArialMT          | 4          | NewCenturySchlbk | 4          |
| AvantGarde       | 4          | NewYork          | 1          |
| Bodoni           | 6          | Optima           | 4          |
| Bookman          | 4          | Oxford           | 1          |
| Carta            | 1          | Palatino         | 4          |
| Chicago          | 1          | StempelGaramond  | 4          |
| Clarendon        | 3          | Symbol           | 1          |
| CooperBlack      | 2          | Tekton           | 1          |
| Copperplate      | 2          | Times            | 4          |
| Coronet          | 1          | TimesNewRomanPS  | 4          |
| Courier          | 4          | Univers          | 14         |
| GillSans         | 9          | Wingdings        | 1          |
| Eurostile        | 4          | ZapfChancery     | 1          |
| Geneva           | 1          | ZapfDingbats     | 1          |
| Goudy            | 5          |                  |            |
| Helvetica        | 8          |                  |            |
| Helvetica Narrow | 4          |                  |            |
| HoeflerText      | 5          |                  |            |
| JoannaMT         | 4          |                  |            |
| LetterGothic     | 4          |                  |            |
| LubalinGraph     | 4          |                  |            |

PostScript fonts are not accessible via AFP/IPDS, nor can PostScript access AFP/IPDS fonts.

## PostScript DBCS Font Support

The following Adobe PostScript 3 resident Japanese DBCS fonts are included with feature numbers 4810/4811:

- Japanese Morisawa fonts:
  - GothicBBB-Medium

o Ryumin-Light

**Printer Drivers**

- The following drivers are available:

| Platform               | DataStrm | Languages |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
|------------------------|----------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|---|----|---|
|                        |          | EN        | FR | IT | GR | SP | BP | DU | JP | SC | TC | RU | PO | HU | K | CZ |   |
| Windows 95/98/Se/Me    | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| Windows NT 4.0         | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| Windows 2000           | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| Windows XP 32 bit      | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| Windows 95/98/Se/Me    | PCL 6    | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| Windows NT 4.0         | PCL 6    | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| Windows 2000           | PCL 6    | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| Windows XP 32 bit      | PCL 6    | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| Mac OS 8.6 - 9.2       | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| Mac OS X, classic      | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| AIX 4.3x               | PS/PCL@  | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |   |
| AIX 5.1                | PS/PCL@  | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |   |
| Sun Solaris 7/8 Sparc  | PS/PCL@  | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |   |
| SCO UNIX Openserver 5  | PS/PCL@  | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |   |
| HP-UX 11.00 and 11.20  | PS/PCL@  | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |   |
| Linux Redhat 7.0 & 7.1 | PS 3     | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |   |

Languages: EN=English      SP=Spanish      SC=Simplified Chinese  
 FR=French      BP=Brazilian Portuguese      TC=Traditional Chinese  
 IT=Italian      DU=Dutch      RUS=Russian  
 GR=German      JP=Japan      PO=Polish  
 HU=Hungarian      K=Korean      CZ=Czech

**Note:** @ supports PS 3, PCL 5e or PCL 6 depending on user selection.

- DBCS Japanese fonts:  
Linux, AIX, HP-UX, SCO and Sun Solaris drivers support resident DBCS Japanese PostScript fonts.

- The following drivers function is supported:

| Platform       | Data Stream | Font         | Send&Save/Email Auto  |        |           |
|----------------|-------------|--------------|-----------------------|--------|-----------|
|                |             |              | Download Notification | Config | Finishing |
| AIX            | PCL5e       | Intellifonts | Yes                   | No     | Yes       |
| AIX            | PCL6        | None         | Yes                   | No     | Yes       |
| AIX            | PS          | Type 1 PS    | Yes                   | No     | Yes       |
| Linux Redhat   | PS          | None         | Yes                   | No     | Yes       |
| Mac            | PS          | Type 1 PS    | No                    | Yes    | Yes       |
| UNIX           | PCL5e       | Intellifonts | Yes                   | No     | Yes       |
| UNIX           | PCL6        | None         | Yes                   | No     | Yes       |
| UNIX           | PS          | Type 1 PS    | Yes                   | No     | Yes       |
| Windows        |             |              |                       |        |           |
| 95/98/Se/Me    | PCL6        | TrueType     | Yes                   | Yes    | Yes       |
| Windows        |             |              |                       |        |           |
| 95/98/Se/Me    | PS          | None         | Yes                   | Yes    | Yes       |
| Windows        |             |              |                       |        |           |
| NT 4.0/2000/XP | PCL6        | None         | Yes                   | Yes    | Yes       |
| Windows        |             |              |                       |        |           |
| NT 4.0/2000/XP | PS          | None         | Yes                   | Yes    | Yes       |

**Note:** Auto = Autoconfig.

## Printer Utilities

### Departmental Printer Resource Utility (DPRU)

This application provides a repository (resource inventory) for fonts and overlays (macros) on a workstation with access to an IBM network printer. Once a font or overlay has been added to the DPRU inventory, it can be downloaded to the hard drive.

The font format supported is TrueType. Fonts and overlays that are downloaded are available to workstation applications when the printer drivers are selected. DPRU is a separate program that uses the printer drivers to download. It is supported for:

| Platform                | Data Stream | Languages |    |    |    |    |    |    |    |    |    |    |    |    |   |    |  |
|-------------------------|-------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|---|----|--|
|                         |             | EN        | FR | IT | GR | SP | BP | DU | JP | SC | TC | RU | PO | HU | K | CZ |  |
| Windows 95/98/Me<br>(1) | PCL 6       | X         | X  | X  | X  | X  | X  | X  |    |    |    |    |    |    |   |    |  |

**Note:** (1) DBCS fonts are not supported.

DPRU function is available on other operating systems through the printer drivers.

DPRU is shipped on CD-ROM with the PCL/PostScript feature.

### IBM Network Printer Tool Box (NPTB) for Windows

IBM provides the Network Printer Tool Box (NPTB) with an easy-to-use graphical interface for network administrators. Infoprint 2085 and 2105 are supported on NPTB version 4.x. NPTB supports Microsoft 95/98/NT/2000 platforms.

Network administrators can set-up Notification Manager for Infoprint 2085 and 2105. Whether printers are low on toner, out of paper or need attention, these notifications can get the information to the right source without delay, improving printer up-time and end user productivity.

