ML-16000HY



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-16000HY 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-16000HY 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. ML-16000HY is a hybrid printer capable of digitally recreating 100% of special effects on any fabric: from glossy lacquer through to gold and silver metal and opaque white, without requiring any subsequent steps.

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, Acid 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.

Datasheet











Accurate
Belt
Position
Control
Technology



Print Widths 4,610mm 2,500mm 2,070mm Epson Cloud Solution PORT

Key features

Productivity

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

Printer widths

4,610 (W) x 2,500 (D) x 2,070 (H) mm (181 x 98 x 81 in)



TECHNICAL SPECIFICATIONS

Printing technology PrecisionCoreinkiettechnology

Number of printheads Number of valves Number of colours

Maximum print resolution Gradation process Max print width

1,200 x 1,200 dpi Variable-SizedDropletTechnology 1,800 mm (71") ML-16000 : 1,800 mm (71") ML-16000 : 1,800 mm (71") Max print length Max fabric width Max fabric thickness 10 mm

PRINT SPEED (Digital only)*2

Square *1 417 (300 × 600 dpi, 1 pass) Maximum printing speed (m²/h)

Typical printing speed 1 (m²/h Typical printing speed 2 (m²/h) Maximum printing speed (sq ft/hr) Typical printing speed 1 (sq ft/hr) 236 (600 × 600 dpi, 2 pass) 158 (900 × 600 dpi, 3 pass) 4,489 (300 × 600 dpi, 1 pass) 2,540 (600 × 600 dpi, 2 pass) Typical printing speed 2 (sq ft/hr) 1,701 (900 x 600 dpi, 3 pass)

PRINT SPEED (Digital only)*2

278 (300 x 600 dpi, 1 pass) Maximum printing speed (Imt/h) Maximum printing speed (intr/h) Typical printing speed 2 (lmt/h) Typical printing speed 2 (lmt/h) Maximum printing speed (li ft/hr) Typical printing speed 1 (li ft/hr) Typical printing speed 2 (li ft/hr) 157 (600 x 600 dpi, 1 pass) 157 (600 x 600 dpi, 2 pass) 105 (900 x 600 dpi, 3 pass) 912 (300 x 600 dpi, 1 pass) 516 (600 × 600 dpi, 2 pass) 346 (900 × 600 dpi, 3 pass)

PRINT SPEED (Hybrid printing)*2

Printing speed (m²/h) Printing speed (sq ft/hr) 30 (900 × 600 dpi, 4+ pass) 323 (900 × 600 dpi, 4+ pass) Square

PRINT SPEED (Hybrid printing)*2

Printing speed (lmt/h) Printing speed (li ft/hr) 20 (900 × 600 dpi, 4+ pass) 66 (900 × 600 dpi, 4+ pass)

FABRIC HANDLING

Conveyor belt with adhesive Automatic Fabric drive

Belt washing

STANDARD FEEDER

300 mm (11.8") Fabric roll weight 100 kg (220 lb) 2" or 3" Fabric roll core diameter

ENVIRONMENTAL CHARACTERISTICS

Operating: 20°C - 30°C (68°F - 86°F), Recommended: 22°C - 28°C (72°F - 82°F) Temperature

Humidity Operating: 40 - 60%RH (no condensation)

ELECTRICAL

Main unit: 400V, 3 phase + Neutral + Earth, 50Hz/60Hz Main unit: 30A*2 Main unit: 20.7kVA (Operating)*2 Voltage Rated current

Apparent Power (VA)

EU, EFTAcountries, 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 Rusia, Belarus, Kazakhstan: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2, CERTIFICATIONS*2

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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)

GENESTA INK

Black, Cyan, Magenta, Yellow, Grey, Red, Green, Orange • Pigment

• Paste ink Glossy, white

Ink capacity 10 litres

Paste capacity
 1 litres bottle

DIMENSIONS

Printer
 ML-16000 : 4,610 (W) x 2,500 (D) x 2,070 (H) mm (181 x 98 x 81 in)

Control box ML-16000 : 660 (W) x 1,500 (D) x 2,290 (H) mm (26 x 59 x 90 in)

WEIGHT

Printer
 ML-16000 : Approx. 3,900 kg (8,598 lb)

• Control box Approx. 400 kg (882 lb)

Ink Rack
 Approx. 240 kg (529 lb) (not including ink)





^{*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.