

Printer Configuration

The tables list Phaser 6500/WorkCentre 6505 printer configuration

Single-Function Printer (SFP) Configuration

Features	Phaser 6500
Processor Speed	400 MHz
Memory Configuration ^a	256 MB
Print Speed (Color/Mono A-size)	24/24
Resolutions (dpi)	
Standard	600 x 600 x 1 bit
Enhanced	600 x 600 x 4 bit
PostScript 3 and PCL6 Fonts	Standard
USB 2.0 Support	Standard
Ethernet Interface	10/100/1000 Base-TX
Manual Feed slot (Single sheet)	Standard
Tray 1 (250 Sheets)	Standard
Tray 2 (250 Sheets)	Optional
Duplex Unit	Optional
Wireless LAN	Optional

a. Printer has one memory slot supporting 256 MB, 512 MB, or 1024 MB DDR2 DIMMs, to a maximum of 1280 MB (256 MB standard + 1024 MB optional).

Multi-Function Printer (MFP) Configuration

Features	WorkCentre 6505
Processor Speed	400 MHz
Memory Configuration ^a	256 MB
Print Speed (Color/Mono A-size)	24/24
Resolutions (dpi)	
Standard	600 x 600 x 1 bit
Enhanced	600 x 600 x 4 bit
PostScript 3 and PCL6 Fonts	Standard
USB 2.0 Support	Standard
Ethernet Interface	10/100/1000 Base-TX
Manual Feed slot (Single sheet)	Standard
Tray 1 (250 Sheets)	Standard
Tray 2 (250 Sheets)	Optional
Duplex Unit	Optional
Wireless LAN	Optional

a. Printer has one memory slot supporting 256 MB, 512 MB, or 1024 MB DDR2 DIMMs, to a maximum of 1280 MB (256 MB standard + 1024 MB optional).

The listed items have limited life and require periodic replacement.

Maintenance Items

Item	Print Life
Imaging Unit	Approximately 30,000 pages
Fuser	Up to 50,000 pages
Separator Roll	Up to 50,000 pages
Feed Roller	Up to 50,000 pages
ADF Feed Roller Assembly (MFP only)	Approximately 35,000 sheets
ADF Separator Pad Assembly (MFP only)	Approximately 35,000 sheets

Note

Print life is based on “typical” office printing and 5 % coverage per color on 24 lb. paper. Print life figures are not guaranteed and varies depending on usage habits. Imaging Unit print life is based on 3-page jobs using letter-size paper.

Consumables

Consumables consist of 4 Toner Cartridges. Each Toner Cartridge (except starter cartridges) has a CRUM (Customer Replaceable Unit Monitor) to record regional and toner usage information. The CRUM maintains a count of the amount of toner consumed. When the count reaches set values, warning and error messages are displayed to notify the user when near and end of life status is reached.

CMY Toner is not consumed when printing in Black and White mode or when printing Gray scale.

Life ratings are based on A-size sheets at 5 % coverage.

Toner Cartridge	Print Life	
	C,M,Y	Black
Starter Capacity	1,000 pages	1,000 pages
Standard Capacity	1,000 pages	—
High Capacity	2,500 pages	3,000 pages

Note

Starter capacity cartridges are packaged with the printer when shipped from the factory. These starter cartridges are not available for order.