NPTB helps users install and configure IBM network printers in LANs, including Novell networks (Bindery and NDS). NPTB monitors printers and provides printer status using the industry-standard, open-systems SNMP (Simple Network Management Protocol) Printer MIB and private enterprise MIBs.

Some examples of the information available using SNMP are: on/offline, paper jam, out of toner, output tray full, input tray empty, and information about the printer's configuration, capacity, and number of pages printed.

Other functions provided by NPTB include:

- Printer microcode update.
- Printer grouping.
- Printer reset.
- Copy printer settings.

NPTB uses the following protocols:

| Client Operating Systems            | Control Protocols | Configurable Protocols              |
|-------------------------------------|-------------------|-------------------------------------|
| Windows 95/98/Me<br>Windows NT/2000 | TCP/IP, IPX/SPX   | TCP/IP, IPX/SPX, AppleTalk, NetBios |

NPTB is supported in English language only.

NPTB is shipped with the printer on CD-ROM.

<http://www.ibm.com/printers>

## TCP/IP Network Port Monitor Utility

The IBM TCP/IP Network Port Monitor provides bi-directional printer and job status for Infoprint 2085 and 2105. It runs on Windows NT 4.0 and Windows 2000 print servers and supports the following clients:

| Platform          | Data Stream | Languages |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
|-------------------|-------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|---|----|---|
|                   |             | EN        | FR | IT | GR | SP | BP | DU | JP | SC | TC | RU | PO | HU | K | CZ |   |
| Windows NT 4.0    | NA          | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| Windows 2000      | NA          | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| Windows XP 32 bit | NA          | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |

**Note:** NA = Not Applicable.

Some of the benefits of the TCP/IP Network Port Monitor are:

- Integrates with standard Windows printer objects.
- Displays printer status.
- Indicates that a job has completed printing and is ready for pickup.
- Detailed progress of a job on the printer (such as "printing page 3 of 7" or "copy 2 of 5").
- Cancel print jobs on the actual printer and not just your workstation.

The IBM TCP/IP Network Port Monitor is shipped with the PCL/PostScript feature on CD-ROM.

## Infoprint Manager

Infoprint Manager AIX and Windows will provide device support for Infoprint 2085 and 2105 (specific release support information will be provided in May, 2002).

## Infoprint Server

The Infoprint Server feature of OS/390 and z/OS will provide support for Infoprint 2085 and 2105 with the PCL/PostScript feature.

## LPR Remote Printing Client

The LPR Remote Printing Client utility provides a TCP/IP port monitor for seamless Windows 95/98 network printing. This port monitor can be used on Windows 95/98/Me to direct print jobs from Windows applications to IBM Workgroup printers. LPR is supported in the English language only.

This utility supports other printers or print servers that run a TCP/IP LPD print server. The port monitor can be used on mobile systems for remote printing or it can be used on department print servers in an unattended print server mode.

This package also includes a command line LPR executable program for printing jobs directly. The LPR program, called IBMLPR.EXE, provides a standard RFC 1179 compliant printing interface and allows the -S and -P parameters to be set by way of environment variables so that drag and drop printing can be enabled for a default printer.

The LPR Remote Printing Client is shipped with the PCL/PostScript feature on CD-ROM.

## Web Ready Printing

### Printer Resident Web Pages

Infoprint 2085 and 2105 include printer resident web pages. The web pages can be viewed by an industry standard browser using the printer IP address. Public web pages are available to all users. Administrator web pages are provided for configurator functions. Administrator web pages require password access. The types of web pages include:

- Public Web Pages, End User support and functions
  - End User support and functions:
    - View printer status and general printer settings.
    - Web Pull Printing - Allows users to specify a URL address of a file for printing files from an internet source and reducing network traffic.
    - Web Direct Printing - This allows a user to select a file for printing directly to the printer freeing the client for other tasks and reducing network traffic.
  - Administrator support and function (available to anyone with password protection):
    - View printer status, job status and general printer settings
    - Cancel active or spooled jobs
- Browsers supported include:

| Browser           | Version       |
|-------------------|---------------|
| -----             | -----         |
| Internet Explorer | 4.0 and above |
| Netscape          | 4.0 and above |

### Using a browser to submit print jobs

Two methods of submitting a print job to the printer are available for Infoprint 2085 and 2105. They are referred to as pull printing and direct printing.

For reference, the conventional method of job submission from a workstation is to select File and Print from an application menu. This process uses a print driver to create a print job which is then sent from the local workstation to the printer. Depending upon the installation configuration, the job may be sent directly to the printer, or to a print server and then to the printer.

- Pull Printing
 

With pull printing, a browser is used to access a web page in the printer. The user fills in an entry field on the web page with an internet address (or URL) of an existing file to be printed. An example would be a tax form that is available from a government web site. After entering the URL of the file, the user clicks on the Submit button. This submits the URL to the printer. The printer then retrieves and processes the file from the remote server identified by the URL. The file is transferred over the network only once: from the remote server to the printer. Conventional printing of a remote file requires the transfer of the file over the network twice: from the remote server to the local workstation and then to the printer.

Files printed using Pull Printing must be in the correct format to be successfully processed. Supported formats include Postscript, PDF, PCL (5e and 6) and PCL. Supported transfer protocols include HTTP, FTP and Gopher via a proxy server. In order for the printer to reach a server that is on the other side of a firewall, a proxy server must provide access through the firewall. The address of the proxy server is a configuration item in the printer that can be set by the printer administrator.

Pull printing provides a one step method of printing existing documents or forms that are available on many web sites. Pull printing can also be used to update the microcode of a printer by entering the URL of the microcode update file. The microcode file can be retrieved over the internet from the IBM Printing Systems Web site

www.printers.ibm.com

Or from a server configured by the printer administrator.

- **Direct Printing**

Direct printing also uses a browser to submit a print job. As with Pull Print, the user fills in an entry field on the web page that identifies the name of an existing file to be printed. The user can also use standard Windows file browsing operations. For direct printing, the identified file must be accessible as a local file to the workstation. After entering the name of the file, the user clicks the Submit button. The browser reads the file and transfers it to the printer. As with Pull Print, the file must be in a supported format: PostScript, PDF, PCL, PJI and ASCII text.

Direct printing provides a simple method of printing an existing document on any printer that can be reached with a browser.

