# InfoPrint 1985 (machine type 4856) offers fast printing for up to A3 and tabloid media

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# Overview



InfoPrint® Solutions Company, a Ricoh®-IBM joint venture, is enhancing its workgroup printer family with the introduction of the InfoPrint 1985 printer. This printer is the replacement for the InfoPrint 1585 printer.

This new monochrome laser printer offers printing speeds of up to 50 pages per minute (ppm)<sup>1</sup> on letter media and up to 50 ppm<sup>1</sup> on A4 media. Other benefits of the InfoPrint 1985 include:

- Faster processor than previous product
- Support for A3/tabloid media
- Enhanced security built-in
- · Numeric keypad with control buttons
- Gigabit Ethernet standard on all models

# **Key prerequisites**

None

<sup>&</sup>lt;sup>1</sup> Exact print speeds vary depending on document complexity, system configuration, software applications, driver, and printer status.

# Planned availability date

October 23, 2009

# Description

InfoPrint 1985 is the replacement for the InfoPrint 1585 workgroup printer. This new monochrome laser printer offers printing speeds of up to 50 ppm² on letter size media and up to 50 ppm² on A4 size media. This printer supports A3 and tabloid media. The printer comes in the following models:

Model	Standard memory	Maximum memory	USB	Processor	Duplex	Standard 1000BaseTX
n02, n01	256 МВ	1280 МВ	Standard	800 MHz	No	Yes
dn2, dn1	256 MB	1280 MB	Standard	800 MHz	Standard	Yes

All models include two 500-sheet drawers and a 100-sheet multipurpose feeder (MPF) for a total input capacity of 1,100 sheets standard. Up to two optional input sources are supported for a total maximum input capacity of 5,100 sheets. Standard output capacity is 500 sheets with a maximum output capacity of 3,800 sheets.

## **Memory**

All models have one slot for additional SDRAM memory. Memory options for the printer include 256 MB, 512 MB, or 1024 MB memory DIMMs. All models have one slot for the optional 256 MB flash memory card. All models have a slot for an optional hard disk.

#### **Network connections**

All models include internal 1000BaseTX (Gigabit Ethernet) as standard.

The internal wireless feature allows the printer to be connected directly to a wireless LAN. This supports the IEEE 802.11b, 802.11g, and 802.11n draft 2.0 standards. Draft 2.0 refers to the version of the not-yet-ratified IEEE 802.11n standard.

#### **Usage rates**

The maximum monthly usage for the InfoPrint 1985 is 300,000 impressions. InfoPrint Solutions Company does not recommend printing to the monthly maximum on a consistent basis.

#### **Print quality**

The print resolutions supported by the printer are:

- 1200 x 1200 dpi
- 2400 image quality<sup>3</sup> (default mode)
- 600 x 600 dpi
- 300 dpi

<sup>&</sup>lt;sup>2</sup> Exact print speeds vary depending on document complexity, system configuration, software applications, driver, and printer status.

<sup>&</sup>lt;sup>3</sup> The 2400 Image Quality (IQ) enhancement is a special print mode designed to vary the intensity of each individual printed dot by manipulating its size to produce the

appearance of greater print resolution within the limitation of a set number of dots per inch (dpi).

The toner darkness setting offers 10 user-selectable settings to balance print darkness and toner savings. The higher the setting, the darker the print (that is, level 1 is the lightest). The printers ship with a default setting of 8. Level 8 to level 1 offers up to 50% toner savings, thus reducing the cost of printing. The toner darkness setting is available through the operator panel under the Quality menu and also accessible from the print driver.

Because of the printing technology, setting 9 and 10 do not provide darker print than the default setting of 8.

## Font support

The InfoPrint 1985 printer resident fonts include support for the following:

Emulation	Number of scalable fonts	Number of bitmapped fonts
PCL 6	89	2
PostScript	158	0
PPDS	39	5

The fonts in the PCL emulation are compatible with the fonts in the HP LaserJet 4550, and include nine additional fonts and many extra symbol sets to support extra languages and applications. Included in the PCL emulation are OCR-A, OCR-B, and Code 3 of 9 barcode fonts. The fonts in the PostScript® emulation are compatible with all 136 fonts in Adobe® PostScript 3 and include 22 additional fonts.

