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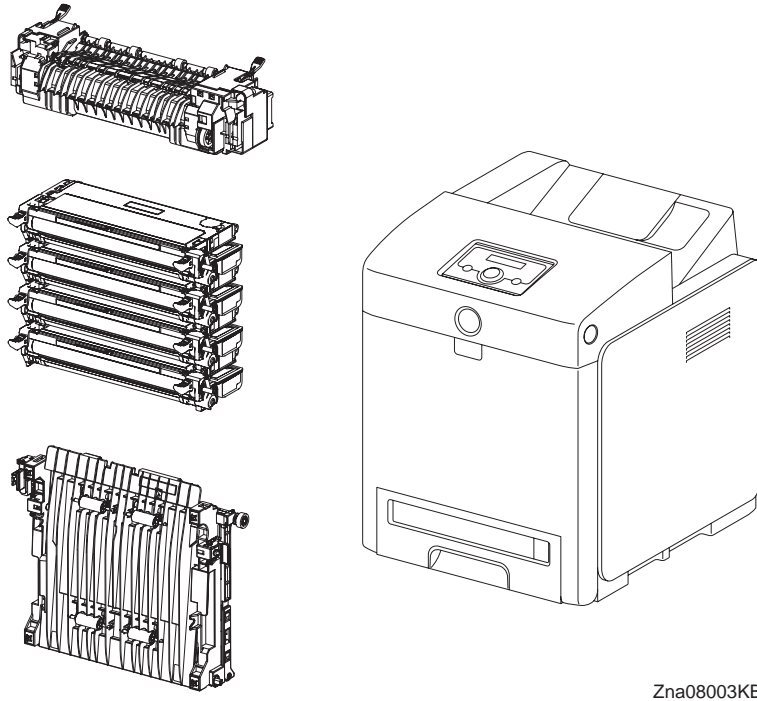
Chapter 8 Printer Specifications CONTENTS

1. Configuration of Printer

1.1 Basic Configuration

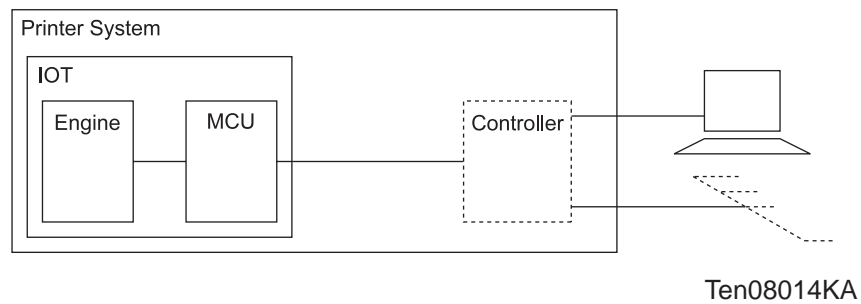
The printer has the following basic configurations depending on the destination.

- print engine main unit (MSI and 250 feeder unit as the standard paper feeding)
- consumables (CRU)



1.2 Functional Configuration

Functional configuration of this printer is shown below.



2. Electrical Properties

2.1 Power Source

Two types of power source as follows are available for this printer, which are selected according to the specifications.

- 100V/115V printer:..... voltage: 100-127VAC $\pm 10\%$ (90 ~ 135V), frequency: 50/60Hz ± 3 Hz
- 220/240V printer: voltage: 220-240VAC $\pm 10\%$ (198 ~ 264V), frequency: 50/60Hz ± 3 Hz

2.2 Power Consumption

Power consumption in each operation mode at rated voltage input

Operation mode	Average (Wh/h)
Running mode (F/C)	890 or less
Running mode (B/W)	890 or less
Ready mode	890 ^{*1} or less
Low power mode	9 or less

*1: Full option configuration

2.3 Rush Current

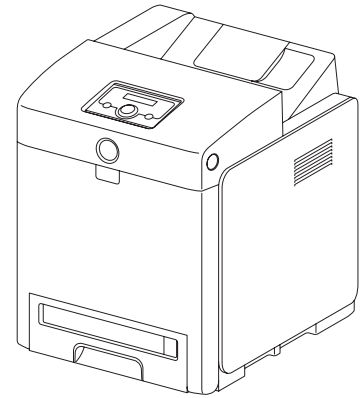
When the power switch is turned on, the inrush current shall be maximum 50Amp (Cold start)/135Amp (Hot start) at first 2.5msec, and 80Amp (110V/220V) / 85Amp (100V) within 10msec

3. Mechanical Properties

3.1 Dimensions/Mass of Printer

Width(mm)	Depth(mm)	Height(mm)	Mass(kg)
400	504	470	27.2 or less

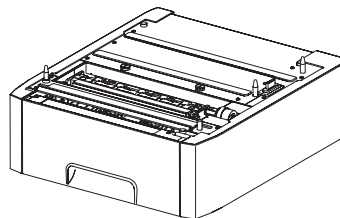
* Including MSI with its cover being closed. And the ejection stacker is also being contained in the main unit.



