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.

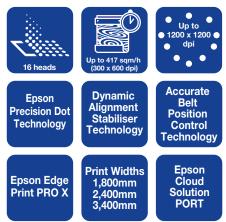
Environmentally friendly GENESTA Ink

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, 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.

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

Printer widths

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

EPSON

*Genesta RE-N Reactive inks: except one of Grey (Grey RE-N), Genesta AC Acid inks: except Black AC-N / Grey AC-N

TECHNICAL SPECIFICATIONS

PRINT initialing technology humber of printheads PrecisionCore inkjet technology 10 Number of printheads 8 Maximum print resolution (ardation process Max print length Max frait ength Max frait ength Max fabric width 1,200 x1 200 dpl 1,300 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133") Max fabric width PRINT SPEED" Maximum printing speed (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Maximum printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Maximum printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Maximum printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Maximum printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 1 (mr/h) Typical printing speed 2 (mr/h) Typical printing speed 3 (mr/h) Typical printing speed 3 (mr/h) Typical printing speed 2 (mr/h) Ty		
Square *1Maximum printing speed (m?/h) 236 (600 × 600 dpi, 1 pass) 158 (600 × 600 dpi, 3 pass)PRINT SPEED*Maximum printing speed 2 (m?/h) 17ylical printing speed 2 (sq ft/hr) 17ylical printing speed 2 (sq ft/hr) 157 (600 × 600 dpi, 1 pass) 17ylical printing speed 2 (sq ft/hr) 157 (600 × 600 dpi, 2 pass) 17ylical printing speed 2 (sq ft/hr) 157 (600 × 600 dpi, 2 pass) 17ylical printing speed 2 (int/hr) 157 (600 × 600 dpi, 2 pass) 17ylical printing speed 2 (int/hr) 157 (600 × 600 dpi, 2 pass) 17ylical printing speed 2 (int/hr) 157 (600 × 600 dpi, 2 pass)FABRIC HANDLING Eabric drive Eabric drive Eabric drive Edit washingConveyor belt with adhesive AutomaticSTANDARD FEEDER Fabric roll weight Fabric roll weight Fabric roll weight Patric roll weight Patric roll weight Patric roll weight Patric roll weight Fabric roll weight <br< td=""><td>Printing technology Number of printheads Number of colours Maximum print resolution Gradation process Max print width Max print length Max fabric width</td><td>16 8 1,200 x 1,200 dpi Variable-Sized Droplet Technology 1,800 mm (71") ML-16000 : 1,800 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133") ML-16000 : 1,800 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133")</td></br<>	Printing technology Number of printheads Number of colours Maximum print resolution Gradation process Max print width Max print length Max fabric width	16 8 1,200 x 1,200 dpi Variable-Sized Droplet Technology 1,800 mm (71") ML-16000 : 1,800 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133") ML-16000 : 1,800 mm (71") - ML-16000-240 : 2,400 mm (94") - ML-16000-340 : 3,400 mm (133")
Linear **Maximum printing speed (lmt/h) Typical printing speed 1 (lmt/h) 105 (900 × 600 dpi, 2 pass) Typical printing speed 2 (lmt/h) 105 (900 × 600 dpi, 2 pass) 105 (900 × 600 dpi, 2 pass) 100 kg (220 lb) 2 * or 3* (ML-16000-340 : 3* only)FABRIC HANDLING Fabric roll diameterSolo mm (11.8*) 100 kg (220 lb) 2 * or 3* (ML-16000-340 : 3* only)ENVIRONMENTAL CHARACTERISTICS Temperature HumidityOperating: 20°C - 30°C (68°F - 86°F), Recommended: 22°C - 28°C (72°F - 82°F) Operating: 40 - 60%RH (no condensation)ELECTRICAL Voltage Apparent Power (VA)Main unit: 400V, 3 phase + Neutral + Earth, 50Hz/60Hz Main unit: 30A°2 Main unit: 20.7KVA (Operating)*2CERTIFICATIONS** SafetyEU, EFTAcountries, Turkey: 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, EN 62311 Ukraine: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2, EN 62311 Ukraine: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2, EN 62311 Ukraine: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2, EN 62311 Ukraine: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2, 		Typical printing speed 1 (m³/h 236 (600 × 600 dpi, 2 pass) Typical printing speed 2 (m³/h) 158 (900 × 600 dpi, 3 pass) Maximum printing speed (sq ft/hr) 4,489 (300 × 600 dpi, 1 pass) Typical printing speed 1 (sq ft/hr) 2,540 (600 × 600 dpi, 2 pass)
Fabric drive Belt washing Conveyor belt with adhesive Automatic STADDARD FEEDER Fabric roll diameter 300 mm (11.8") Fabric roll weight Fabric roll weight 100 kg (220 lb) Fabric roll core diameter ENVIRONMENTAL CHARACTERISTICS Temperature Operating: 20°C - 30°C (68°F - 86°F), Recommended: 22°C - 28°C (72°F - 82°F) Operating: 40 - 60%RH (no condensation) ELECTRICAL Voltage Main unit: 400V, 3 phase + Neutral + Earth, 50Hz/60Hz Main unit: 30A*2 Main unit: 20.7kVA (Operating)*2 CERTIFICATIONS** Safety 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.2573-14, CHer No.2573-14, CHE N		Typical printing speed 1 (Imt/h) 157 (600 × 600 dpi, 2 pass) Typical printing speed 2 (Imt/h) 105 (900 × 600 dpi, 3 pass) Maximum printing speed 1 (Iift/hr) 912 (300 × 600 dpi, 1 pass) Typical printing speed 1 (Iift/hr) 516 (600 × 600 dpi, 2 pass)
Fabric roll diameter Fabric roll veight300 mm (11.8") 100 kg (220 lb) 2" or 3" (ML-16000-340 : 3" only)ENVIRONMENTAL CHARACTERISTICS TemperatureOperating: 20°C - 30°C (68°F - 86°F), Recommended: 22°C - 28°C (72°F - 82°F) Operating: 40 - 60%RH (no condensation)ELCTRICAL Voltage Rated current Apparent Power (VA)Main unit: 400V, 3 phase + Neutral + Earth, 50Hz/60Hz Main unit: 30A*2 Main unit: 20.7k/VA (Operating)*2CERTIFICATIONS*2 SafetyEU, 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 Jordan: EN ISO 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 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 Jordan: EN ISO 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 Jordan: EN ISO 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 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 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	Fabric drive	
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 Main unit: 400V, 3 phase + Neutral + Earth, 50Hz/60Hz Voltage Main unit: 30A*2 Apparent Power (VA) Main unit: 20.7kVA (Operating)*2 CERTIFICATIONS*2 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, EN 62311 Ukraine: EN 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2 Sordan: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2 NETWORK NETWORK	Fabric roll diameter Fabric roll weight	100 kg (220 lb)
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 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, EN 62311 Ukraine: EN 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 Serbia: EN ISO 12100, EN 13849-1, EN 60204-1, EN 55011, EN 61000-6-2	Temperature	Recommended: 22°C - 28°C (72°F - 82°F)
Safety 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.2573-14, Order No.2574-14 Ruusia, 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	Voltage Rated current	Main unit: 30A*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, 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
		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, Oyan, 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 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)





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