Additional fonts can be downloaded to the printer RAM, optional user flash, or the hard disk.

The CD-ROM shipped with the printer includes screen fonts to match the printer's resident scalable fonts. The Software and Documentation CD also contains a variety of downloadable fonts for Hebrew and Arabic.

#### **Features**

The printer supports the following features:

```
Part
number Description
39V0943 2 x 500-Sheet Drawer
39V0944 2000-Sheet Dual Input
39V0947 2,000-Sheet High Capacity Feeder
39V0945 2/3 Hole Finisher
39V0946 2/4 Hole Finisher
75P6949 Duplex Unit
39V3415 256 MB Memory
39V3416 512 MB Memory
39V3417 1024 MB Memory
39V3593 256 MB Flash Memory
39V3420 80 GB Hard Disk
39V3889 Bar Code Card
39V3463 Decryption Card
39V3633 \text{ IPDS}^{\overline{\text{TM}}} \& SCS/Tne Card
39V1524 Ethernet 10/100BaseTX (1 USB port)
39V1525 Ethernet 1000BaseTX (4 USB ports)
75P6855 802.11g Wireless to USB (EMEA)
75P6856 802.11g wireless to USB (UK/Ireland)
39V3624 802.11b/g/n Wireless Print Server
39V3423 Parallel 1284-B Interface Card
39v3424 RS-232C Serial Interface Card
75P7029 10 ft. Parallel Cable
75P7030 2-meter USB Cable
39V3618 Korean Font Card
39v3619 Simplified Chinese Font Card
```

39V3620 Traditional Chinese Font Card 39V3621 Japanese Font Card 39V3890 Printer Stand with Cabinet

Wireless features are not available in Russia, South Africa, and Turkey.

# Accessibility by people with disabilities

# For hardware offerings

The following features support use by people with disabilities:

- Controls and latches are operable with one hand and minimal dexterity.
- Keys are discernible by touch without activating them.
- The display, controls, latches, and levers are accessible to someone in a wheel chair.
- Color is used as an enhancement for conveying information, as well as an additional method of distinguishing between buttons, controls, and latches.

## **Product number**

Mach type Model	Part number Description	UPC
Austria, Belgium, Turkey, Finland, N	France, Germany, Greece, Netherlands, Norway, Sweden	Russia, Spain,
4856 n02 4856 dn2	39V3743 InfoPrint 1985 39V3744 InfoPrint 1985	8-45481-00102-9 8-45481-00103-6
Denmark 4856 nO2 4856 dn2	39V3745 InfoPrint 1985 39V3746 InfoPrint 1985	8-45481-00104-3 8-45481-00105-0
Israel 4856 nO2 4856 dn2	39V3749 InfoPrint 1985 39V3750 InfoPrint 1985	8-45481-00108-1 8-45481-00109-8
Italy 4856 nO2 4856 dn2	39V3751 InfoPrint 1985 39V3752 InfoPrint 1985	8-45481-00110-4 8-45481-00111-1
South Africa 4856 nO2 4856 dn2	39V3753 InfoPrint 1985 39V3754 InfoPrint 1985	8-45481-00112-8 8-45481-00113-5
Switzerland 4856 nO2 4856 dn2	39V3755 InfoPrint 1985 39V3756 InfoPrint 1985	8-45481-00114-2 8-45481-00115-9
UK 4856 n02 4856 dn2	39V3757 InfoPrint 1985 39V3758 InfoPrint 1985 39V3633 IPDS and SCS/TNe Card 39V3889 Bar Code Card 39V3890 Printer Stand with Cabinet	8-45481-00116-6 8-45481-00117-3 8-83436-04874-3 8-45481-00177-7 8-45481-00178-4

## **Publications**

http://www.infoprint.com

The following publications are shipped with the products:

#### Software and Documentation CD

## User's Guide (contained on CD)

The *User's Guide* will be available in the following languages: Arabic, English, Danish, Dutch, Finnish, French, German, Hebrew, Italian, Korean, Norwegian, Polish, Brazilian Portuguese, Romanian, Russian, Spanish, Swedish, Simplified Chinese, Traditional Chinese, and Turkish.