Specifications

Printing Specifications

Characteristic	Specification	
Printing Technology	Recording System: Tandem electro-photographic system using OPC Drum and direct transfer by the Transport Belt	
	Exposure System: 4 semiconductors laser beam scanning system	
	Transfer System: Four-color finished toner image is transferred onto the paper	
	Fusing System: Thermal fusing system by Free Belt Nip Fusing (FBNF)	
Print Volume	Average	450 PV/month
	Maximum	40,000 PV/month
	Median	300 PV/month
Color Medium	Cyan, Magenta, Yellow, and Black Toner Cartridges	
Resolution / Addressability (dpi)	Standard	600 x 600 x 1
	Enhanced	600 x 600 x 4
Print-Quality Mode	600 x 600 x 1bit (Standard) 600 x 600 x 4bit (Enhanced)	
Average Image Coverage	Color	5 % each CMYK
	Mono	5 %
Maximum Image Coverage	240 % for all C, M, Y, K combined	
Printer Life	100,000 pages	
Maximum Duty Cycle	40,000 pages/month*	
Warm-Up Time	Less than 30 seconds from Power On	
Operating System	Windows	2003/2008 Server/ XP/ Vista/ Windows7
	Macintosh	OS 10.5 and greater
	Linux	Redhat and SuSe
* Assumes a 30 day month of printing.		

Scanning Specifications

Characteristic	Specifications
Scanning Mode	<ul style="list-style-type: none"> ■ Platen Mode: Scan document using the document glass ■ Constant Velocity Transport (CVT) Mode: Scan document via the Automatic Document Feeder (ADF)
Maximum Scan Size	<ul style="list-style-type: none"> ■ Platen Mode: 215.9 mm x 297 mm (8.5 in. x 11.7 in.) ■ CVT mode; 215.9 mm x 355.6 mm (8.5 in. x 14 in.)
Media Size	
Minimum	<ul style="list-style-type: none"> ■ Fast Scan Direction: 148 mm (5.8 in.) ■ Slow Scan Direction; 210 mm (8.3 in.)
Maximum	<ul style="list-style-type: none"> ■ Fast Scan Direction: 215.9 mm (8.5 in.) ■ Slow Scan Direction: 355.6 mm (14.0 in.)
USB Scanning	
Resolution	1200 x 1200 dpi optical, up to 9600 dpi interpolated
<ul style="list-style-type: none"> ■ Scan Interface ■ File Formats 	TWAIN/ WIA 2.0 BMP, JPG, PDF, TIFF
Network Scanning	
Resolution	Up to 600 dpi
Color Mode	Color, Black & White
Original Type	Text, Photo, Mixed
File Format	JPG, PDF, TIFF
Lighter/Darker	7 levels
Sharpness	3 levels
Contrast	3 levels
Auto Exposure	Off, Normal, Higher (1, 2)
Scan to Desktop via SMB	Up to 6 SMB servers
Scan to FTP	Up to 6 FTP servers
Scan to E-mail	Yes (no individual user log in)

Scan Performance

Function	Document	Black & White	Color
USB Scan to Computer (TWAIN/WIA)	Document Glass, 300 dpi, 24-bit color, letter size	<20 sec.	<20 sec.
USB Scan to Computer (via Express Scan Manager)	Document Glass, 300 dpi, 24-bit color, letter size	<15 sec.	<15 sec.
Network Scan to Computer via SMB	Document Glass, 150 dpi, mixed, letter size	<15 sec.	<15 sec.
Scan to USB Thumb Drive	Document Glass, default	12 sec.	17 sec.

Copy Specifications

Copy Specifications

Characteristic	Specifications
Resolution	<ul style="list-style-type: none"> ■ Black & White: 600 x 600 dpi ■ Color: 600 x 600 dpi
Copy Mode	Color, Black & White
Output Type	Standard, Enhanced (Best)
Original Type	Text, Photo, Text/Photo
Reduce/Enlarge	25 % -400 %
Lighter/Darker	7 levels
Color Saturation	3 levels
Sharpness	3 levels
Color Balance	4 colors, 3 densities, 5 levels
Auto Exposure	Off, Normal, Higher (1, 2)
Number of Copies	1-99
Multiple Up (N to 1)	Off, Auto, ID Copy, Manual
Duplex Copy	On, Off
Poster	2x2, 3x3, 4x4
Auto Fit	On, Off
Cloning	On, Off
Collate (max pages)	<ul style="list-style-type: none"> ■ Color: 50 ■ B/W: 50