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3.2 Dimensions/Mass of Paper Tray

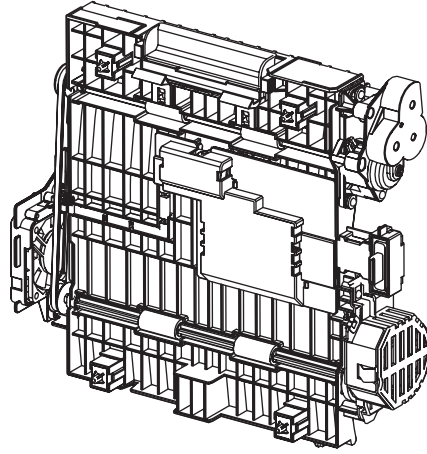
Tray	Width(mm)	Depth(mm)	Height(mm)	Mass(kg)
For 550 sheet	388	506.7	134.4	7.6 or less



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3.3 Dimensions/Mass of Duplex

Width(mm)	Depth(mm)	Height(mm)	Mass(kg)
283	319	78	1.0 or less



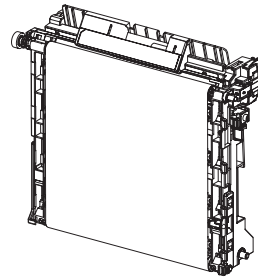
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3.4 Dimensions/Mass of Consumables and CRUs

3.4.1 TRANSFER BELT

Width: 317mm
 Depth: 278mm
 Height: 79mm
 Mass: 1.29kg

Reference: *The TRANSFER BELT has CRUM (CRU memory) to record information.*

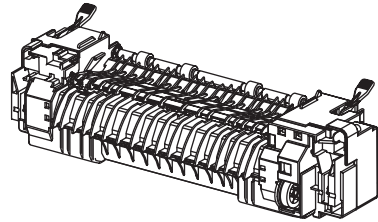


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3.4.2 FUSER CRU

Width: 393mm
 Depth: 121mm
 Height: 130mm
 Mass: 1.5kg

Reference: *The FUSER has CRUM (CRU memory) to record information.*

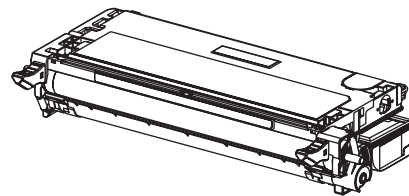


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3.4.3 Black toner cartridge

Width: 303.8mm
 Depth: 150mm
 Height: 53.8mm
 Mass: 1.03 (4K)/1.10 (9K) kg

Reference: *The Black toner cartridge has CRUM (CRU memory) to record information.*

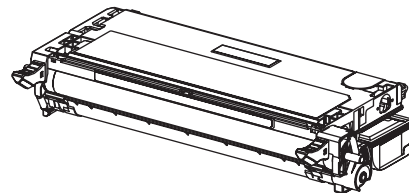


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3.4.4 Yellow toner cartridge

Width: 303.8mm
 Depth: 150mm
 Height: 53.8mm
 Mass: 1.01 (3K)/1.10 (9K) kg

Reference: *The Yellow toner cartridge has CRUM (CRU memory) to record information.*

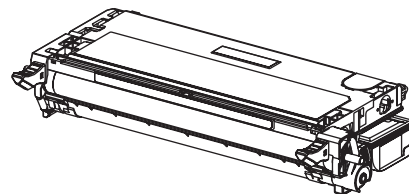


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3.4.5 Magenta toner cartridge

Width: 303.8mm
 Depth: 150mm
 Height: 53.8mm
 Mass: 1.03 (4K)/1.10 (9K) kg

Reference: *The Magenta toner cartridge has CRUM (CRU memory) to record information.*

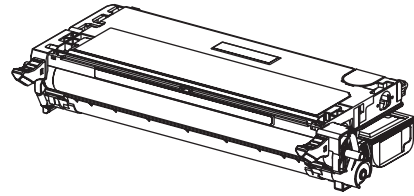


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3.4.6 Cyan toner cartridge

Width: 303.8mm
 Depth: 150mm
 Height: 53.8mm
 Mass: 1.03 (4K)/1.10 (9K) kg

Reference:*The Cyan toner cartridge has CRUM (CRU memory) to record information.*

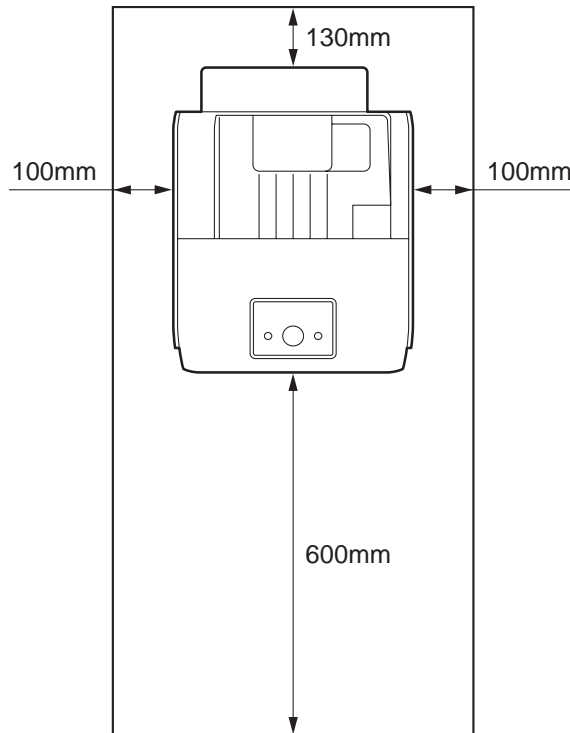


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3.5 Installation Space (min. installation space)