## IPP

IPP (Internet Printing Protocol) was commissioned by the Internet Engineering Task Force (IETF) and developed under the guidance of the Printer Working Group printing industry consortium. As such, IPP is better defined than its LPR predecessor (RFC 1179) and is now being adopted as a new standard for printing and job control in networks and over the internet.

Infoprint 2085 and 2105 include an IPP server that can accept jobs from an IPP client using HTTP/1.1 as the transport protocol as defined in the IPP specification. An IPP client is required on any operating system from which you want to do IPP printing. For example, Infoprint 2085 and 2105 can accept jobs submitted using IPP from the IPP client for Windows 2000. Microsoft also provides clients for Windows 98 and NT. IBM provides IPP clients for the following software solutions:

- IBM Infoprint Manager for Windows
- Infoprint Server feature of OS/390 V2R8 and higher releases and z/OS

## Functional Enhancements for Infoprint 2085 and 2105

### Restricted IP Printing

Infoprint 2085 and 2105 allow an administrator to limit the users on the TCP/IP network who can send jobs to the printer. Without this, any user can send a print job to the printer. This can be a problem for server based printing. With Restricted IP Printing, the administrator can configure the printer to only accept print jobs over TCP/IP from the server IP address. Up to five addresses or address ranges may be specified.

### Networking Plug and Play

This function employs an advertise and seek discovery protocol to reduce the amount of manual configuration typically necessary in network printing environments. The Infoprint 2085 and 2105 advertise their presence on the network using an IP multicast transmission. The companion listener software application may be running on one or more desktop systems or on a print server (recommended).

This IBM solution (called IBM Connect and Print) is targeted for Windows NT, 2000, and XP customers. It is useful in an environment that has Windows 9x clients with an NT/2000/XP print server. This application can be configured to automatically install a printer on the Windows system. The listener application may also issue a multicast query to seek previously undetected printers which may be present on the network.

### Enhanced DHCP/Plug & Play/WINS

The use of DHCP by Infoprint 2085 and 2105 have been enhanced to simplify the task of getting the printer set up and printing on a network. With it, the printer attempts to obtain many network configuration parameters from the DHCP server even if it does not get its IP address from the DHCP server. The parameters that are requested include the following:

- TCP/IP host name
- Domain name
- Address of the Domain Name Server

- Address of the WINS Server
- Address of the SMTP Server
- Address of the NetWare Server, NetWare tree and NetWare context

If the printer is configured to obtain its IP address from the DHCP server, the printer requests that the DHCP server register the printer's host name with the system DNS server. The printer registers its NetBIOS name with the WINS server.

## Send and Save

Infoprint 2085 and 2105 supports flexible new ways for holding and releasing jobs. When a print job should not be seen by anyone except by the person sending it, a PIN code may be sent to the printer along with the print job. The printer will hold the job until that PIN code is entered at the operator panel.

Any user may send jobs to the printer to be held for later release. This allows the printer to serve as an electronic forms cabinet, holding blank forms to be printed when needed. The forms may be replaced or removed as needed.

Send and Save is supported on all operating systems except Macintosh. Send and Save is supported only on PCL/PostScript jobs (PCL/PostScript feature must be installed).

## Email from the printer for job and printer status

Infoprint 2085 and 2105 supports sending email notification to users of the printer. Two categories of notification are provided:

- Job notification
- Printer notification

Using IBM PCL/PostScript printer drivers, the user may include an email address when submitting a print job. The printer will send email to that address when the job completes or if the job is held up due to a printer problem, such as when the printer runs out of paper.

Additionally, the printer administrator may configure email addresses for a key operator, supplies operator or service operator to be notified when the printer requires attention. Conditions such as paper jams, out-of-paper and service call required will be sent to email addresses selected by the administrator.

These functions are supported on all operating systems except Macintosh. Job Notification is supported only on PCL/PostScript jobs (PCL/PostScript feature must be installed). It also requires IBM drivers.

For printer notification, the language used to create the email is the language selected for the operator panel. For job notification, the language is set by the printer driver to the same language as the one used by the printer driver.

## Network Status Page

A network status page is included in Infoprint 2085 and 2105. This page provides real-time status of the state of various network communications. The status page may help to determine the cause of printing problems, such as the inability to logon to a NetWare network or a timeout when receiving a network print job. The status page may be printed from the operator panel or viewed online with a web browser.

## Edge Sensitivity

Some preprinted forms, especially labels or prepunched forms, may cause jams when loaded in a tray in the normal orientation, but feed correctly when loaded in the opposite direction (a 180 degree rotation). To support the use of this opposite loading direction, the Infoprint 2085 and 2105 provide an option that allows the operator to define a media as edge sensitive. Logic within the printer control unit will rotate simplex and duplex pages 180 degrees to align the image with the orientation of the form. This option is not compatible with most finishing operations.

## Side Sensitivity



When jobs alternate frequently between simplex and duplex pages, throughput will be reduced due to the time needed to switch between simplex and duplex and back again. To provide faster throughput of jobs that frequently mix simplex and duplex pages, the Infoprint 2085 and 2105 provide an option that allows the operator to define a media as side sensitive. Logic within the printer control unit will run simplex pages in duplex mode, enhancing the throughput of these jobs. Note that the side sensitivity option will have the opposite affect on jobs consisting only of simplex pages; these jobs will run slower with media defined as side sensitive. This option is compatible with all finishing operations.

### Defined Forms support for Print Adjust

Infoprint 2085 and 2105 will provide web page and operator panel interfaces for defining attributes of forms to be used by print jobs. The form attributes include:

- Name of form
- Edge sensitivity
- Side sensitivity
- Print adjust values

This allows for optimization of print registration when using preprinted forms, adhesive labels, or other forms that require precise registration. These values move the printed image on the page in the horizontal and vertical directions. For greatest flexibility, separate values may be specified for the front and back sides of the page. The adjustment values are given in units of 1/75 of an inch (8 pels).

Up to 99 different forms may be defined. When the corresponding media is loaded into a tray, the form must be assigned to the tray via the operator panel or web page for the form attributes to be used. When the size or type of the media is being changed, the System Settings menu may also need to be changed.

The attributes of the form definitions do not apply to copy jobs.

### Email Printing

The Infoprint 2085 and 2105 can accept Email jobs for printing. To use this feature, the printer is assigned a POP3 email account and the account information is configured in the printer. Once configured, the printer periodically logs into the Email server, retrieves and processes any mail that has been sent, and logs out. Email messages consist of a body and optional attachments.