Fax Specifications

Fax Specifications

Characteristic	Specifications
Communication Mode	<ul style="list-style-type: none"> ■ Priority 1: ITU-T Super G3 ■ Priority 2: ITU-T G3 ECM ■ Priority 3: ITU-T G3
Resolution	B&W (Fast Scan x Slow Scan)
Lines:	<ul style="list-style-type: none"> ■ 8 pixels x 3.85 line / mm ■ 8 pixels x 7.7 line / mm ■ 8 pixels x 15.4 line / mm ■ 16 pixels x 15.4 line /mm
Pixels	<ul style="list-style-type: none"> ■ 400 x 400 ppi / 25mm ■ 300 x 300 ppi / 25mm ■ 200 x 200 ppi / 25mm ■ 100 x 100 ppi / 25mm
Supported Protocols	<ul style="list-style-type: none"> ■ V. 34 (Max.33.6 kbps) ■ V. 17 (14.4/12/9.6/7.2 kbps) ■ V. 29 (9.6/7.2 kbps) ■ V. 27ter (4.8/2.4 kbps)
Compression Format	B&W: 1-bit, JBIG, MMR, MR, MH Color: Not supported
Incoming Call Control	Telephone Mode, Fax Mode, Telephone/ Fax Mode, Answering Machine Mode, Distinctive Ring Pattern Detection (DRPD)
Lighter/Darker	7 levels
DM Protection	Reject junk Fax
Forwarding & Local Print	Supported
Color Fax	Not supported.
Fax Address Book	Up to 200 Speed Dial numbers and up to 6 Group Dial numbers stored in device memory. The Group Dial Numbers may have up to 200 Fax numbers associated with each group; however, the total number of allowable Fax numbers for all groups is 200.
Lan Fax	
Resolution	Normal: 200 x 100 dpi Fine: 200 x 200 dpi Super Fine: 400 x 400 dpi
Driver	PCL driver - supported PS driver - not support
Color	Not supported
Delayed Start	Up to 24 hours
Broadcast Sending	Up to 30 destinations
Zoom	25 % -400 % (same as printer driver)

Fax Specifications (continued)

Characteristic	Specifications
Auto Reduction/ Enlarge (Auto Fit)	On/Off (same as printer driver)
Rotation	On/Off (same as printer driver)
N-Up	1/ 2/ 4/ 8/ 16/ 32 (same as printer driver)
Watermark	Supported (same as printer driver)
Phone Book	Up to 500 Speed Dial numbers and up to 500 Group Dial. Local phone book stored on PC not linked device.

Memory Specifications

Characteristic	Specifications
Memory	Minimum 256 MB On Board memory
	Maximum 1280 MB
Supported RAM	Supports one 256, 512, or 1024 MB DDR2 SODIMM in expansion slot.

Electrical Specifications

Characteristic	Specification
Power Supply Voltage/Frequency	
Line Voltages	110-127 VAC \pm 10 %
	220-240 VAC \pm 10 %
Frequency Range	50/60 Hz \pm 3 Hz
Current Capacity	110 V Engine: < 9 A 220 V Engine: < 5 A
Power Consumption (with all options, 110 or 220 V)	
Power Saver Mode	5 W or less
Standby Mode (Fuser On)	50W or less
Color Continuous Printing	280W or less
B/W Continuous Printing	280W or less

Print Speed

Resolution	Color A/A4	Mono A/A4
600 Standard	24/24	24/24
600 Enhanced	24/24	24/24

Environmental Specifications

Note

Image quality is guaranteed in the optimum ranges for temperature and humidity, which represent a general office environment.