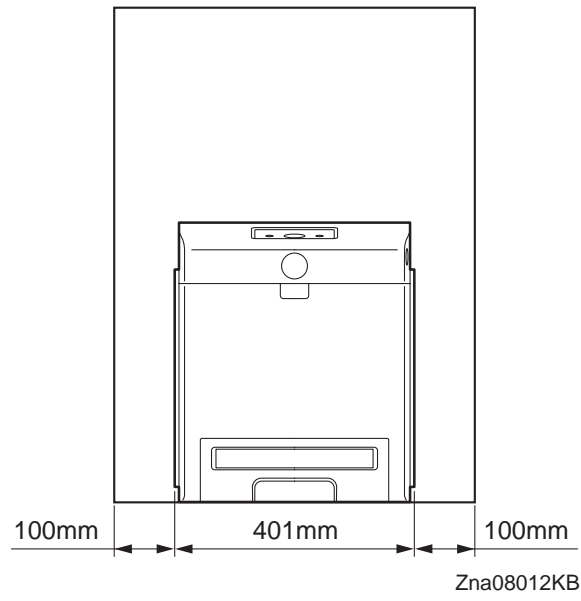
Minimum space as shown below is required to install the printer when it is used for normal objects.
 (Space occupied by the operator is not included.)

Top view

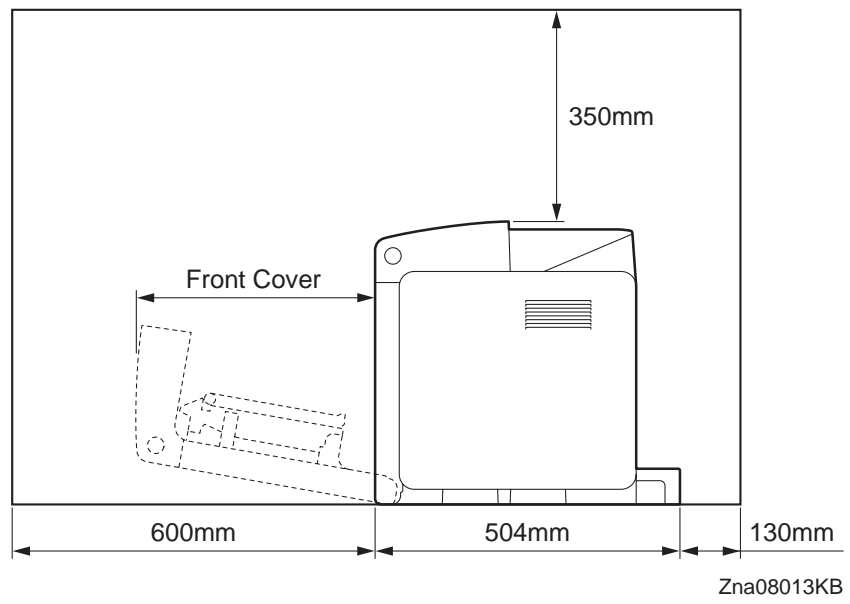


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Front view



Side view



4. Functions

4.1 Recording System

Electro-photographic system employing OPC drum and direct transfer by the transport belt

4.2 Exposure System

Semiconductor four laser beams scanning system

4.3 Development System

Development with dry type 2-component developer

4.4 Fixing System

Thermal fixing system by Free Belt Nip Fusing (FBNF)

4.5 Resolution

- Main scanning direction:by the printer controller
- Sub scanning direction:600 dots/25.4mm (fixed)

4.6 Operation Mode

The printer can be operated in either of 4 operation modes. The modes are switched over by command from the printer controller or change of printer operation, etc.

Proceeding from power ON, low power mode or sleep mode to standby mode will take place after going through a warm up stage.

- Running mode

State in running or recording operation

Fixing system:	Held at operating temperature.
Exposure system:	Operating status
Recording system:	Operating status

- Ready mode

Ready state

Fixing system:	Held at ready temperature.
Exposure system:	Stop status
Recording system:	Stop status

- Sleep mode

Complete resting state. Compatible to E-Star and BAM requirement.

Fixing system:	Stop status
Exposure system:	Stop status
Recording system:	Stop status

- Deep sleep mode

Resting state from the sleep state. Compatible to E-Star and BAM requirement.

Fixing system:	Stop status
Exposure system:	Stop status
Recording system:	Stop status

4.7 Warm-up Time

When nominal voltage (100V, 115V, 220V) is applied, the printer will proceed to standby mode from POWER-ON within 30 seconds.

Reference: Measured at 22°C, 55% RH, nominal voltage.

4.8 FPOT (First Print Output Time)

FPOT time of the printer is shown in the table below.

The time required for the first sheet of paper to be delivered after the PRINT indication is given is calculated on the following conditions (rounded to one decimal place).

- IOT performance that the controller does not have IOT wait.
- The printer is in the standby mode. (ROS MOTOR OFF, FUSER READY)
- Paper is A4 SEF
- Except when process control is operating*1

*1: Process controller operation is process controls such as TC control, electric potential control, cleaning cycle, registration control, and so on. Sometimes, the engine stops feeding papers for a certain period of time while continuous printing for these operations.

Color Mode	Paper Tray	FPOT (Sec.)
B/W	MPF	16 sec. or less
	Standard tray	16 sec. or less
	Optional 2nd tray	16.5 sec. or less
Color	MPF	17 sec. or less
	Standard tray	17 sec. or less
	Optional 2nd tray	17.5 sec. or less

4.9 Continuous Printing Speed

The continuous printing speed is shown in the below.