Attachments consisting of plain text, preformatted PostScript, PCL, or PDF files can be printed. Unprintable attachments are discarded. Each attachment in the body is replaced by a line of text indicating how the attachment was processed (printed or discarded). Email printing requires the PCL/PostScript option. Only Single Byte Character Sets (SBCS) are supported for the Email body and subject line. Double Byte Character Sets (DBCS) are supported in PDF attachments.

### Keywords

Keywords may be entered on the email subject line by the submitter in order to control how the printer will process the body and attachments.

In a simple example, a user could copy the printer on all outgoing email in order to create a hard-copy "chron-file". In another example, a user could provide the printer's email address to a business associate in another company so that a document could be sent directly to the user's printer - similar to FAX but more efficient and easier to use.

Email printing requires the PCL/PS option.

### Time Of Day

The Infoprint 2085 and 2105 provides a Time Of Day timestamp for print jobs. The job status that is displayed on printer web pages includes the time that the job was processed. For Permanently Saved jobs (such as a dental form, submitted with the Send & Save function), a timestamp of the last time that the job was printed is also displayed. The printer can be configured to obtain the current Time of Day from a network time server.

## Parameter Duplication

Infoprint 2085 and 2105 will provide a function in the printer control unit that will allow all the printer parameters to be transferred from one printer to another. The function will also allow the parameters to be stored on a host computer and then sent back to the same printer, or one or more other printers. Parameters may be exchanged between all machine types and models of Infoprint 2085 and 2105.

This function applies only to printer parameters.

## PCL Version

Infoprint 2085 and 2105 support PCL 5e/6.

## Printer Management

### SNMP MIB Support

Infoprint 2085 and 2105 supports industry standard open-systems SNMP printer MIBs.

- Printer MIB (RFC 1759)
- MIB II (MIB RFC 1213)
- Host Resources MIB (MIB RFC 2790)
- Job MIB (RFC 2707)
- Finisher MIB

### Novell NetWare Support

Novell NetWare connectivity is supported via Ethernet and Token-Ring attachments as PSERVER or RPRINTER.

### World Trade Considerations

Printer Resident Font Support is listed below:

|                          | PCL | PS  | AFP/<br>IPDS |
|--------------------------|-----|-----|--------------|
|                          | --- | --  | ----         |
| <b>Group 1 Languages</b> |     |     |              |
| Japanese DBCS            | No  | Yes | Yes          |
| German                   | Yes | Yes | Yes          |
| French                   | Yes | Yes | Yes          |
| Simp. Chin.(DBCS)        | No  | No  | Yes          |
| Italian                  | Yes | Yes | Yes          |
| Spanish                  | Yes | Yes | Yes          |
| Brazilian Portug.        | Yes | Yes | Yes          |
| Trad. Chin.(DBCS)        | No  | No  | Yes          |
| Korean                   | No  | No  | Yes          |
| U.S. English             | Yes | Yes | Yes          |
| <b>Group 2 Languages</b> |     |     |              |
| Danish                   | Yes | Yes | Yes          |
| Dutch                    | Yes | Yes | Yes          |
| Swedish                  | Yes | Yes | Yes          |
| Finnish                  | (1) | Yes | Yes          |
| Arabic                   | Yes | No  | Yes          |
| Norwegian                | Yes | Yes | Yes          |
| Portuguese               | (1) | Yes | Yes          |
| Russian                  | No  | No  | Yes          |
| Hebrew                   | Yes | No  | Yes          |

|           |     |       |     |
|-----------|-----|-------|-----|
| Thai      | No  | No    | No  |
| Polish    | Yes | No(2) | Yes |
| Turkish   | Yes | No(2) | Yes |
| Czech     | Yes | No(2) | Yes |
| Hungarian | Yes | No(2) | Yes |
| Greek     | Yes | No    | Yes |

Group 3

|              |     |       |     |
|--------------|-----|-------|-----|
| Albanian     | No  | Yes   | Yes |
| Bulgarian    | Yes | No    | Yes |
| Byelorussian | No  | No    | Yes |
| Catalan      | Yes | Yes   | Yes |
| Croatian     | Yes | No(2) | Yes |
| Estonian     | No  | No(2) | Yes |
| Farsi        | No  | No    | No  |
| Icelandic    | (1) | Yes   | Yes |
| Latvian      | No  | No(2) | Yes |
| Lithuanian   | No  | No(2) | Yes |
| Macedonian   | Yes | No    | Yes |
| Romanian     | Yes | No(2) | Yes |
| Serbian      | Yes | No    | Yes |
| Slovakian    | No  | No(2) | Yes |
| Slovenian    | Yes | No(2) | Yes |
| Ukranian     | No  | No    | Yes |
| Urdu         | No  | No    | No  |
| Vietnamese   | No  | No    | No  |
| Laotian      | No  | No    | No  |

Group 1D Languages

|                    |     |     |     |
|--------------------|-----|-----|-----|
| Australian English | (1) | Yes | Yes |
| Belgian English    | (1) | Yes | Yes |
| UK English         | (1) | Yes | Yes |
| English Uppercase  | Yes | Yes | Yes |
| S. African English | (1) | Yes | Yes |
| Belgium French     | (1) | Yes | Yes |
| Canadian French    | (1) | Yes | Yes |
| Swiss French       | (1) | Yes | Yes |
| Swiss Italian      | (1) | Yes | Yes |

Group 2D Languages

|               |     |     |     |
|---------------|-----|-----|-----|
| Belgium Dutch | (1) | Yes | Yes |
|---------------|-----|-----|-----|

**Note:** (1) Supported via ISO Latin 1.

**Note:** (2) ISOAdobeCE is not supported.

Language support for publications and web pages are listed in the table below:

|                | Languages |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |
|----------------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|
|                | EN        | FR | IT | GR | SP | BP | DU | DA | FI | NO | SW | JP | SC | TC | RU | PO | HU | K | CZ |
| Publications   | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  |
| Operator Panel | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |
| Web Pages      | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |

Languages: EN=English      SP=Spanish      SC=Simplified Chinese  
 FR=French      BP=Brazilian Portuguese      TC=Traditional Chinese  
 IT=Italian      DU=Dutch      RU=Russian  
 GR=German      JP=Japan      PO=Polish  
 DA=Danish      FI=Finnish      NO=Norwegian

SW=Swedish    HU=Hungarian  
CZ=Czech

K=Korean

The CE will setup two languages for the operator panel at installation time.