Characteristic	Specification	
Temperature		
Optimum	15 to 28° C (59 to 82° F)	
Operating	10 to 32° C (50 to 90° F)	
Standby	-20 to 40° C (-4 to 104° F)	
Humidity (% RH)		
Optimum	20 to 70% RH	
Operating	15 to 85% RH	
Standby	5 to 85% RH	
Altitude		
Operating	0 to 3,100 meters (10,171 feet)	
Acoustic Noise LWA(B)	Sound Power Level (B)	Sound Pressure (dBA)
Printing	6.46	51.6
Standby	4.3	25.7

Operating Mode

Mode	Condition	Description
Running Mode		There are three running modes: <ul style="list-style-type: none"> ■ Print mode – the print engine operates for printing and report printing in the SFP, and for printing, copying, Fax received printing, and report printing in the MFP. ■ Scan mode (MFP only) – the IIT is operating for copy, local, and network scanning, and for Fax sending. ■ Fax communication mode (MFP only) – Fax sending/receiving is in progress.
	Exposure	The Laser Unit Motor runs at the operating speed.
	Recording	The system is operating.
	Fusing	Maintained at operating temperature.
	IIT	Scanner or ADF is in operation, scanning lamp is on.
	Cooling Fan	The fan operates at high speed.
	Control Panel Operation	LCD - Backlight: On LED - Ready LED is On.
Ready Mode		The printer is in standby status, ready to run.
	Exposure	The system is at Pause.
	Recording	The system is at Pause.
	Fusing	The system keeps the standby temperature.
	IIT	The Scanner and ADF are in a standby status, ready to run.
	Cooling Fan	The fan operates at low speed.
	Control Panel Operation	LCD - Backlight: On LED: If printer is online, Ready LED is On.
Power Saver Mode (Deep Sleep)		The printer enters Power Saver mode when it has not received print data for the specified time.
	Exposure	The system is at Pause.

Mode	Condition	Description
	Recording	The system is at Pause.
	Fusing	The system is Off.
	IIT	The Scanner and ADF are off.
	Cooling Fan	The system is Off.
	Control Panel Operation	LCD: Off, LCD Backlight: Off LED: Wake Up LED is On.

NOTE When the printer receives a print or Fax job or the Wake Up/Power Saver button is pressed, the printer exits the Power Saver mode and enters the Ready mode.

First Print Output Time

First Print Output Time (FPOT) is defined as a time from when the engine receives a Start signal in Ready state, until a single page is delivered to the output tray.

The following conditions are applied:

- The Controller does not keep the print engine waiting
- The printer is at Ready mode
- Paper is A size Short Edge Feed (SEF)
- Process control time is not included

Mode	Tray	FPOT (sec.) ^a
Color	Tray	13.0 sec. or less
	Manual Feed	13.0 sec. or less
Mono	Tray	12.0 sec. or less
	Manual Feed	12.0 sec. or less

a. Maximum FPOT time is 18 seconds for mono or color. If the preceding job was all mono, and the first page in the next job is mono, FPOT is 12 seconds. If the last job had any single color page, and the first page in the next job is color, FPOT is 13 seconds. If the printer has to switch modes, FPOT is 18 seconds.

First Copy Output Time

First Copy Output Time (FCOT) is the time required for the printer to deliver the first sheet of paper after the user presses Start. The following conditions are applied:

- The Controller does not keep the print engine waiting
- The printer is at Ready mode
- Paper is A size Short Edge Feed (SEF)
- The original is on the document glass or in the ADF
- Process control time is not included