OS	PDL	Test Chart	Paper Size	Paper Type	Paper Tray	Color/BW	Duplex/Simplex	Average Print Speed
XP	PCL6	J11E	A4/Letter SEF	Plain paper	MPF	Color	Simplex	56 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	MPF	BW	Simplex	38 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	MPF	Color	Duplex	80 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	MPF	BW	Duplex	56 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray1	Color	Simplex	56 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray1	BW	Simplex	38 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray1	Color	Duplex	79 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray1	BW	Duplex	56 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray2	Color	Simplex	57 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray2	BW	Simplex	38.5 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray2	Color	Duplex	80 sec. or less
XP	PCL6	J11E	A4/Letter SEF	Plain paper	Tray2	BW	Duplex	57 sec. or less
OSX	PS	J11E	A4/Letter SEF	Plain paper	Tray1	Color	Simplex	435 sec. or less
OSX	PS	J11E	A4/Letter SEF	Plain paper	Tray1	BW	Simplex	355 sec. or less
OSX	PS	J9E	A4/Letter SEF	Plain paper	Tray1	Color	Simplex	77 sec. or less
OSX	PS	J9E	A4/Letter SEF	Plain paper	Tray1	BW	Simplex	71 sec. or less
OSX	PS	J11E	A4/Letter SEF	Plain paper	Tray1	Color	Duplex	442 sec. or less
OSX	PS	J11E	A4/Letter SEF	Plain paper	Tray1	B/W	Duplex	400 sec. or less
OSX	PS	J9E x2	A4/Letter SEF	Plain paper	Tray1	Color	Duplex	151 sec. or less
OSX	PS	J9E x2	A4/Letter SEF	Plain paper	Tray1	BW	Duplex	135 sec. or less

4.10 Input Properties

4.10.1 Paper pick-up system

- Paper pick-up with paper tray
Feeding method of this printer is ARRF method.

- MSI paper pick-up
Feeding method of this printer is S-ARRF method.

- Duplex paper feeder unit
It can be installed as an option, and it enables duplex printing. Selection of Duplex Feeder Unit is designated from the controller.

4.10.2 Paper pick-up capacity

- Paper pick-up with paper tray
 - 550 sheet Paper Tray : 550 sheets or below 59.4mm of standard paper
 - 250 sheet Paper Tray : 250 sheets or below 27.6mm of standard paper

- MSI paper pick-up
150 sheets or below 15mm of standard paper

4.11 Output Properties

4.11.1 Paper delivery system

Paper can be delivered by the following method.

- FACE DOWN delivery

4.11.2 Paper delivery capacity

- FACE DOWN delivery
250 sheets (Letter/A4 standard paper)

4.11.3 Delivery paper size/mass

- FACE DOWN delivery
All paper sizes applicable to this printer

4.11.4 Full stack detection

non

4.12 Paper

4.12.1 Paper type

Paper which can be used with this printer is classified into standard paper, general paper and special paper.

- Standard paper

Using this type of paper is recommended. Reliability, operability and print image quality are the application range of the specifications.

Following paper is the standard paper.

	B/W	F/C
For domestic market	P	C2
For overseas market	4200DP	X-pressions

- General paper

General paper is plain paper except standard paper and special paper, and its reliability and running performance are within the specification, but the print image quality is out of the specification.

- Special paper

Special paper except for plain paper. Reliability and operability are the applicable range of specifications but the print image quality is out of the applicable range of specifications.

4.12.2 Paper mass

- Paper feed from paper tray

"60 to 216 gsm" (16 lb to 80 lb)

- Paper feed from MSI

"60 to 216 gsm" (16 lb to 80 lb)

4.12.3 Paper size

Paper size which can be set to each paper pick-up unit is shown in the table below.

Cassette	Paper size
550 Sheet Paper Tray	A5, B5 (JIS, IOS), A4, Letter, Executive, Legal, Folio Minimum size Width 148mm (5.82 in) × Length 210mm (8.26 in) Maximum size Width 215.9mm (8.5 in) × Length 355.6mm (14 in)
250 Sheet Paper Tray	A5, B5 (JIS, IOS), A4, Letter, Executive, Legal, Folio Minimum size Width 148mm (5.82 in) × Length 210mm (8.26 in) Maximum size Width 215.9mm (8.5 in) × Length 355.6mm (14 in)
MSI Tray	A5, B5 (JIS, IOS), A4, Letter, Executive, Legal, Folio, Envelope, Monarch, DL, C5, Yokei size2, Yokei size3, Yokei size4, Yochokei size3, Chokey size3, Japanese post card Minimum size Width 76.2mm (3 in) × Length 127mm (5 in) Maximum size Width 220mm (8.66 in) × Length 355.6mm (14 in)

5. Consumables

Consumables are usually replaced by costumers. In the event of recovery of failure attributable to consumables or isolation of failure, you may replace them.

