

RICOH

EMP 156

Frequently Asked Questions



Ricoh Printing Systems America, Inc.

THE CONTENT OF THIS DOCUMENT COVERS THE FOLLOWING AREAS:

- A. BUSINESS**
- B. TECHNICAL**
- C. SERVICE**

A. BUSINESS**1) What is the EMP156 printer?****A:**

EMP156 is one of the fastest black & white cut sheet laser beam printers in the world. This printer was researched by Ricoh Research Laboratory and developed by Ricoh Printing Systems, Inc., Japan. The intent of this joint development was to achieve high speed, high performance, and high reliability with new Ricoh core technologies. The print speed is 156 ppm for Letter/Legal paper, 78 ppm for Ledger paper. This printer supports up to 14.2"x18" paper size handling, unique print quality enhancement, high duty cycle, high capacity input/output, high performance controller, long consumable life, minimum foot print, minimum power consumption, and proven high reliability.

This printer redefines the concept of a robust engine and is a perfect match for mission critical environments.

2) What are the targeted markets and applications for the EMP156?**A:**

The primary markets for the EMP156 include the current install base for all Xerox DP4635/DP155/DP180EPS, and Nuvera 100/120, Oce DS4040, Heidelberg Di9110/Di9150i and the banking and financial institutions. Also included in the target markets are In-plant printing, Central Reproduction Departments (CRD's), Data Centers and Print for Pay. The applications in these markets include periodical statements, direct mail and fliers.

3) What is the EMP156 Launch Schedule?**A:**

The EMP156 is available for order taking from RPSA starting in June, 2005.

4) How many demonstration units are available in RPSA?

A:

One full configuration demonstration unit is available at RPSA, Simi Valley.

5) What sales materials are currently available to support the sales effort for the EMP156?

A:

EMP 156 sales training slides, print samples, paper guide, pricing, TCO model, brochure (PDF & Offset), competitive chart and this FAQ.

6) What are the configuration options?

- 1.) EMP 156 Engine + CS 1
- 2.) EMP 156 Engine + HCF1
- 3.) EMP 156 Engine + CS1 + HCF1
- 4.) EMP 156 Engine + CS1 + CS2 + HCF1
- 5.) EMP 156 Engine + CS1 + CS2
- 6.) EMP 156 Engine + HCF1 + HCF2
- 7.) EMP 156 Engine + CS1 + HCF1 + HCF2
- 8.) EMP 156 Engine + CS1 + CS2 + HCF1 + HCF2

Each configuration above may be ordered with an Attention Lamp (Green, Yellow and Red)

7) Will there be a speed, space or cost advantage over purchasing a competitor's products?

A:

The main advantage with the EMP156 will be that this product can provide the highest efficiency for cost, speed, space, labor, and environment.

Cost: Competitive TCO

Speed: High speed printing, high throughput, high monthly duty cycle

Space: Minimum footprint

Labor: Easy operation, flexible I/F, high capacity input/output,

Minimum downtime due to high reliability

Environment: Minimum power consumption, low toner waste rate.

8) Will the supplies component of the TCO model be the same as those for the DDP?

A:

No, some consumables and PM/EM parts are different from the DDP parts.

9) What is the warranty period for Equipment and Accessories?

A:

Ricoh Printing Systems America, Inc. (RPSA) warrants the Equipment and Accessories will be free from defects in materials and workmanship for a period of twelve (12) months from the date of shipment, under normal use and service, and when installed, repaired, maintained and used according to RPSA's instructions and recommended procedures. RPSA will provide an Advanced Exchange for defective parts within the first ninety (90) days from the date of shipment. RPSA will, at its sole option and expense, repair or replace defective product parts within the warranty period provided: (a) Customer promptly notifies RPSA in writing of any defect identified by Customer; (b) Customer obtains a Return Material Authorization number from RPSA's Customer Services Department; (c) the defective part is returned freight prepaid and insured by Customer to RPSA in Simi Valley, CA; and (d) RPSA confirms that the part is defective.