Mode	FCOT (sec.)
Color	30.0 sec. or less
Mono	21.0 sec. or less

Physical Dimensions and Clearances

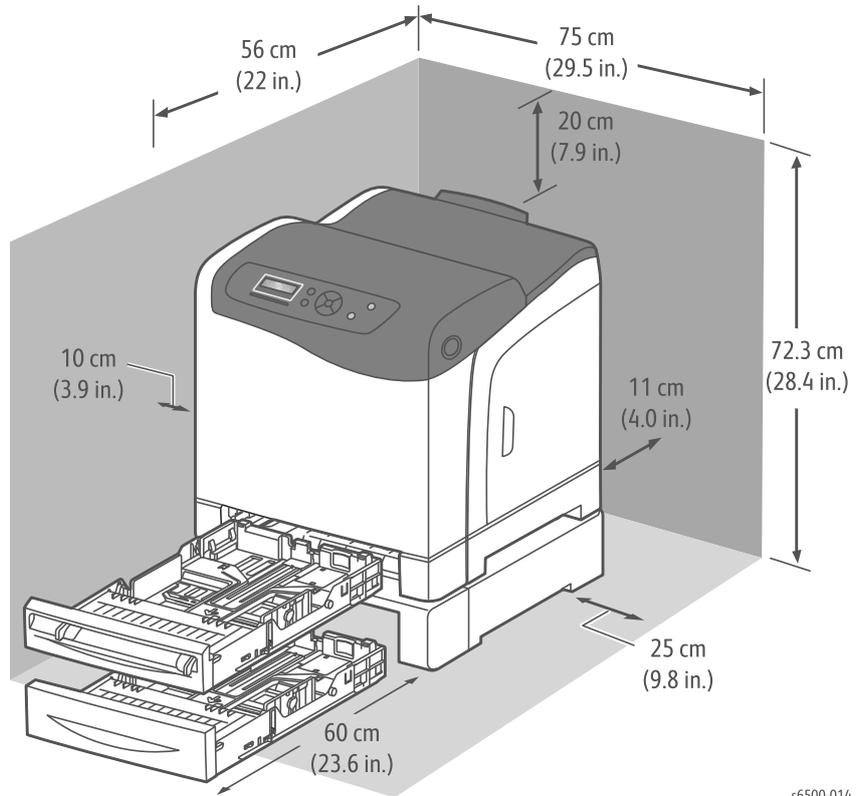
SFP Dimensions

Characteristic	Measurement
Height	416 mm (16.4 in.)
Height with 250-Sheet Feeder	524 mm (25.9 in.)
Width	403 mm (15.9 in.)
Depth	469 mm (18.5 in.)
Weight (base printer with consumables)	18.6 kg (41.0 lb.)

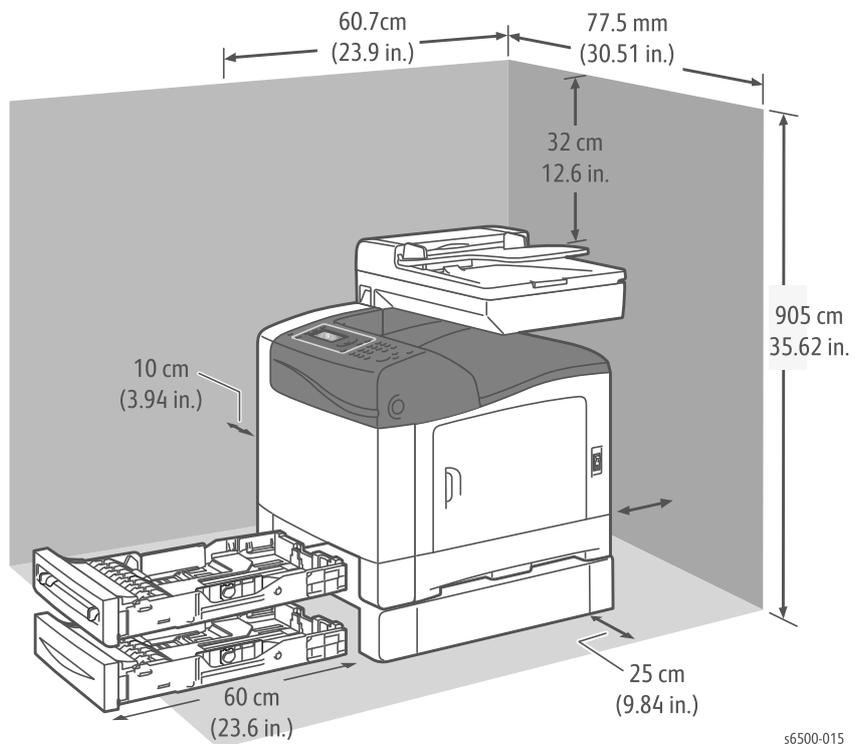
MFP Dimensions

Characteristic	Measurement
Height	584 mm (23")
Height with 250-Sheet Feeder	690 mm (27.1 in.)
Width	430 mm (16.9 in.)
Depth	544 mm (21.4 in.)
Weight (base printer with consumables)	28.8 kg (63.5 lb.)