5.1 Items of Consumables

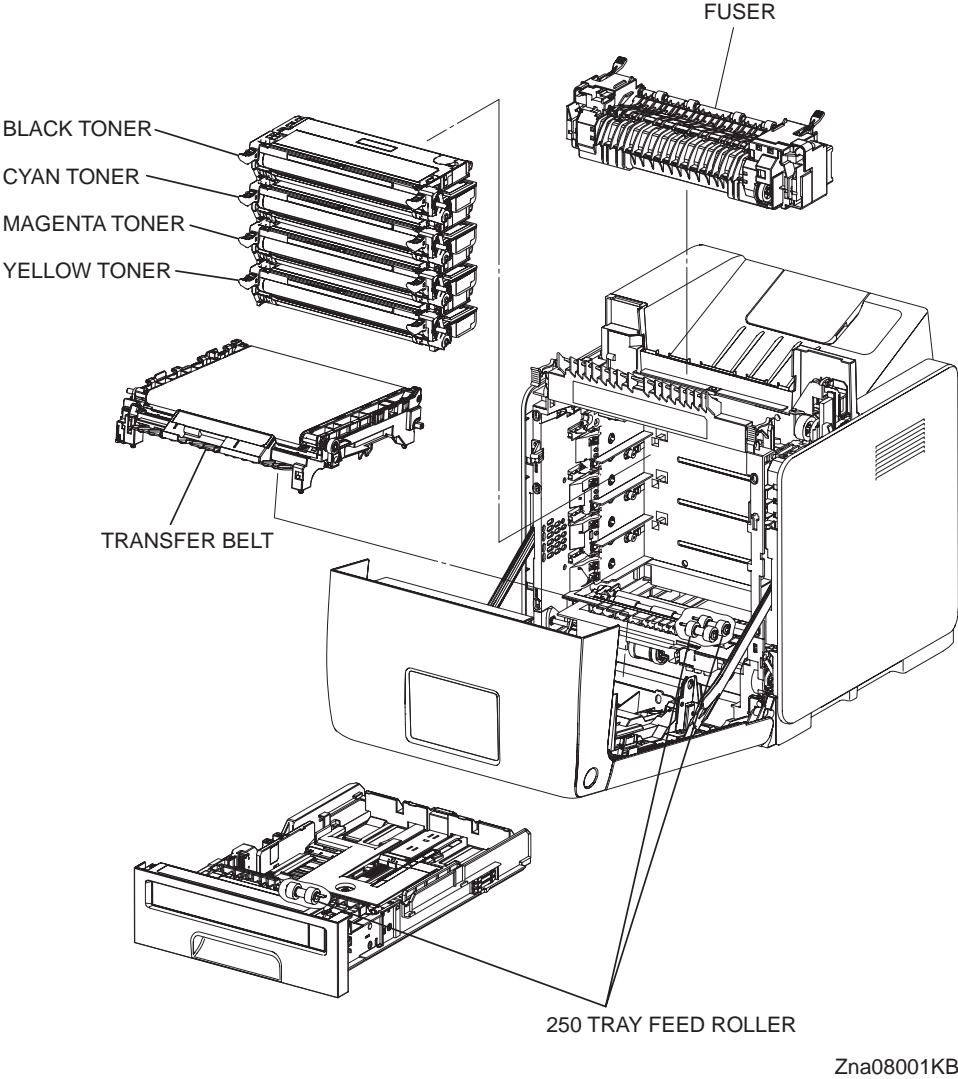
- Black toner cartridge
Cartridge to supply black toner to the development unit.
Black toner cartridge has CRUM (CRU memory) to record information.
- Yellow toner cartridge
Cartridge to supply yellow toner to the development unit.
Yellow toner cartridge has CRUM (CRU memory) to record information.
- Magenta toner cartridge
Cartridge to supply magenta toner to the development unit.
Magenta toner cartridge has CRUM (CRU memory) to record information.
- Cyan toner cartridge
Cartridge to supply cyan toner to the development unit.
Cyan toner cartridge has CRUM (CRU memory) to record information.

5.2 Consumable Life

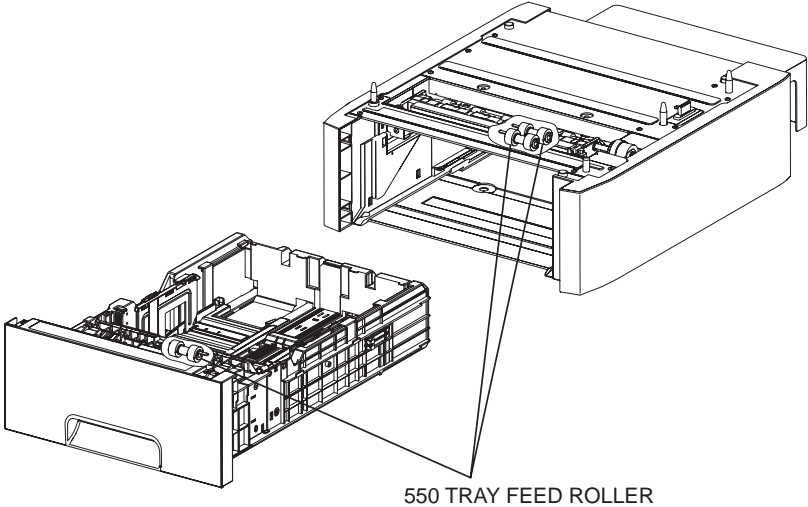
- Black toner cartridge: 4kPV
- Yellow toner cartridge: 3kPV
- Magenta toner cartridge: 3kPV
- Cyan toner cartridge: 3kPV

5.3 Periodic Replacing Parts (Reference)

- FEED ROLLER (250/550 Feeder) 100kPV
- TRANSFER BELT 100kPV
- FUSER 100kPV



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6. Operating Environment

6.1 Installation Temperature / Humidity

Installation temperature and humidity on the condition without condensation is as follows.

At operating: 10-35 °C, 15-85%RH (No condensation)

At standby: minus 20-40 °C, 5-85%RH (No condensation)

6.2 Installation Altitude

0 to 3,100m

6.3 Installation Horizontality

Longitudinal levelness of table surface on which the printer is installed: 1 degree or under

Lateral levelness of table surface on which the printer is installed : 1 degree or under

6.4 Ambient Lighting

3000 Lux or less (without no direct sun beams)

6.5 Storage Temperature of a Toner Cartridge

The guaranteed period of the print cartridge before unpacked is as follows:

Normal conditions: 24 months under 0 to 35°C, 15 to 80% RH.