## **Physical Specifications**

### **Size and Weight**

Unpacked size and weight are as follows:

|              | Width<br>----- | Depth<br>----- | Height<br>----- | Weight<br>----- |
|--------------|----------------|----------------|-----------------|-----------------|
| Base Printer | 2106mm (69.8") | 735mm (28.9")  | 1476mm (58.1")  | 302kg (664 lb)  |
| Printer+HCF  | 2314mm (91.1") | 735mm (28.9")  | 1476mm (58.1")  | 381kg (838 lb)  |

**Note:** " denotes inches.

## **Operating Environment**

- Infoprint 2085:
  - Operating Temperature: 50 to 90 deg F (10 to 32 deg C)
  - Humidity: 15 to 85% RH; 26 deg C max wet bulb
  - Altitude: 8,200 ft (2500 m)

## **Electrical Specifications**

- North America - 208 Volt, 60 Hz
- Europe - 220-240 Volt, 50/60 Hz
- Japan - 200 Volt, 50/60 Hz

## **Power Consumption**

Less than 3,000 Watts.

## **Acoustics**

| Mode<br>-----     | Infoprint 85<br>----- | Infoprint 105<br>----- | Remark<br>----- |
|-------------------|-----------------------|------------------------|-----------------|
| Operating         | 78 dB(A)              | 80 dB (A)              | Sound Power     |
| Idle              | 63 dB(A)              | 69 dB (A)              | Sound Power     |
| Operator position | 72 dB(A)              | 74 dB (A)              | Sound Pressure  |
| User Position     | 72 dB(A)              | 74 dB (A)              | Sound Pressure  |

## **Ozone Emissions**

Infoprint 2085 and 2105 ozone emissions are less than 0.02 mg/hr in the continuous copying mode.

## **Limitations**

Not applicable.

**Hardware Requirements**

Not applicable.

**Software Requirements**

Not applicable.

[↑ Back to top](#)**Publications**

| Publication<br>Description                      | Order<br>Number |
|---|-----------------|
| -----   |                 |
| Ship-Group Publications (included with printer) |                 |
| -----   |                 |
| User's Guide (U.S.& Canada)                     | S544-5824       |
| Safety Information                              | S544-5826       |
| Quick Reference Guide                           | S544-5825       |

## Non-ship-Group Publications:

|   |           |
|---|-----------|
| -----                                   |           |
| Planning Guide                          | G544-5838 |
| Ethernet/Token-Ring Configuration Guide | S544-5831 |
| IPDS/SCS Technical Reference            | S544-5832 |

**EMEA--->**

| Language<br>Group | Publication<br>Description | Order<br>Number           |
|-------------------|----------------------------|---------------------------|
| -----             |                            |                           |
| Arabic            | User's Guide               | n/a<br>(English provided) |
| Arabic            | Quick Reference Guide      | SB20-2188                 |
| Denmark           | User's Guide               | G511-5820                 |
| Denmark           | Quick Reference Guide      | G511-5819                 |
| English           | User's Guide               | S544-5824                 |
| English           | Quick Reference Guide      | S544-5825                 |
| Finland           | User's Guide               | SB11-9168                 |
| Finland           | Quick Reference Guide      | SB11-9169                 |
| France            | User's Guide               | SF11-0928                 |
| France            | Quick Reference Guide      | SF11-0929                 |
| Germany           | User's Guide               | SA12-4930                 |
| Germany           | Quick Reference Guide      | SA12-4931                 |
| Germany           | Planning Guide             | GA12-4948                 |
| Sweden            | User's Guide               | SA14-3058                 |
| Sweden            | Quick Reference Guide      | SA14-3059                 |
| Hungary           | User's Guide               | SA22-5643                 |
| Hungary           | Quick Reference Guide      | SA22-5644                 |
| Poland            | User's Guide               | SA85-0078                 |
| Poland            | Quick Reference Guide      | SA85-0079                 |
| Czech Republic    | User's Guide               | n/a<br>(English provided) |

|                    |                         |                           |
|--------------------|-------------------------|---------------------------|
| Czech Republic     | Quick Reference Guide   | SA12-7665                 |
| Italy              | User's Guide            | SA13-2028                 |
| Italy              | Quick Reference Guide   | SA13-2029                 |
| Italy              | Planning Guide          | GA13-2033                 |
| Netherlands        | User's Guide            | SA14-6000                 |
| Netherlands        | Quick Reference Guide   | SA14-6001                 |
| Norway             | User's Guide            | SA15-4816                 |
| Norway             | Quick Reference Guide   | SA15-4817                 |
| Russia             | User's Guide            | SH43-0208                 |
| Russia             | Quick Reference Guide   | SH43-0209                 |
| Spain              | User's Guide            | S510-1394                 |
| Spain              | Quick Reference Guide   | S510-1395                 |
| Turkey             | User's Guide            | n/a<br>(English provided) |
| Turkey             | Quick Reference Guide   | SB10-7050                 |
| <b>&lt;---EMEA</b> |                         |                           |
| <b>AP---&gt;</b>   |                         |                           |
| Language Group     | Publication Description | Order Number              |
| -----              | -----                   | -----                     |
| English            | User's Guide            | S544-5824                 |
| English            | Quick Reference Guide   | S544-5825                 |
| China              | User's Guide            | S152-0203                 |
| China              | Quick Reference Guide   | S152-0204                 |
| Japan              | User's Guide            | SA88-8693                 |
| Japan              | Quick Reference Guide   | SA88-8694                 |
| Japan              | Planning Guide          | GA88-8695                 |
| Korea              | User's Guide            | SA30-1621                 |
| Korea              | Quick Reference Guide   | SA30-1622                 |
| Taiwan             | User's Guide            | S550-0123                 |
| Taiwan             | Quick Reference Guide   | S550-0124                 |
| <b>&lt;---AP</b>   |                         |                           |
| <b>LA---&gt;</b>   |                         |                           |
| Language Group     | Publication Description | Order Number              |
| -----              | -----                   | -----                     |
| Brazil             | User's Guide            | S517-7377                 |
| Brazil             | Quick Reference Guide   | S517-7378                 |
| English            | User's Guide            | S544-5824                 |
| English            | Quick Reference Guide   | S544-5825                 |
| Spain              | User's Guide            | S510-1394                 |
| Spain              | Quick Reference Guide   | S510-1395                 |
| <b>&lt;---LA</b>   |                         |                           |

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## Features -- Specify/Special/Exchange

↓ No Charge Specify Codes

↓ Special Feature Codes -- Chargeable

↓ Feature Exchanges

### No Charge Specify Codes

**US---**

No specify features.

