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Infoprint 4100-HS1 and 4100-PS1 Printers (4100-HS1 and 4100-PS1)

This section describes the Infoprint 4100-HS1 and Infoprint 4100-PS1 printer characteristics. The Infoprint 4100-HS1 and Infoprint 4100-PS1 are continuous-forms printers that use laser and electrophotographic technology to print text, images, graphics, and bar codes at up to 247 impressions per minute (ipm). The Infoprint 4100-HS1 has a hard hot roll which provides high print quality. The Infoprint 4100-PS1 has a soft hot roll which provides premium print quality.

The Infoprint 4100-HS1 and 4100-PS1 printers also have switchable 480/600 pels-per-inch resolution and the Print Quality Enhancement (PQE) function, which smooths edges on diagonal lines, protects fine details, improves the fidelity of images, and allows for adjustment of the boldness of text and the darkness of images.

Figure 41. Infoprint 4100-HS1 and 4100-PS1 Printers



Table 137 summarizes the printer characteristics for the Infoprint 4100-HS1 and 4100-PS1 printers.

Table 137. Infoprint 4100-HS1 and 4100-PS1 Printer Characteristics

Printer Characteristic	Infoprint 4100-HS1 Printer and 4100-PS1 Printer Characteristic Value
Print technology	Laser

Datastreams	IPDS Continuous
Form type	Continuous Up to 16 inch (406 mm) stack of paper (box)
Number of input bins	
Number of output bins Finisher attachments	Up to 14 inch (356 mm) stack of paper
	n/a
Manual forms feed	n/a
Envelope printing	n/a
MICR printing	yes ¹
Duplex printing	no
Color	yes ¹
Adjust print-quality levels	yes
Print resolution	480 dpi 600 dpi
Maximum printing rates for letter (8.5 x 11	inches)
inches per second	35
inches per minute	2100
Maximum printing rates for letter in pages	per minute ²
1-up landscape (8.5 inches long) simplex	247
1-up landscape (8.5 inches long) duplex	n/a
2-up portrait (11 inches long) simplex	381
2-up portrait (11 inches long) duplex	n/a
Maximum printing rates for 6 inch x 9 inch	in pages per minute
3-up portrait (9 inches long) simplex	700
3-up portrait (9 inches long) duplex	n/a
Maximum printing rates for A4 (210 x 297	mm)
mm per second	889
mm per minute	53340
Maximum printing rates for A4 in pages pe	r minute ²
1-up landscape (210 mm long) simplex	253
1-up landscape (210 mm long) duplex	n/a
2-up portrait (297 mm long) simplex	359
2-up portrait (297 mm long) duplex	n/a
Maximum printing rates for A5 (210 x 148	mm) in pages per minute
3-up portrait (210 mm long) simplex	761
3-up portrait (210 mm long) duplex	n/a
Maximum usage in pages per month (duty	cycles) ³
Letter: 1-up landscape (8.5 inches long)	6,000,000 simplex
Letter: 2-up landscape 11 inches long)	9,400,000 simplex
A4: 1-up landscape (210 mm long)	6,200,000 simplex
A4: 2-up landscape (297 mm long)	8,700,000 simplex
6 x 9: 3-up landscape	17,200,000 simplex
A5: 3-up landscape (210 mm long)	18,700,000 simplex

1. Customer Changeable Developer is available allowing the operator to change the developer, helping to increase system availability for MICR or highlight color printing. Please contact your IBM sales representative for availability status.

2. Maximum printing rate is the maximum number of pages of the indicated size and configuration that can be printed at the constant speed of paper movement shown for each printer. Rates for pages of different sizes and configuration can be calculated by dividing the form length into the printer speed. Actual printing rate will be less if the printer cannot reach this rate due to complexity or density of the data or the ability of the system to deliver data at this rate.

 Maximum usage is based on operating 7 days a week, 24 hours a day, at maximum printing rate with normal maintenance and operations activity. IBM does not recommend reaching this monthly maximum on consistent Previous Page | Next Page Contents Glossary Index IBM Printing Systems Printers > Infoprint 4100-HS1 and 4100-PS1 Printers (4100-HS1 and 4100-PS1) >

Printable Area

The printer can print to the horizontal page perforations and within $\frac{1}{2}$ -inch (12.7 mm) of either vertical (tractor hole) edge of the form. See <u>Figure 42</u>. With tractorless paper, the printer can print to $\frac{1}{2}$ -inch (12.7 mm) from either edge of the form without print quality degradation.

Print quality may be degraded when printing near folding perforations, an internal perforation, or any cut in the form. To ensure correct operation and print quality, maintain the following distances:

- From non-folding and internal perforations: 0.05-inch (1.27 mm)
- From folding perforations: for text, OCR, and bar codes: 0.33-inch (8.5 mm); for images and solid-area fill: 0.05-inch (1.27 mm)
- From binder holes and cuts: 0.1 inch-(2.54 mm).

Figure 42. Printable Area on the Infoprint 4100-HS1 and 4100-PS1 Printers



Refer to the Continuous Forms Advanced Function Printers: Forms Design Reference, G544-3921.