Harsh conditions: Up to one month under -20 to 0°C and 35 to 40°C, 5 to 15% RH and 80 to 95% RH.

The storage altitude shall be 0 to 3100m. Can be extended to 0 to 15000m when shipped by air.

(Provided that the cargo bay is pressurized to 70.9275Kpa or higher.)

7. Safety / Environment Conditions

7.1 Safety Standard

- 100V / 110V system
UL60950
CSA C22.2 No.60950-00
- 220V system
IEC60950 / EN60950 2000

7.2 Laser Safety Standard

- 100V / 110V system
FDA21CFR Chapter 1, Subchapter J, Section 1010, 1040
- 220V system
IEC60825-1 Amendment 1 + Amendment 2 / EN60825-1 Amendment 1 + Amendment 2 Class 1, Laser Product

7.3 EMI

- 100V / 110V system (US)
FCC Part 15, Subpart B, Class B
- 220V system (EC)
EN55022 (CISPR Publication 22), Class B

7.4 Noise

Noise of printing is as follows.

Printer \ Noise	Engine		Full option (Engine+Duplex/500Feeder)	
	Sound power Level (B)	Impulse Sound Power Level (B)	Sound power Level(B)	Impulse Sound Power Level (B)
	LWA	LWAI	LWA	LWAI
During printing	6.3	6.6	6.6	7.1
During Standby	4.0	-	4.0	-

8. Print image Quality

8.1 Image Quality Guarantee Conditions

The image quality is specified and guaranteed under the following conditions.

8.1.1 Environmental conditions

Environment condition for evaluating image quality

Temperature: 15-28 °C

Humidity: 20-70%RH

8.1.2 Guaranteed paper

The print image quality specified here is guaranteed with standard paper fed from the paper tray.

Evaluation is performed with the maximum size of each standard paper.

- Xerox 4200DP 201b letter (Black and White)

- Xerox Digital Color Xpression 24lb letter (Color)

8.1.3 Paper condition

The paper used is fresh paper immediately after unpacked, which has been left in the operating environment for 12 hours before unpacking.

8.1.4 Printer condition

The print image quality specified in this section is guaranteed with the printer in normal condition.

8.1.5 Image quality guaranteed area

The print image quality specified in this section is guaranteed in the guaranteed image quality area specified in this manual. (Refer to Chapter 1)

8.1.6 Criterion

The print image quality is guaranteed with the Spec. In rate = 90% ($\gamma = 90\%$).

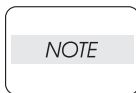
9. Option

9.1 Options to be Installed by Users

Users can install the following units.

- 550 Feeder Unit
- Duplex Unit
- HDD Unit
- Expansion memory (512MB/1024MB)
- Network Protocol Adapter
- Wireless Printer Adapter

10. ESS Specification



In order for the printer to apply to the Windows Vista, it is necessary to download firmware from the DELL website.

10.1 External Interface

10.1.1 USB

Item	Specification
Connector	Type-B x 1
Protocol	USB2.0, HighSpeed
Supported Client	Windows 2000 / XP / x64 XP / Server2003 / x64 Server2003/Vista / x64 Vista / Server2008(TBD) / x64 Server2008(TBD) PC with USB MacOS X PC with USB Linux PC with USB

10.1.2 Ethernet

Item	Specification
Connection	10 Base-T/100 Base-TX
Protocol	See "10.2 Network Protocol" for details
Supported Client	Windows NT 4.0/2000/XP/x64XP/Server 2003/x64Server2003/Vista / x64 Vista/ Server2008(TBD) / x64 Server2008(TBD) PC Mac OS X PC Linux/Unix PC

10.1.3 IEEE1284

Item	Specification
Connection	Centronics 36pin x 1
Protocol	Standard, Nibble, ECP
Supported Client	Windows NT4.0/2000/XP/x64XP/Server 2003/x64Server2003/Vista / x64 Vista/ Server2008(TBD) / x64 Server2008(TBD) PC Linux PC

10.1.4 Wireless

multi-protocol Card is required.

Item	Specification
Connection	802.11b/802.11g
Protocol	See "10.2 Network Protocol" for details
Supported Client	Windows NT 4.0/2000/XP/x64XP/Server 2003/x64Server2003/Vista / x64 Vista/ Server2008(TBD) / x64 Server2008(TBD) PC Mac OS X PC Linux PC* ¹
Security Protocol	64(40-bit key)/128(104-bit key) WEP,WPA-PSK(TKIP,AES), WPA2-PSK(AES) (IEEE802.1x attestation Function of WPA-1x non-corresponds)

*1: Connection to the Linux machine is not guaranteed. Only for infrastructure connection and when Linux terminal is connected with Wired LAN connection.

