

ML-16000



The Monna Lisa is an industry-leading digital textile printer that represents the culmination of our expertise in ink and printhead development, image processing, and pre and post fabric treatment. The ML-16000 and Total Textile Solution deliver the finest print quality with lower investment and the highest level of customer satisfaction.

High print quality and productivity

Epson precision dot technologies reduce banding and graininess, and new stacked printing that randomises the halftone dot pattern to reduce image degradation caused by dot misalignment. Dynamic Alignment Stabiliser (DAS) technology also ensures stable print quality by controlling waveforms on printhead chip for higher dot placement accuracy and more uniform dot density on each pass. The ML-16000 also features symmetrical colour alignment for consistent colour overlap order during high-speed bidirectional printing, and Accurate Belt Position Control (ABPC) technology for precise fabric feeding. The result is optimal quality and speed, with superb reproduction of colour gradations, fine details, and complex geometric patterns.

Flexibility to meet any printing need

Epson inkjet printing technology is noted for its adaptability to a wide range of media, making it ideal for direct-to-fabric printing. The ML-16000 can meet a variety of different production needs and applications.

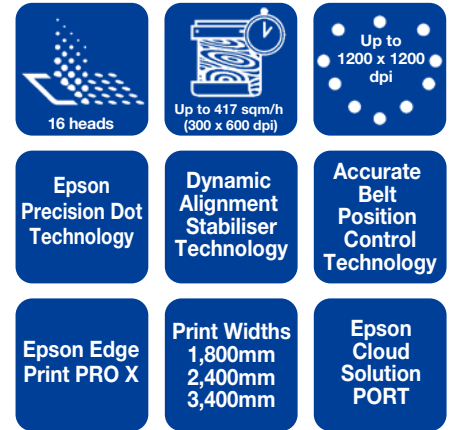
Environmentally friendly GENESTA Ink

Epson GENESTA inks are available in Acid, Reactive, Disperse, and Pigment formulations, and are ECO PASSPORT certified to meet globally recognised standards for environmentally friendly textile printing. Our Acid ink is also bluesign® approved, and our Reactive and Pigment inks are GOTS approved by ECOCERT.* The vacuum packed degassed ink comes in hot-swappable 10-litre high-capacity ink cartridges that allow uninterrupted production.

Epson Edge Print PRO X (RIP software)

Our original RIP software, Epson Edge Print PRO X, has an intuitive interface for easy to use as well as step & repeat, hot folders, colour replacement for matching spot colours, and other convenient features. If you prefer to use a different RIP software, the ML-16000 can flexibly support that too.

Datasheet



Key features

Productivity

Maximum printing speed
417 sqm/h (300 x 600 dpi, 1 pass)
Typical printing speed
236 sqm/h (600 x 600 dpi, 2 pass)

High print quality

16 PrecisionCore Micro TFP printheads
Epson precision dot technology
Dynamic Alignment Stabiliser (DAS) Technology
Symmetrical colour alignment
Accurate Belt Position Control (ABPC) Technology

Ink types

Acid, Reactive, Disperse, and Pigment inks
(10L)

Extensive software compatibility

Supports Epson Edge Print PRO X as well as other RIP software

Print widths

1,800 / 2,400 / 3,400 mm (71 / 94 / 133 in)

*Genesta RE-N Reactive inks (except Grey RE-N) and Genesta PG-2 Pigment inks

TECHNICAL SPECIFICATIONS

PRINT	
Printing technology	PrecisionCore inkjet technology
Number of printheads	16
Number of colours	8
Maximum print resolution	1,200 x 1,200 dpi
Gradation process	Variable-Sized Droplet Technology
Max print width	1,800 mm (71")
Max print length	ML-16000 : 1,800 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133")
Max fabric width	ML-16000 : 1,800 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133")
Max fabric thickness	10 mm

PRINT SPEED^{*2}	
Square ^{*1}	Maximum printing speed (m ² /h) 417 (300 x 600 dpi, 1 pass) Typical printing speed 1 (m ² /h) 236 (600 x 600 dpi, 2 pass) Typical printing speed 2 (m ² /h) 158 (900 x 600 dpi, 3 pass) Maximum printing speed (sq ft/hr) 4,489 (300 x 600 dpi, 1 pass) Typical printing speed 1 (sq ft/hr) 2,540 (600 x 600 dpi, 2 pass) Typical printing speed 2 (sq ft/hr) 1,701 (900 x 600 dpi, 3 pass)