Minimum Clearances



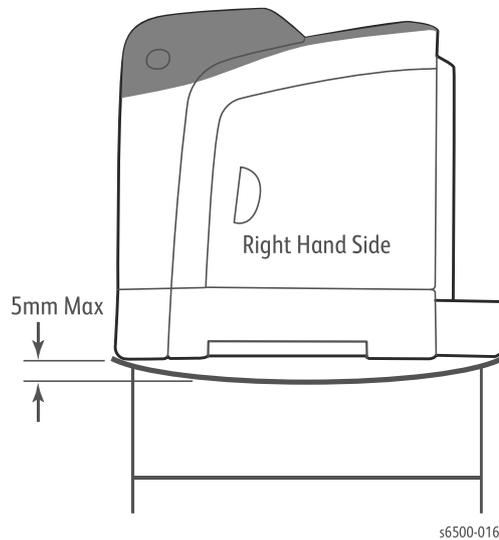
s6500-014



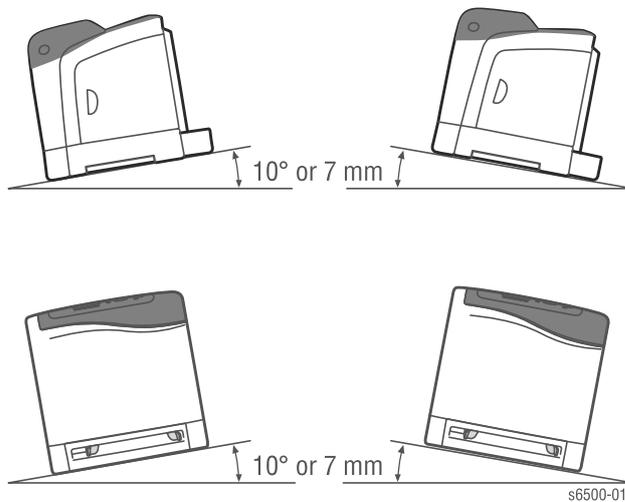
s6500-015

Mounting Surface Specifications

Mounting surface flatness must be within the specified range.



The printer must not be tipped or tilted more than 7 mm.



Failure to adhere to the specified mounting specifications will void all guarantees of print-quality and/or performance. Known problems that can occur as a result of exceeding the mounting surface specifications are:

- Color-to-Color mis-registration, primarily in the horizontal (laser scan) direction.
- A smear or line of toner approximately 40 mm from the trailing edge of the print.

Media and Tray Specifications

The following tables list the paper recommended for each of the printer's trays and for the Duplex Unit.

Tray 1 (Standard Tray)

Characteristic	Supported Media
Paper Size	<ul style="list-style-type: none"> ■ Letter (8.5 x 11 in.) ■ US Folio (8.5 x 13 in.) ■ Legal (8.5 x 14 in.) ■ Executive (7.25 x 10.5 in.) ■ A4 (210 x 297 mm, 8.2 x 11.5 in.) ■ A5 (148 x 210 mm, 5.2 x 8.2 in.) ■ JIS B5 (182 x 257 mm) ■ #10 Envelope (4.1 x 9.5 in.) ■ Monarch Envelope (3.9 x 7.5 in.) ■ DL Envelope (110 x 220 mm) ■ C5 Envelope (162 x 229 mm) ■ Custom size range: Width: 3–8.5 in. (76.2–215.9 mm) Height: 5–14 in. (127–355.6 mm)
Paper Type and Weight	<ul style="list-style-type: none"> ■ Plain (65–120 g/m², 17–32 lb. Bond) ■ Lightweight Cardstock (100–163 g/m², 37–60 lb. Cover) ■ Heavyweight Cardstock (163–220 g/m², 60–80 lb. Cover) ■ Envelope ■ Labels ■ Letterhead ■ Lightweight Glossy Cardstock (100–163 g/m², 37–60 lb. Cover) ■ Heavyweight Glossy Cardstock (163–220 g/m², 60–80 lb. Cover) ■ Hole Punched ■ Colored Paper ■ Special
Loading Capacity	250 sheets (20 lb.)