B: TECHNICAL**10) What are the new features in EMP156?****A:****a) Adjustable Vacuum feed**

All input hoppers have a vacuum feeding mechanism and vacuum force adjustment mechanism to optimize the picking condition for each hopper. This feature supports coated paper*, very smooth surface paper, etc. while maintaining a low jam rate.

**Coated papers are supported that do not melt, vaporize, offset, discolor or release hazardous emissions when exposed to high temperatures.*

b) Print Quality enhancement

Laser power amplitude modulation & laser pulse width modulation achieves a very clear 600 dpi print image. High print quality is possible with very efficient toner usage.

c) Multi - F θ glass lens optical unit

This optical unit has Multi F θ glass lens to minimize the fluctuation of the focused laser dot size. The dot size accuracy has been increased dramatically helping to produce a sharp image.

d) Enhanced belt transfer system

This feature achieves more than 90% toner transfer rate. Less than 10 % of the toner will be wasted. In the case of the DDP, 20 ~ 30% of the toner was wasted. This feature also achieves good toner transfer (good print quality) on rough surface paper such as recycled paper, wrinkled paper, etc.

e) Wide & Straight Paper path

Up to 14.2" of paper width is supported. Also, the style of paper path is very smooth. There are no sharp curves in the paper path. This helps to achieve a very low jam rate with high-speed paper movement.

f) Jogger in container stacker

This feature achieves +/- 1 mm (In Spec.: +/- 5mm) resulting in accurate

stacking with standard paper.

g) High performance controller.

Ripping speed increased more than 200% from DDP's. This controller has the power to drive a 200-ppm engine.

Main enhancements are:

Main CPU: 800 MHz (from 375MHz)

Main Bus (64 bits): 133 MHz (from 75MHz)

Main Memory: 266 MHz (from 75MHz)

Ethernet: 10/100/1000 Base-T support

h) Long life consumables

Drum Life: 3,600,000 pages (4,500,000 rotation count)

Heat Roller Life: 2,400,000 pages

11) What are the EMP 156 consumables?

A:

Users can replace the following:

Toner - 6 bottles per package	Average Yield: 324,000 images @ 5% (per package)
Developer - 2 bottles per package	Average Yield: 1,280,000 images @ 5% (per package)
Fine Filter (G)	Average Yield: 1,600,000 images
Fuser Cleaning Web	Average Yield: 2,400,000 images

12)What is the print resolution and process speed?

A:

Resolution: 600 DPI

Process Speed: 727.6mm / sec. (28.6inch / sec)

13) What is the input/output capacity of the EMP156?

A:

Input: Max 15,500 sheets (standard: 3,500 sheets)

Output: Max 8,100 sheets (standard: 4,100 sheets)

14) What paper will the EMP156 support?

A:

Paper size: A3/A4/B4/B5/Ledger/Legal/Letter/ Max 14.2" x 18"

Paper weight: 16 to 53 lb Bond paper or 110 lb Index

Special Paper type: Preprinted/Prepunched/Perforated/Label
/Coated paper/Carbonless*

**Please refer to the EMP 156 Paper Guide for recommendations.*

15) What kinds of the paper handling options are compatible with the EMP156?

A:

Currently, the only available output option is the container stacker.

16) Are AFP and Metacode printing supported?

A:

RPSA will offer third party AFP and Metacode data stream conversion to PCL or PostScript for the EMP156.

17) Will you be able to load custom fonts, such as Barcode fonts to the printer?

A:

Yes.

18) Will the MicroPress support the EMP156?

A:

MicroPress support is being evaluated.

19) What are the *standard* file formats and PDL's supported by the EMP156?

A:

- PostScript 3
- PCL
- PDF 1.4
- Compressed TIFF files
- Uncompressed TIFF files
- TIFF variants and compressions supported
 - 1 Bit B/W: None, PackBits, CCITT Group 3, CCITT Group 4
 - 4/8 Bit Gray: None, LZW
 - 3 Byte RGB: None, LZW
 - 4 Byte CMYK: None, LZW

20) Does the EMP156 support LPR Spooling?