**<---US**

**CAN, AP, LA, EMEA---**

COLOR: A specify code is not required.

VOLTAGE: A specify code is not required. Voltage/power will be determined by the plant based on the country code of the order.

LANGUAGE: A specify code for language is required and will be provided by the configurator based on the country code of the order.

**<---CAN, AP, LA, EMEA**

### Special Feature Codes -- Chargeable

| Mach              | Factory<br>Type Model | Field<br>Feature Number | Field<br>Feature Number | Description   |
|-------------------|-----------------------|-------------------------|-------------------------|---|
| 2785              | 001                   |                         |                         | 85 IPM Printer  |
|                   |                       | 4500                    | 4501                    | A3/11"x17" Tray 1 Kit   |
|                   |                       | 4520                    | 4521                    | 4,550-Sheet High Capacity Feeder (HCF)  |
|                   |                       | 4624                    | 4625                    | 3-Hole Punch Kit for Finisher   |
|                   |                       | 4626                    | 4627                    | 4-Hole Punch Kit for Finisher   |
|                   |                       | 4628                    | 4629                    | 4-Hole Punch Kit for Finisher (Swedish)   |
|                   |                       | 4120                    | 4121                    | IBM Token-Ring 4/16 Adapter   |
|                   |                       | 4820                    | 4821                    | PCL/PostScript  |
|                   |                       | 4150                    | 4151                    | Copy Connect Cable  |
|                   |                       | 4920                    | 4921                    | Anti-Condensation Kit   |
|                   |                       | 6120                    | 6121                    | LCDS/Metacode Channel Software Enablement                                       |
|                   |                       | 6130                    | 6131                    | LCDS/Metacode TCP/IP Software Enablement  |
|                   |                       | 6140                    | 6141                    | LCDS/Metacode Enablement Accessories  |
|                   |                       | 6110                    | 6111                    | LCDS/Metacode Sun Channel Hardware Enablement                                   |
|                   |                       | 6150                    | 6151                    | LCDS/Metacode Sun ESCON Channel H'ware Enable                                   |
|                   |                       | 6160                    | 6161                    | LCDS/Metacode TCP/IP Sun Blade  |
|                   |                       | 4050                    | 4050                    | Relocation Kit  |
|                   |                       |                         |                         | Language Groups (consists of hardcopy<br>User's Guide and Quick Reference Card) |
| <b>US---</b>      |                       | 4622                    | 4623                    | 2-Hole Punch Kit for Finisher (US)  |
|                   |                       | 2924                    |                         | English Language Group  |
| <b>&lt;---US</b>  |                       |                         |                         |   |
| <b>CAN---</b>     |                       | 2924                    |                         | English Language Group  |
|                   |                       | 2928                    |                         | French Language Group   |
| <b>&lt;---CAN</b> |                       |                         |                         |   |

**EMEA----**

|      |      |  |
|------|------|--|
| 4620 | 4621 | 2-Hole Punch Kit for Finisher (EMEA/Japan) |
| 2924 |      | English Language Group                     |
| 2928 |      | French Language Group                      |
| 2980 |      | Brazilian Portug. Language Group           |
| 2931 |      | Spanish Language Group                     |
| 2993 |      | Danish Language Group                      |
| 2988 |      | Dutch Language Group                       |
| 2987 |      | Finnish Language Group                     |
| 2929 |      | German Language Group                      |
| 2932 |      | Italian Language Group                     |
| 2920 |      | Norwegian Language Group                   |
| 2933 |      | Polish Language Group                      |
| 2934 |      | Hungarian Language Group                   |
| 2936 |      | Russian Language Group                     |
| 2994 |      | Swedish Language Group                     |

**<---EMEA****LA----**

|      |  |                                  |
|------|--|----------------------------------|
| 2924 |  | English Language Group           |
| 2928 |  | French Language Group            |
| 2980 |  | Brazilian Portug. Language Group |
| 2931 |  | Spanish Language Group           |

**<---LA****AP----**

|      |      |  |
|------|------|--|
| 4810 | 4811 | PostScript Japanese                        |
| 4620 | 4621 | 2-Hole Punch Kit for Finisher (EMEA/Japan) |
| 2924 |      | English Language Group                     |
| 2996 |      | Chinese (S-C) Language Group               |
| 2995 |      | Chinese (T-C) Language Group               |
| 2997 |      | Korean Language Group                      |
| 2930 |      | Japanese Language Group                    |

**<---AP****Infoprint 2085 and 2105 Features****(#4150, #4151) Copy Connect Cable**

- FC 4150 = factory, FC 4151 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

The optional Copy Connect Cable may be used to connect two printers together to load balance copy jobs between two printers. It does not double the speed of the print job.

For large volume copy runs, two connected machines form a single system that can complete the job in a shorter time. Copying speeds of 170 copies/minute (A4, 8.5" x 11" sizes) are available for Infoprint 2085 and 210 copies/minute for Infoprint 2105.

It also allows auto-backup for less participation of operators. If one machine stops because of a paper jam or it has run out of toner or paper, the other machine will take over and finish the job automatically. When the stopped machine is recovered, the machines will allocate the job again and continue to complete the job in a way that results in maximum productivity.

The cable is 10 meters in length.

**(#4161, #4162) Gigabit Ethernet Adapter**

- FC 4161 = factory, FC 4162 = field



- Minimum required = 0, maximum allowed = 1
- Prerequisite = none, Co-requisite = none
- Conflict = this feature is mutually exclusive with IBM Token-Ring 4/16 Adapter (FC 4120/4121)

This feature will disable the standard Ethernet attachment.

The Gigabit Ethernet TX attachment offers high-speed data transfers using standard ethernet Category 5 UTP copper cabling. This LAN technology allows gigabit speeds with existing Category 5 facility wiring.

This feature is also known as 1000BaseTX and supports speeds of 10/100/1000 megabits per second.