#### **Operator Panel**

The Operator Panel will be available in the following languages: English, Danish, Dutch, Finnish, French, German, Italian, Norwegian, Polish, Brazilian Portuguese, Russian, Spanish, Swedish, Turkish, Simplified Chinese, Traditional Chinese, Korean, and Japanese.

## **Technical information**

## Specified operating environment

#### **Dimensions**

	Width	Depth	Height	Weight
All	616.0 mm <sup>4</sup>	520.0 mm	475.0 mm	45.6 kg
models	(24.25 in)	(20.5 in)	(18.7 in)	(100.5 lb)
2,000-she	eet 540.0 mm	520.0 mm	292.0 mm	29.5 kg
	(21.3 in)	(20.5 in)	(11.5 in)	(65.0 lb)

<sup>&</sup>lt;sup>4</sup> Extending MPF fully adds 13 inches (330 mm).

# Minimum clearance requirements

Left side	Right side	Front	Rear	Тор
200.0 mm	460.0 mm	642.0 mm	200.0 mm	200.0 mm
(7.8 in)	(18.1 in)	(25.3 in)	(7.8 in)	(7.8 in)

**Note:** When installing the printer, the customer should allow enough room to access the paper trays and paper exits.

### Operating environment

Operating environment

Temperature: 16° to 32° C (60° to 90° F)
Humidity: 8% to 80% relative humidity
Altitude: 0 to 3,048 meters (10,000 ft)

Storage and shipping environment (packed)

- Temperature: -40° to 43.3° C (-40° to 110° F)
- Humidity: 5% to 95% relative humidity
- Altitude: 0.25 atmospheric pressure (equivalent to 10,300 m; 34,000 feet)

Storage and shipping environment (unpacked)

- $\bullet$  Temperature: 0° to 40° C (32° to 104° F)
- Humidity: 5% to 80% relative humidity

## **Electrical specifications**

### Low-voltage models

- 100 127 V ac at 50 60 Hz, nominal
- 90 137 V ac, extreme

### High-voltage models

- 220 240 V ac at 50 60 Hz (not available in all countries)
- 198 259 V ac, extreme

## Average power consumption

The following table specifies nominal average power requirements for the base printer configuration for InfoPrint 1985.

Printing states	All	models
Off Power saver mode Ready mode Simplex printing Duplex printing	8 100 700 560	W
Typical electricity consumption Normal mode Eco mode	6.00	kwh/wk
Maximum current while printing 115 Volts 230 Volts		(rms)

Note: All duplex models are Energy Star compliant.

#### **Acoustics**

All measurements were made in accordance with ISO 7779 and reported in conformance with ISO 9296.

Mode	1 meter average sound pressure level (dBA)	Declared sound power level (Bels)
Simplex	55	7.1
Duplex	58	7.4
Ready	22	3.8

#### **Planning information**

# Customer responsibilities

This printer is designed as Customer Setup Unit (CSU). The customer is responsible for:

- · Adequate site, system, and other vendor preparation
- · Receipt at the customer location and placement of the printer
- Installation and configuration of the printer and features by following the installation instructions, including:
  - Installing and maintaining cables
  - Loading print media and clearing jams
  - Performing low-level problem determination
  - Ordering and installing supplies and consumables
- Working with InfoPrint Solutions Technical Support to complete low-level problem determination including:

- Downloading and installing microcode updates as directed by the InfoPrint Solutions Technical Support Center
- Replacing defective features that were installed as part of the customer setup process

It is the customer's responsibility to order and maintain an adequate inventory of toner cartridges and maintenance supplies.

#### Cable orders

No attachment cables are required for this feature.

#### Supplies

No supplies are required with the machine order. InfoPrint 1985 is shipped with 35,000-impressions<sup>5</sup> print cartridge. Refer to the following table for replacement print cartridges. It is the customer's responsibility to order and maintain an adequate inventory of toner cartridges and maintenance supplies.