PRINT SPEED^{*2}	
Linear ^{*1}	Maximum printing speed (lmt/h) 278 (300 x 600 dpi, 1 pass) Typical printing speed 1 (lmt/h) 157 (600 x 600 dpi, 2 pass) Typical printing speed 2 (lmt/h) 105 (900 x 600 dpi, 3 pass) Maximum printing speed (li ft/hr) 912 (300 x 600 dpi, 1 pass) Typical printing speed 1 (li ft/hr) 516 (600 x 600 dpi, 2 pass) Typical printing speed 2 (li ft/hr) 346 (900 x 600 dpi, 3 pass)

FABRIC HANDLING	
Fabric drive	Conveyor belt with adhesive
Belt washing	Automatic

STANDARD FEEDER	
Fabric roll diameter	300 mm (11.8")
Fabric roll weight	100 kg (220 lb)
Fabric roll core diameter	2" or 3" (ML-16000-340 : 3" only)

ENVIRONMENTAL CHARACTERISTICS	
Temperature	Operating: 20°C - 30°C (68°F - 86°F) Recommended: 22°C - 28°C (72°F - 82°F)
Humidity	Operating: 40 - 60%RH (no condensation)

ELECTRICAL	
Voltage	Main unit: 400V, 3 phase + Neutral + Earth, 50Hz/60Hz
Rated current	Main unit: 30A ^{*2}
Apparent Power (VA)	Main unit: 20.7kVA (Operating) ^{*2}

CERTIFICATIONS^{*2}	
Safety	EU, EFTA countries, Turkey: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2 Morocco: Order No.2573-14, Order No.2574-14 Russia, Belarus, Kazakhstan: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2, EN 62311 Ukraine: EN 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2 Jordan: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2 Serbia: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2

NETWORK	
Transmission speed	100BASE-TX or more (recommended)

*1 Printing width: 1500mm, Printing mode: bidirectional. Printing speeds vary depending on such factors as image printed, firmware version, operating state of PC and print settings.

*2 Please contact Epson for the specifications of ML-16000-240 and ML-16000-340.

GENESTA INK

- **Acid**
Black, Cyan, Magenta, Yellow, Grey, Red, Blue, Cobalt, Orange, Rubine, Fluorescent Pink, Fluorescent Flavine, ACROSS (Ink penetration liquid)
- **Reactive**
Black, Cyan, Magenta, Yellow, Grey, Red, Blue, Orange, Crimson, ACROSS (Ink penetration liquid)
- **Disperse**
Black, Cyan, Magenta, Yellow, Grey, Red, Blue, Orange, ACROSS (Ink penetration liquid)
- **Pigment**
Black, Cyan, Magenta, Yellow, Grey, Red, Green, Orange
- **Ink capacity**
10 litres

DIMENSIONS

- **Printer**
ML-16000 : 4,610 (W) x 2,500 (D) x 2,070 (H) mm (181 x 98 x 81 in)
ML-16000-240 : 5,260 (W) x 2,490 (D) x 1,950 (H) mm (207 x 98 x 77 in)
ML-16000-340 : 6,560 (W) x 2,500 (D) x 1,940 (H) mm (258 x 98 x 76 in)

- **Control box**
ML-16000 : 660 (W) x 1,500 (D) x 2,290 (H) mm (26 x 59 x 90 in)
ML-16000-240 / ML-16000-340 : 660 (W) x 1,500 (D) x 2,270 (H) mm (26 x 59 x 89 in)

WEIGHT

- **Printer**
ML-16000 : Approx. 3,900 kg (8,598 lb)
ML-16000-240 : Approx. 4,300 kg (9,480 lb)
ML-16000-340 : Approx. 6,000 kg (13,228 lb)
- **Control box**
Approx. 400 kg (882 lb)
- **Ink Rack**
Approx. 240 kg (529 lb) (not including ink)

ML-16000 & Working Area Dimensions



PRECISIONCORE
PRINTHEAD