The connection to the server can be direct (point-to-point) or through standard Gigabit Ethernet TX LAN connections.

This attachment complies with the IEEE 802.3ab standard.

The Gigabit Ethernet TX attachment utilizes a RJ-45 connector to connect to standard Category 5 ethernet cabling. When used with standard Category 5 ethernet cabling, the maximum cable segment distance is 100 meters.

Below are the Attachment/Datastreams for the Gigabit Ethernet feature:

| Physical   | Protocols                   | Datastream                        |
|------------|-----------------------------|-----------------------------------|
| 1000BaseTX | IP, IPX, NetBios, Ethertalk | PostScript 3, PCL 6,<br>PDF, IPDS |

The code upgrade is required for the Gigabit Ethernet feature.

## Code Upgrade

### New POD Functions

A code upgrade with the following new function is now available.

### Enterprise Print Drivers

Print On Demand (POD) functionality is available for windows based drivers including Windows 2000, Windows XP and Windows ME.

### Job Ticket Composer

This job ticket composition utility can create, save, and edit job tickets and send jobs to the printer. The software runs in conjunction with drivers for Windows XP, Windows 2000, and Windows ME, and it can also be run as a stand-alone utility. The composer supports PCL 6, PostScript 3 and PDF jobs.

### Job Ticket Editor

This editor supports XML-based job tickets created using a subset of Job Description Format (JDF) as specified by CIP4 (International Cooperation for the Integration of Processes in Prepress, Press and Postpress). It allows job tickets to be sent to the machine with a print job. The job ticket can specify many special processing requests, including:

- Stapling (including subset stapling)
- Punching
- Covers
- Inserted pages
- Special media on certain sheets

- Mixed Plex (single and double sided printing with the same job)
- Printing selected pages, specified by page range and/or individual page numbers

## Ordered Media Support

Support has been added for handling print jobs using media that is loaded in ordered sets, such as multi-part tabs. The printer will track the usage of sheets from each set, and will eject unneeded ordered sheets at the end of a job. This will ensure that the next job starts at the beginning of a set. Also, special handling is provided for recovering from paper jams when ordered media is used.

## Tab Text Creation

The Job Ticket Editor provides the capability to specify text to be printed on tabs, including orientation, font, and size.

Printing on tabs is supported for Single Byte Character Sets (SBCS) only.

## Other Software Functions

### IPDS Data Matrix Bar Code support

The Intelligent Printer DataStream (IPDS) support has been enhanced to print two-dimensional bar codes in the Data Matrix format.

### Tray/Media Profiles support

Support has been added for user defined print job profiles. A tray/media profile defines the form assignment and PCL and IPDS tray renumbering, if any, for each tray. Profiles may be set up for frequently-run jobs or job groups. Profiles provide a more convenient method for the operator to change these machine settings. Up to 99 profiles may be defined.

### IPP Windows Port Monitor

A new port monitor for Windows 2000 and Windows XP is provided. This port monitor provides real-time printer and job status. The print data is transferred to the printer using Internet Printing Protocol (IPP).

### Complete Job Information

The machine keeps a log of the most recent 500 print jobs to allow convenient review of the recent usage of the machine. This log is available through the built-in web server. For a ticketed job, the machine can display details about the job including the finishing specified and the media required. These details are available through the built-in web server and the operator panel.

## Limitations

The code upgrade has the following limitations:

- Ordered media tray linking  
Autolinking of input trays is automatically enabled for trays that have matching media in them. Media is considered matching when the media type and media size of a tray both match, and the form assignment for the tray is the same (either the trays have no form assigned, or the trays have the same form assigned). Because ordered media sheets vary within a tray, auto linking is disabled for trays that are loaded with ordered media.

When several trays are linked and the first-selected tray is emptied, the printer chooses the next tray to use based on an internal algorithm. When the first-selected tray is refilled, the printer immediately resumes printing from that tray, even if the other linked trays have not become empty.

- Single page offset  
The shift tray supports offsetting of jobs and copies of jobs to ease separation of the output. Offsetting is only performed for jobs or copies that contain two or more pages.

- Bin unloading

When the shift bin becomes full, a message is displayed and printing stops. When some or all of the paper is removed, printing resumes after a brief pause. If some of the paper is left in the bin when printing resumes, sheets of the current job may be stacked on top of sheets from an earlier job.

- Custom media types

PostScript and PCL jobs may select input media based on media size and media type requests. The media type request must identify the media type by name, using a name selected from a list of supported media type names. Additional media type names cannot be added to the printer. The provided drivers and the Job Ticket Composer fully enable selection of all supported media.

### Drivers and Languages

Drivers will be available in English only at GA and other languages available by June 2003. All other drivers remain unchanged. Other software that has changed is also listed.

| Platform            | DataStrm | Languages |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
|---------------------|----------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|---|----|---|
|                     |          | EN        | FR | IT | GR | SP | BP | DU | JP | SC | TC | RU | PO | HU | K | CZ |   |
| -----               |          |           |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
| POD Enabled Drivers |          |           |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
| -Windows ME/XP/2000 | PCL 6    | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| -Windows ME/XP/2000 | PS 3     | X         | X  | X  | X  | X  | X  | X  | X  |    |    |    |    |    |   |    |   |
| Composer            |          |           |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
| -Windows ME/XP/2000 |          | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| IPP Port Monitor    |          |           |    |    |    |    |    |    |    |    |    |    |    |    |   |    |   |
| -Windows XP/2000    |          | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |
| -Windows NT 4.0     |          | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X |

Languages: EN=English    SP=Spanish    SC=Simplified Chinese  
 FR=French    BP=Brazilian Portuguese    TC=Traditional Chinese  
 IT=Italian    DU=Dutch    RUS=Russian  
 GR=German    JP=Japan    PO=Polish  
 HU=Hungarian    K=Korean    CZ=Czech

| Source    | Languages |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |   |
|-----------|-----------|----|----|----|----|----|----|----|----|----|----|----|----|----|---|----|----|----|----|----|----|---|
|           | EN        | FR | IT | GR | SP | BP | DU | DA | FI | NO | SW | RU | PO | HU | K | CZ | TU | AR | JP | SC | TC |   |
| -----     |           |    |    |    |    |    |    |    |    |    |    |    |    |    |   |    |    |    |    |    |    |   |
| Pubs      | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  | X | X  | X  | X  | X  | X  | X  | X |
| Op Panel  | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    |    |   |    |    |    |    | X  |    |   |
| Web Pages | X         | X  | X  | X  | X  | X  | X  | X  | X  | X  | X  |    |    |    |   |    |    |    |    | X  |    |   |

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 DA=Danish    FI=Finnish    NO=Norwegian  
 SW=Swedish    TU=Turkish    AR=Arabic

### (#4920, #4921) Anti-Condensation Kit

- FC 4920 = factory, FC 4921 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

The features includes heating elements that mount under the paper drawers and keep moisture from building up. It is intended for

humid environments. This feature is not available in Japan as the printer shipped in Japan comes with this feature as standard.