10.1.5 Interface Specification

Option Configuration	Interface that can be operated			
	USB	IEEE1284	Ethernet	IEEE802.11b/11g (Wireless)
Not installed	Yes	Yes	Yes	No
Installed	Yes	Yes	No	Yes

*Protocol: See "10.2 Network Protocol" for details

10.2 Network Protocol

10.2.1 Printing Protocol

Protocol	Transport	Maximum Session ^{*2}	Supported Client
LPD	TCP/IP	1	Windows NT 4.0/2000/XP/x64 XP/Server 2003/ x64 Server20033/Vista/x64 Vista/ Server2008(TBD) / x64 Server2008(TBD) Mac OSX Linux ^{*4} Unix ^{*4}
Port9100	TCP/IP	1	Windows NT 4.0/2000/XP/x64 XP/Server 2003/ x64 Server20033/Vista/x64 Vista/ Server2008(TBD) / x64 Server2008(TBD)
IPP ^{*5}	TCP/IP	5	Windows NT 4.0/2000/XP/x64 XP/Server 2003/ x64 Server20033/Vista/x64 Vista/ Server2008(TBD) / x64 Server2008(TBD) Mac OS 10.3
SMB ^{*5}	TCP/IP	5	Windows NT 4.0/2000/XP/x64 XP/Server 2003/ x64 Server20033/Vista/x64 Vista/ Server2008(TBD) / x64 Server2008(TBD)
	NetBEUI	5	Windows NT 4.0/2000,
NetWare (P-Server) ^{*5}	NCP/IPX TCP/IP ^{*1}	1	NetWare3.12, 3.2, (NDS unsupported) NetWare4.1, 4.11, 4.2, 5, 5.1,6,6.5 ^{*3}
EtherTalk ^{*5}	ATP/DDP	1	Mac OSX

*1: Available for versions later than NetWare5

*2: Maximum session is defined as the number of print request acceptable at the same time.

*3: NetWare 6.5 is required to apply support pack 1.1 or later provided by Novell.

*4: Supported if a driver provided by FX is used.

*5: Available only Network protocol Adapter is installed.

10.2.2 Other Protocols

Protocol	Transport	Support
SNMP	UDP/IP	[Supported MIB] MIB-II (RFC1213) HostResources MIB (RFC1514) PrinterMIB (RFC1759) XCM Printer Port Monitor MIB
	IPX	
HTTP/HTTPS	TCP/IP	[Client] (Windows NT4.0/2000/XP/Vista) Internet Explorer 6.x or 7x Firefox x 2.0 (Mac OS 10.2 or later) Safari 2.x Firefox 2.x JavaScript must be set/ready to operate on the above browsers.
DHCP	UDP/IP	[Supported OS] Windows NT 4.0 Server, Windows 2000 Server, Windows Server 2003, Windows x64 server 2003, Windows Server2008(TBD) , Windows x64 Server2008(TBD), Linux (RedHat Enterprise Linux ES4/5, SuSE Enterprise Linux 10). Unix (Solaris 9)
BOOTP	UDP/IP	[Supported OS] Windows NT 4.0 Server, Windows 2000 Server, Windows Server 2003, Windows x64 server 2003, Windows Server2008(TBD) , Windows x64 Server2008(TBD), Unix (Solaris 9)
RARP	TCP/IP	[Supported OS] Unix (Solaris 9)
AutoIP	TCP/IP	[Software] Installer
WINS	TCP/IP	[Supported OS] Windows NT 4.0 Server, Windows 2000 Server, Windows Server 2003, Windows x64 server 2003, Windows Server2008(TBD) , Windows x64 Server2008(TBD)
SMTP	TCP/IP	E-mail Alert [Supported Mail Server] LotusNotes, MS-Exchange, Eudora
Telnet	TCP/IP	[Supported OS] Windows 2000, Windows 2000 Server, Windows XP, Windows x64 XP, Windows Server 2003, Windows x64 server 2003, Vista, x64 Vista, Windows Server2008(TBD), Windows x64 Server2008(TBD), Mac OSX 10.3, 10.4, 10.5 Unix(Solaris9)
WSD	TCP/IP	[Supported OS] Vista/x64 Vista/ Server2008(TBD) / x64 Server2008(TBD)
Bonjour(mDNS)*1	UDP/IP	[Supported OS] Mac OS 10.2 or later

DDNS ^{*1}	TCP/IP	[Supported OS] Windows NT 4.0 Server, Windows 2000 Server, Windows Server 2003, Windows x64 server 2003, Windows Server2008(TBD), Windows x64 Server2008(TBD), Unix (Solaris 9)
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*1: Available only Network protocol Adapter is installed.

10.3 Decomposer

10.3.1 PDL/Emulation

Decomposer is still PCL. However printer can accept the job generated only by the own printer driver.

Interface/Protocol	PDL/Emulation		
	PCL5c	PCL6	PS3
USB	Yes	Yes	Yes
1284	Yes	Yes	Yes
Lpd	Yes	Yes	Yes
Port9100	Yes	Yes	Yes
IPP	Yes	Yes	Yes
SMB* ¹	Yes	Yes	Yes
NetWare (P-Server)* ¹	Yes	Yes	Yes
EtherTalk (A-PAP)* ¹	No	No	Yes

Yes: Supported No: Not supported

*1: Available only Network protocol Adapter is installed.

10.3.2 Font

81 fonts and 36 Symbol Sets for PCL and 136 fonts for PS3 are available as built-in font.

10.3.3 Form Overlay

The function for writing PCL5 forms is supported.

10.3.4 Image Area

Usable Area Size	Maximum : 215.9mm (8.5 in.) x 355.6mm (14 in.)
Unprintable Area	4.1 mm each from four edges (left, right, top and bottom) of paper For DL LEF, 6.1mm from left and right edges, 4.1 mm from top and bottom edges are not printable
Printable Area	Maximum : 207.9mm (8.18 in.) x 347.6mm (13.68 in.)
Print Image Quality Guaranteed Area	Same as Printable Area

10.4 Job Control

10.4.1 Cancel Print

A print job in process can be cancelled at the operation panel.

10.4.2 Job Recovery

When a job fails due to a paper jam, the printer automatically restarts the job after the jammed paper is removed.