Tray 2 (Optional 250-Sheet Feeder)

Characteristic	Supported Media
Paper Size	<ul style="list-style-type: none"> ■ Letter (8.5 x 11 in.) ■ US Folio (8.5 x 13 in.) ■ Legal (8.5 x 14 in.) ■ Executive (7.25 x 10.5 in.) ■ A4 (210 x 297 mm) ■ A5 (148 x 210 mm) ■ JIS B5 (182 x 257 mm) ■ Custom size range: Width: 5.8–8.5 in. (147.3–215.9 mm) Height: 8.3–14 in. (210.8–355.6 mm)

Tray 2 (Optional 250-Sheet Feeder)

Characteristic	Supported Media
Paper Type and Weight	Plain Paper (60–105 g/m ² , 16–28 lb. Bond) <ul style="list-style-type: none"> ■ Letterhead ■ Hole Punched ■ Colored Paper
Loading Capacity	250 sheets (20 lb.)

Manual Feed Slot

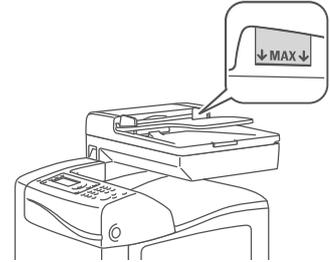
Characteristic	Supported Media
Paper Size	<ul style="list-style-type: none"> ■ Letter (8.5 x 11 in.) ■ Legal (8.5 x 14 in.) ■ Executive (7.25 x 10.5 in.) ■ US Folio (8.5 x 13 in.) ■ No. 10 Envelope (4.1 x 9.5 in.) ■ Monarch Envelope (3.9 x 7.5 in.) ■ DL Envelope (110 x 220 mm) ■ C5 Envelope (162 x 229 mm) ■ A4 (210 x 297 mm) ■ A5 (148 x 210 mm) ■ JIS B5 (182 x 257 mm) ■ Custom size range: Width: 3–8.5 in. (76.2–215.9 mm) Height: 5–14 in. (127–355.6 mm)
Paper Type and Weight	<ul style="list-style-type: none"> ■ A4 (210 x 297 mm) ■ Letter (8.5 x 11 in.) ■ US Folio (8.5 x 13 in.) ■ Legal (8.5 x 14 in.) ■ Custom size range: Width: 3–8.5 in. (76.2–215.9 mm) Height: 5–14 in. (127–355.6 mm)
Loading Capacity	One sheet at a time

Duplex Unit

Characteristic	Supported Media
Paper Size	<ul style="list-style-type: none"> ■ A4 (210 x 297 mm) ■ Letter (8.5 x 11 in.) ■ US Folio (8.5 x 13 in.) ■ Legal (8.5 x 14 in.) ■ Custom size range: Width: 3–8.5 in. (76.2–215.9 mm) Height: 5–14 in. (127–355.6 mm)
Paper Type and Weight	<ul style="list-style-type: none"> ■ Plain (60–105 g/m², 16–28 lb. Bond) ■ Letterhead (plain) ■ Hole Punched (plain) ■ Colored paper (plain)
Loading Capacity	One sheet at a time

Automatic Document Feeder

Characteristic	Supported Media
Original Size	<ul style="list-style-type: none">■ Width: 4.1–8.5 in. (148–216 mm)■ Length: 8.3–14 in. (210–355.6 mm)
Weight Range	<ul style="list-style-type: none">■ 50–125 g/m² (17–32 lb. Bond)
Loading Capacity	To MAX fill line



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