### **(#4520, #4521) 4,550-Sheet High Capacity Feeder**

- FC 4520 = factory, FC 4521 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This feature has 3 trays for 4,550-sheet capacity. Trays 4 and 5 have 1,000-sheet capacity each and tray 6 has 2,550-sheet capacity.

### **(#4500, #4501) A3/11" x 17" Tray Kit**

- FC 4500 = factory, FC 4501 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This option supports large size media including A3/11 x 17 in. media. It replaces the standard tray 1 (tandem tray) which cannot be used again without a CE involvement. This tray is supported in tray 1 only and has a capacity of 1,000 sheets. Media supported in this tray include A3 SEF, B4 SEF, A4 SEF, A4 LEF, 11" x 17" SEF, Letter SEF, Letter LEF, and Legal SEF.

### **(#4620, #4621) 2-Hole Punch Kit for Finisher**

- FC 4620 = factory, FC 4621 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This option supports 2-hole punching in the European and Japan format.

Only one of the hole punch kits (FCs 4620/4621, 4622/4623, 4624/4625, 4626/4627, 4628/4629) can be installed at a time although multiple hole punch kits can be ordered.

### **(#4622, #4623) 2-Hole Punch Kit for Finisher**

- FC 4622 = factory, FC 4623 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This option supports 2-hole punching in the U.S. format.

Only one of the hole punch kits (FCs 4620/4621, 4622/4623, 4624/4625, 4626/4627, 4628/4629) can be installed at a time although multiple hole punch kits can be ordered.

### **(#4624, #4625) 3-Hole Punch Kit for Finisher**

- FC 4624 = factory, FC 4625 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This option supports 3-hole punching.

Only one of the hole punch kits (FCs 4620/4621, 4622/4623, 4624/4625, 4626/4627, 4628/4629) can be installed at a time although multiple hole punch kits can be ordered.

### **(#4626, #4627) 4-Hole Punch Kit for Finisher**

- FC 4626 = factory, FC 4627 = field

- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This option supports 4-hole punching.

Only one of the hole punch kits (FCs 4620/4621, 4622/4623, 4624/4625, 4626/4627, 4628/4629) can be installed at a time although multiple hole punch kits can be ordered.

#### **(#4628, #4629) 4-Hole Swedish Style Punch Kit for Finisher**

- FC 4628 = factory, FC 4629 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

This option supports Swedish style 4-hole punching.

Only one of the hole punch kits (FCs 4620/4621, 4622/4623, 4624/4625, 4626/4627, 4628/4629) can be installed at a time although multiple hole punch kits can be ordered.

#### **Third Party Enabler Features**

Infoprint 2085 and 2105 supports the following third party software enabler features:

#### **(#6120, #6121) LCDS/Metacode Channel Software Enablement**

- FC 6120 = factory, FC 6121 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = LCDS/Metacode Sun Channel Hardware Enablement (FC 6110/6111) or LCDS/Metacode ESCON Channel Hardware Enablement (FC 6150/6151), Co-requisite = none
- Conflict = LCDS/Metacode TCP/IP Software Enablement (FC 6130/6131)

Included in this feature is M.I.S. print channel software, integration, training, and one year warranty. M.I.S. print software converts LCDS/Metacode to PostScript. This feature requires the LCDS/Metacode Enablement Accessories and either the LCDS/Metacode Sun Channel Hardware Enablement feature or LCDS/Metacode Sun ESCON Channel Hardware Enablement feature.

#### **(#6130, #6131) LCDS/Metacode TCP/IP Software Enablement**

- FC 6130 = factory, FC 6131 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = LCDS/Metacode TCP/IP Sun Blade (FC 6160/6161)
- Conflict = LCDS/Metacode Channel Software Enablement (FC 6120/6121)

Included in this feature is M.I.S. print channel software, integration, training, and one year warranty. M.I.S. print software converts LCDS/Metacode to PostScript. This feature requires the LCDS/Metacode Enablement Accessories feature.

#### **(#6140, #6141) LCDS/Metacode Enablement Accessories**

- FC 6140 = factory, FC 6141 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = none

Included in this feature is extra software, hardware, or maintenance, in order to complete the M.I.S. print solution.

#### **(#6110, #6111) LCDS/Metacode Sun Channel Hardware Enablement**

- FC 6110 = factory, FC 6111 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = LCDS/Metacode Channel Software Enablement (FC 6120/6121), Co-requisite = none

Included in this feature is the Sun Blade workstation, Bus and Tag card, integration, and one year warranty. This feature includes all the hardware required to install the channel/ESCON version of M.I.S.

### **(#6150, #6151) LCDS/Metacode ESCON Channel Hardware Enablement**

- FC 6150 = factory, FC 6151 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = LCDS/Metacode Channel Software Enablement (FC6120/6121), Co-requisite = none

Included in this feature is the Sun Blade workstation, Bus and Tag card, integration, and one year warranty. This feature includes all the hardware required to install the channel/ESCON version of M.I.S.

### **(#6160, #6161) LCDS/Metacode TCP/IP Sun Blade**

- FC 6160 = factory, FC 6161 = field
- Minimum required = 0, Maximum allowed = 1
- Prerequisite = none, Co-requisite = LCDS/Metacode TCP/IP Software Enablement (FC 6130/6131)
- Conflict = LCDS/Metacode Channel Software Enablement (FC 6120/6121)

Included in this feature is hardware for running TCP/IP.

### **Feature Exchanges**

Not available.

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### **Accessories**

None.

### **Customer Replacement Parts**

None.

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### **Machine Elements**

None.

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### **Supplies**

None required with the machine order.

### **Diskettes**

None.

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