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Media Specifications

The Infoprint 4100-HS1 and 4100-PS1 printers accept the following media:

Media types:

Preprinted or blank fanfold forms, roll feed paper, some labels

Media widths:

Tractor Feed

8.3 to 19.5 inches (210 mm to 495 mm) with tractor feed

Tractorless Feed

8.0 to 19.5 inches (203 mm to 495 mm) with tractorless feed

Media lengths:

5.82 inches to 17 inches (148 mm to 432 mm) with tractor feed using the internal stacker

Media weights:

Model HS1

16 to 42 lbs. (60 to 160 gsm)

Model PS1

16 to 28 lbs. (60 to 105 gsm)

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Attachments

The Infoprint 4100-PS1 and 4100-HS1 printers support a maximum of two attachments. These attachments can be:

- System/370 parallel channel
- ESCON channel
- Token Ring (TCP/IP)
- Ethernet (TCP/IP)
- FDDI (TCP/IP)
- Gigabit Ethernet
- FICON

The two attachments may be the same (for example, 2 ESCON channels), or mixed (for example, 1 ESCON and 1 Token-Ring). The exception is that the printer can have only 1 TCP/IP attachment of any flavor. You cannot have 2 Token-Ring or 2 FDDI attachments, or a combination of 1 Token-Ring or 1 FDDI attachments.

System/370 Parallel Channel

For S/370 parallel channel attachment, a control unit position on a S/370 parallel block multiplexer channel is required on an IBM 4361, 4381, 3090, ES/9370, or ES/9000 processor. The following processors are also supported for S/370 parallel channel attachment, Parallel Enterprise Server Models R1, R2, and R3 S/390 G3 Enterprise Server, and the S/390 Multiprise 2000. Attachment is also supported via the 9034 ESCON converter model 1. The S/370 Channel is supported in MVS, VM, and VSE operating system environments.

ESCON Channel

The IBM Infoprint 4100-HS1 and 4100-PS1 may be attached natively to ESCON channels. Note that when attached via ESCON, the IBM Infoprint 4100 HS1 and 4100-PS1 is supported on the MVS, VM, and VSE operating systems only. The IBM Infoprint 4100 HS1 and 4100-PS1 may also be attached to selected PS/2, RS/6000, AS/400 models using Token-Ring (TCP/IP), or Ethernet (TCP/IP). Attachment is also supported via the 9032/9033 ESCON Directors, and 9036 ESCON Remote Channel Extender.

Token-Ring (TCP/IP) Attachment

The IBM Infoprint 4100 HS1 and 4100-PS1 is connected to the host Token-Ring through the IBM Token-Ring cabling via the Token-Ring High-Performance adapter, which is contained in the AFCCU. The attachment card and token-ring adapter cable P/N 53F3930 (approximately 4.6 m (15 ft)) in length are included with the IBM Infoprint 4100 HS1 and 4100-PS1. The control unit can be attached to either a 16Mbit/sec or a 4Mbit/sec Token-Ring LAN. The TCP/IP Token Ring Attachment will attach to the following devices:

- 8228 Token Ring Multistation Access Unit attached to an AS/400, PS/2, or RS/6000 processor.
- 8230 Token Ring Network Controller Access Unit attached to an AS/400, PS/2, or RS/6000 processor.
- 8228 Token Ring Multistation Access Unit attached to a 3172, 3174, 3745, 3725 or 3720 attached to a 3090, ES/9000, 308X or 4381 processor.
- 8230 Token Ring Multistation Access Unit attached to a 3172, 3174, 3745, 3725, or 3720 attached to a 3090, ES/9000, 308X or 4381 processor.

The printer may be located at a maximum distance of 100 meters (333ft.) from the 8228 Multistation Access Unit or 8230 Controlled Access Unit. The distance between the 8228 Multistation Access Units can be increased with either the 8220 or 8219 Optical Fiber Repeater.

Ethernet (TCP/IP) Attachment

An Ethernet Adapter Card (P/N 00G3369) is supplied with Specify Feature 9990 and Special Feature 4161. This is installed in the processor of the AFCCU of the IBM Infoprint 4100 HS1/PS1. The IBM Infoprint 4100 HS1/PS1 may then be attached to an Ethernet LAN via one of the following means:

- Ethernet Thin Coax
 - IBM Supplies a Thin Coax wrap connector (P/N 02G7433)
- Ethernet Thick Coax
 - IBM Supplies the Thick Coax wrap connector (D-shell connector; P/N 71F1167)
- Ethernet Twisted Pair
 - IBM Supplies a Twisted Pair Transceiver (P/N 00G2906)
 - IBM Supplies a Twisted Pair Wrap plug (P/N 00G2380)

FDDI (TCP/IP) Attachment

The FDDI (TCP/IP) attachment is supported in Infoprint Manager for AIX and Infoprint Manager for NT and 2000 printing environments.

The Infoprint 4100 printers are connected to the host FDDI through FDDI 62.5/125 multimode fiber cabling using SC connectors by way of the FDDI Single Station adapter that is contained in the AFCCU.

The FDDI (TCP/IP) attachment attaches to the following devices:

- Directly to the RS/6000
- 8260 Multiprotocol Intelligent Switching Hub attached to a RS/6000 processor.

The printers may be located at a maximum distance of 2 kilometers from the 8260 Multiprotocol Intelligent Switching Hub or RS/6000 processor.

Gigabit Ethernet Attachment

The Gigabit Ethernet attachment is supported in Infoprint Manager for AIX printing environments. The Infoprint 4100 printers are attached to the Ethernet LAN by way of a 62.5 mm SC fiber optic cable.

FICON Attachment

FICON channel attachment is supported in the PSF for OS/390 printing environments. The Infoprint 4100 printers may be attached natively to IBM FICON Channels (9672-G5, 9672-G6, and 900Z).

Attachment is also supported by way of the 2032 Director and the 2042 Director, as well as to the remote end of an IBM 2029 Dense Wavelength Division Multiplexor.