#### Consumables

The following replacement supplies are available for InfoPrint 1985:

Description	Part Model number Approximate average yield <sup>5</sup>
Toner cartridge	All 39v3628 35,000 impressions
Staple pack	All 75P6997 15,000 staples
Photoconductor <sup>6</sup>	All 39v3629 60,000 impressions

<sup>&</sup>lt;sup>5</sup> Approximate yield has been established with an average coverage of 5%. An impression is defined as one printed side of a sheet. A duplex sheet would consist of two impressions.

The approximate average yields are not a warranty or guarantee of minimum life, and are provided to assist in initial supplies planning. Actual usage should be used to establish the supply's life in the end user's application. Many factors (for example, print coverage per page, machine settings, paper type and size, and environmental conditions) can affect supply life.

## Maintenance supplies

The following maintenance supplies are available for InfoPrint 1985:

Description	Models	Part number	Approximate average yield
110V Maintenance Kit	All	39V2603	300,000 pages
220V Maintenance Kit	All	39V2604	300,000 pages

All maintenance supplies are customer installable. Installation services are available at InfoPrint Solutions Company's current billable service rate for this product, with a one-hour minimum. The maintenance kits must be purchased separately by the customer before contacting InfoPrint Solutions Company for installation.

Supply warranties are only for defects in materials and workmanship at the time of shipment and installation. They are not for print count life or normal wear and tear, nor for any print count minimum. Contact your place of purchase for warranty return instructions.

InfoPrint Solutions Company is committed to environmentally conscious programs for printer supplies. A collection program for used printer cartridges has been

<sup>&</sup>lt;sup>6</sup> Yield based on an average of six pages per job and approximately 5% coverage per page. Yields may vary based on actual customer usage.

established and return instructions are included in the supply item packaging, with free return shipping.

To call InfoPrint Solutions Company Supplies Fulfillment Operations (ISFO) at PFS, contact 31-43-350 2756 (within the Netherlands call: 043-350 2756). Toll-free numbers to ISFO have been established in the following countries:

Belgium	0800-71950
Denmark	800-15534
Finland	08001-13112
France	0800-905871
Italy	800-878349
Germany	800-1818005
Norway	800 11389
Spain	900-983131
Sweden	0207-94270
UK	0800-968679

# **Pallet quantity**

The pallet quantity for InfoPrint 1985 is one printer per pallet.

## Security, auditability, and control

This product uses the security and auditability features of the host hardware, host software, and application software.

The customer is responsible for evaluation, selection, and implementation of security features, administrative procedures, and appropriate controls in application systems and communications facilities.

## **Global Technology Services**

Contact your InfoPrint Solutions Company representative for the list of selected services available in your country, either as standard or customized offerings, for the efficient installation, implementation, and/or integration of this product.

### **Terms and conditions**

### Warranty period

Twelve months

#### Warranty service

If required, InfoPrint Solutions Company provides repair or exchange service depending on the types of warranty service specified for the machine. InfoPrint Solutions Company will attempt to resolve your problem over the telephone, or electronically via an InfoPrint Solutions Company Web site. You must follow the problem determination and resolution procedures that InfoPrint Solutions Company specifies. Scheduling of service will depend upon the time of your call and is subject to parts availability. If applicable to your product, parts considered Customer Replaceable Units (CRUs) will be provided as part of the machine's standard warranty service.

Service levels are response time objectives and are not guaranteed. The specified level of warranty service may not be available in all worldwide locations. Additional charges may apply outside InfoPrint Solutions Company's normal service area. Contact your local InfoPrint Solutions Company representative or your reseller for country- and location-specific information. This product is covered by the following types of service.

Customer Replaceable Unit Service and On-site for other selected parts.

CRU: InfoPrint Solutions Company provides replacement CRUs to you for you to install. CRU information and replacement instructions are shipped with your machine and are available from InfoPrint Solutions Company upon your request. CRUs are designated as being either a Tier 1 or a Tier 2 CRU.

Tier 1 CRU: Installation of Tier 1 CRUs is your responsibility. If InfoPrint Solutions Company installs a Tier 1 CRU at your request, you will be charged for the installation.

Tier 2 CRU: You may install a Tier 2 CRU yourself or request InfoPrint Solutions Company to install it, at no additional charge.