10.4.3 Job Time Out

When job transmission is interrupted for a certain period of time (Time can be changed at the operation panel and unlimited time can be selected), the print data is deleted as an error.

10.4.4 Secure Print (/Store Print)

When memory is expanded (512MB or more) or HDD is installed, the printer holds print data, including a user password (12 digits) specified in the printer driver, user name and document name, in memory. The data is not printed until the same password, user name and document name are specified at the printer UI. The user can select whether the data is cleared or not after being printed. The data remains in the printer as long as it is not cleared. The data on the memory is cleared when the printer is turned off. The data on the HDD is not cleared even the printer is turned off. The user can omit entering a password (This is called Store Print). *This function is not available for MAC OS X 10.2.8.

10.4.5 Proof Print

When memory is expanded (512MB or more) or HDD is installed, proof print can be selected only when multiple sets of prints are specified in the printer driver. The printer prints only the first set of the print data including a user name and document name specified in the printer driver. Then the user can select whether the remaining sets are printed or not (the remaining data is cleared) when the same user name and document name are entered at the printer UI. The data remains in the printer as long as it is not cleared. The data on the memory is cleared when the printer is turned off. The data on the HDD is not cleared even the printer is turned off. *This function is not available for MAC OS X 10.2.8 and Linux which use CPUS.

10.4.6 IP Filter

The user can select to accept or reject jobs for the specified IP address. Up to 5 IP addresses can be specified.

IP filter is available only to LPD and Port9100.

10.4.7 Dell ColorTrack

Dell ColorTrack is a function to specify the availability of color print and to limit print volume per user. Only administrators are allowed to make limitation settings from the EWS. User name and password is embedded in the print job in order to identify who the job is sent from. User name and password are entered by user from the printer driver.

10.5 Logging

10.5.1 Job Logging

The printer can retain up to 20 job logs. Job log can be printed instantly according to the user's request or automatically printed when the number of the retained job logs has reached 20. Job log includes the following information:

- Job sent date and time*
- Input interface (USB, Lpd etc.)
- Document name (File name) *
- Output color
- User name/Host name*
- Number of printed pages (Color/B/W)
- Number of printed impressions (Color/B/W)
- Paper size
- Result (Successful, Error, etc.)

*Not displayed for PS.

10.5.2 Error Logging

The printer can retain up to 42 jam errors and up to 42 fatal errors.

The user can print error log by the panel operation.

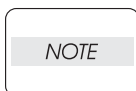
Jam error log includes the following information:

- TOTAL PV when jam has occurred
- Name of jam

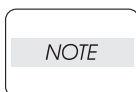
Fatal error log includes the following information:

- TOTAL PV when error has occurred
- Error code

10.5.3 Billing Count



- **The same data is stored in two or more addresses in one IC. Datacheck (checksum etc.) is conducted.**



- **When ESS is replaced, IC can be transferred. (IC is mounted on socket)**

Counter	Description
Color Print Counter	Count the number of page printed in color (7 digits)
B/W Print Counter	Count the number of page printed in B/W (7 digits)
Total Print Counter	Count the total number of page printed in color and B/W (7 digits)

10.6 ID Print

User name can be printed. The printing position can be selected from upper right, upper left, lower right and lower left (Only for PCL6).

The user selects using the operation panel whether user name is printed or not and where it is printed.

10.7 3rd Party Mode

When life of toner cartridge has ended, the printer stops accepting print request (life of toner cartridge is counted by the counter in CRUM). Taking into consideration that some users use refilled toner cartridges, the printer can accept print request by the user's panel operation even if life of toner cartridge has ended. When the mode has changed so that the printer does not stop even after life of toner cartridge ends, the printer displays a message on the operation panel to inform the user of the mode change. When the printer operates in this mode, print image quality is not guaranteed. Also, remaining toner level is not displayed (as CRUM data can not be guaranteed).

10.8 Utility Print

10.8.1 Printer Settings List

Printer Settings List can be printed according to the user's request.

Printer Settings List is printed in B/W in the automatically selected paper tray.

Printer Settings List includes the following information:

Items on the list are slightly different from below when wireless LAN option is installed.

[Title]

Product name (Logo)

[General]

Printer Name, Service tag, Asset Number, Memory capacity, Printer language, Number of fonts available, PDL name and version, ESS version, IOT version, Boot version, Color print volume, B/W print volume, Default paper size, Default paper type for plain paper, Default paper type for label, Default panel display language

[Network]

Network firmware version, MAC address, Ethernet Setting (10 or 100base & half or full)

IPv4 (IP address, Subnet Mask, Gateway Address, Address Status)

IPv6 (Address Manul Configuration, Auto Configuration, Status)

IPX/SPX: Frame type, Network address

IP Filter: Address, Mask, Mode

WirelessSetting*(SSID, Network Type, Link Quality, Link Channel)

IEEE802.1x: Authentication settings

Other supported protocols

*Listed when wireless Printer Adapter is installed

[Printer Options]

"Network Protocol Adapter" Yes or No (If available, version)

"Available Paper Tray" (Tray 1, Tray 2, MPF)

"HDD Unit" Yes or No

[Print Volume]

Print volume for each paper size

10.8.2 Panel Settings List Print

Panel Settings List can be printed by the user's operation.

Panel Settings List is printed in B/W in the automatically selected paper tray.

10.8.3 Font List Print

PCL or PS Font List can be printed by the user's operation.

Font List is printed in the automatically selected paper tray.

10.8.4 Job Log Print

The user can print Job Log by requesting instant print or by setting auto print.

Job Log is printed in B/W in the automatically selected paper tray.