A:

Yes, the same as DDP70e / DDP92.

21) Does the EMP156 support MOPy?

A:

Yes.

22) What interface is supported by the EMP156?

A:

Ethernet: 10/100/1000 Base-T (automatic switching)

C: SERVICE**23) What is the Jam Rate?****A:**

Printer with standard stacker: Once per 20,000 pages

Additional stacker: Once per 40,000 pages

High Capacity Feeder: Once per 40,000 pages

Condition

Paper: Xerox 4024 paper letter 20lb

Paper moisture content: 3.7 ~ 5.5 wt%

Operating environment: 19 ~ 25C/40 ~ 60%RH

Print coverage: 5%

24) What is the monthly duty cycle?**A:**

Recommended monthly volume: 1,200K pages

Maximum monthly volume: 4,500K pages

25) What is the printer's expected life?**A:**

Printer life is five (5) years or 90 Million images, whichever comes first.

26) What are the EMP 156 dimensions?**A:****Base Configuration (H X W X D)**

Printer Engine + Container Stacker 1: 50" x 108" x 44" (1264 x 2,700 x 1,105 mm)

Components (H X W X D)

Printer Engine: 50" x 54" x 44" (1,264 x 1,350 x 1,105 mm)
 Container Stacker 1: 36" x 54" x 30" (905 x 1,350 x 746 mm)
 Container Stacker 2: 36" x 54" x 30" (905 x 1,350 x 746 mm)
 High Capacity Feeder 1: 52" x 50" x 31" (1,318 x 1,270 x 772 mm)
 High Capacity Feeder 2: 50" x 50" x 31" (968 x 1,270 x 772 mm)

Required Maintenance Area (W X D)

Printer Engine + Container Stacker 1: 156" x 122" (4000 x 3100 mm)

27) How many PM items have to be maintained?

A:

Cleaning: 19 Areas (minimum term 800K pages)

Replacement: 26 items (minimum term 2,400K pages)

Part Number	Part Description	EMP 156 Component Supported	PM Frequency
338325-010	PM Kit 1	Engine	1,600,000 images
338325-020	PM Kit 2	Engine	2,250,000 images
338325-030	PM Kit 3	Engine	2,400,000 images
338325-040	PM Kit 4	Engine	2,700,000 images
338325-050	PM Kit 5	Engine	4,050,000 images
338325-060	PM Kit 6	Engine	4,800,000 images
338325-070	PM Kit 7	Engine	5,400,000 images
338325-080	PM Kit 8	Engine	7,200,000 images
338325-090	PM Kit 9	Engine	8,100,000 images
338325-100	PM Kit 10	Engine	9,600,000 images
338325-110	PM Kit 11	CS 1	9,600,000 images
338325-120	PM Kit 12	CS 2	9,600,000 images
338325-130	PM Kit 13	Engine	9,600,000 picks
338325-140	PM Kit 14	HCF 1	9,600,000 picks
338325-150	PM Kit 15	HCF 2	9,600,000 picks
338325-160	PM Kit 16	Engine	14,400,000 images
338325-170	PM Kit 17	Engine	17,600,000 images
338325-180	PM Kit 18	Engine	19,200,000 images

28) Are there any special procedures for jam recovery?**A:**

No, it's just as easy as the DDP70e / DDP 92.

29) How about the reliability?**A:**

MPBF:	600,000 pages (DocuTech DP 135: 623Kp DP 180: 766Kp)
PM cycle	1,600,000 to 19,200,000 pages (DocuTech DP135: 208Kp DP180: 223Kp)
Cleaning cycles	800,000, 1,200,000 and 2,400,000 (average 584,416) pages

30) What is the power consumption?**A:**

200 to 220 V 3 \emptyset , 4 Wire (3 Poles + GND)

4.5 Kw

(DocuTech DP 180: 10.5 Kw Di9110: 6.25Kw)