Based upon availability, CRUs will be shipped for next-business-day delivery. InfoPrint Solutions Company specifies, in the materials shipped with a replacement CRU, whether a defective CRU must be returned to InfoPrint Solutions Company. When return is required, (1) return instructions and a container are shipped with the replacement CRU and (2) you may be charged for the replacement CRU if InfoPrint Solutions Company does not receive the defective CRU within 15 days of your receipt of the replacement.

The following parts have been designated as Tier 1 CRU parts:

- · All output devices
- Memory cards
- · Optional firmware cards
- Option cards
- · Wireless adapters
- All external adapters
- Op panel overlay
- Data cables and adapters (including USB, Serial, Parallel, telephone fax line, scanner)
- All power cords
- Hard drives
- All input devices
- Machine covers
- Furniture and furniture parts (including stands, cabinet and shelves)
- Stacker arm
- Scanner op panel
- · Scanner op panel cover
- Scanner power supply
- Scanner control unit

Standard tier 1 CRU items listed would not apply if the specific product does not include that function or feature.

On-site Service: InfoPrint Solutions Company will repair the failing machine at your location and verify its operation. You must provide a suitable working area to allow disassembly and reassembly of the machine. The area must be clean, well-lit, and suitable for the purpose.

• InfoPrint Solutions Company On-site repair Limited, Next Business Day On-site Response Time, Latest Call Registration 15:00, 9 hours per day, Monday through Friday, excluding public or national holidays

or

<sup>&</sup>lt;sup>7</sup> All furniture products will have a one year (12 months) warranty with delivery of this warranty through replacement CRUs shipped direct to the customer for customer installation. After the one year warranty, repair or replacement of the furniture is customer responsibility.

 InfoPrint Solutions Company On-site Repair, Next Business Day On-site Response Time, Latest Call Registration 3:00 p.m., 9 hours per day, Monday through Friday, excluding public or national holidays

# Warranty and maintenance

# Warranty period

Twelve months

## Warranty service

- Technical support during warranty period
- InfoPrint Solutions Company On-site Repair (IOR) 9 x 5, next business day

# Warranty service upgrades

• IOR 24 x 7, same day (may not be available in all locations, please contact your local InfoPrint representative to confirm the available offerings for your printer)

## Post-warranty service

- IOR 9 x 5, Monday through Friday, excluding holidays, next-business-day response
- IOR 24 x 7, same day (may not be available in all locations, please contact your local InfoPrint representative to confirm the available offerings for your printer)

#### **ServicePacs**

The following Electronic ServicePac® (Epac) for InfoPrint 1985 are available:

Mach		Part
type	SPac offering	number
4556	1 YR IOR 7x24 SBD	68Y4888
4856	2 YR IOR 5x9 NBD	68Y4889
4856	2 YR IOR 7x24 SBD	68Y4890
4856	3 YR IOR 5x9 NBD	68Y4891
4856	3 YR IOR 7x24 SBD	68Y4892
4856	4 YR IOR 5x9 NBD	68Y4893
4856	4 YR IOR 7x24 SBD	68Y4894
4856	1 YR IOR 5x9 NBD PW	68Y4895
4856	1 YR IOR 7x24 SBD PW	68Y4896

## Maintenance processing

Low end

#### Period of maintenance service

9 x 5

# Hourly service class

Two

## Maintenance billing

Monthly

# Usage plan machine

No

### Maintenance service offerings

This machine is eligible under terms and conditions of the InfoPrint Solutions Company ServiceSuite $^{\text{TM}}$ , the Enterprise Service Agreement (ESA), or under the Maintenance Agreement. Consult your InfoPrint Solutions Company representative for details.

When a type of service involves the exchange of a machine part, the replacement may not be new, but will be in good working order.

#### Field-installable features

Yes

#### Model conversions

No

#### Machine installation

Customer setup. Customers are responsible for installation according to the instructions InfoPrint Solutions Company provides with the machine.

### Graduated program license charges apply

No

#### Licensed internal code and licensed machine code

This product does not contain Licensed Internal Code or Licensed Machine Code.

#### **Prices**

For all local charges, contact your InfoPrint Solutions Company representative.

#### **Announcement countries**

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Israel, Italy, Netherlands, Norway, Russia, Spain, Sweden, Switzerland, South Africa, Turkey, and UK.

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