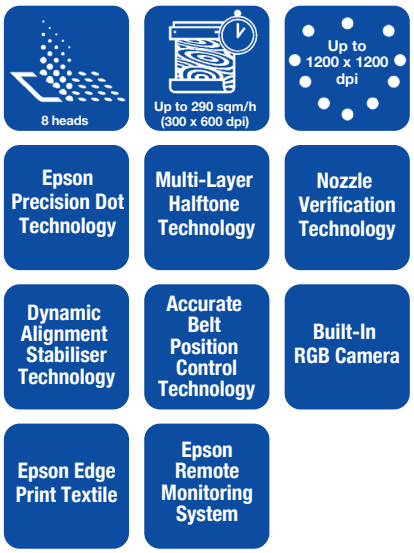
ML-8000

Datasheet



The ML-8000 is the latest addition to our industry-leading series of Monna Lisa digital textile printers. Equipped with eight newly developed PrecisionCore printheads, it packs the power and performance of world-class Epson inkjet printing and manufacturing technologies into an accessible entry-level package. Offering unprecedented performance and usability, it is a next-generation digital textile printer that will take your production capabilities to a new level.

High print quality and productivity

The ML-8000 boasts a typical print speed of 155 square metres per hour (2-pass printing at 600 x 600 dpi). Epson precision dot technologies include Microweave and lookup table (LUT) technologies that reduce banding and graininess, and advanced new Multi-Layer Halftone Technology (MLHT) 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 each printhead chip for higher dot placement accuracy and more uniform dot density on each pass. The ML-8000 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.

Stable operation with minimal downtime

Stable operation and unprecedented usability are realised by advanced cleaning mechanisms and automated adjustment functions. A fluff blower system removes fluff from the fabric surface before it enters the printing area, and an ink mist extraction system helps reduce nozzle clogging problems. In the event a nozzle does become clogged, Nozzle Verification Technology (NVT) detects missing dots and adjusts ink delivery to maintain image quality and reduce printing errors. Auto nozzle cleaning by fabric wiper reduces daily manual maintenance work. With high-accuracy head alignment technology and automatic calibration by the built-in RGB camera, printhead replacement and calibration can be completed in as little as 30 minutes. In addition, the Epson Remote Monitoring System reduces downtime and service calls by allowing quick response to potential problems.

Easy operation

Ease of use is enhanced by a 9-inch LCD touch panel that displays current printer status, operating instructions, and regular maintenance procedures, and by hot-swappable, dual 10-litre or 3-litre high-capacity ink cartridges that allow uninterrupted production.

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.

Software for digital textile printing

Our original RIP software, Epson Edge Print Textile, has an intuitive interface for easy, 3-step, left-to-right operation, as well as step & repeat, hot folders, colour replacement for matching spot colours, and other convenient features. Optional ColorBlend preprocessing software also lets you create colour variations (colorways), control ink penetration to achieve visual equivalence on both sides of fabric, generate ICC profiles, and perform other preprocessing tasks.

Key features

Productivity
Maximum printing speed
290 sqm/h (300 x 600 dpi, 1 pass)*2
Typical printing speed
155 sqm/h (600 x 600 dpi, 2 pass)*3

High print quality
8 PrecisionCore Micro TFP printheads
Epson precision dot technology
Multi-Layer Halftone Technology (MLHT)
Dynamic Alignment Stabiliser (DAS) Technology
Symmetrical colour alignment
Accurate Belt Position Control (ABPC) Technology

Stable operation / Easy maintenance
Fluff blower system
Ink mist extraction system
Nozzle Verification Technology (NVT)
Auto nozzle cleaning by fabric wiper
Built-in RGB camera for auto calibration
Head replacement including auto calibration in 30 min.
Epson Remote Monitoring System

Easy Operation
9-inch LCD touch panel
Dual 10-litre or 3-litre high-capacity ink cartridges

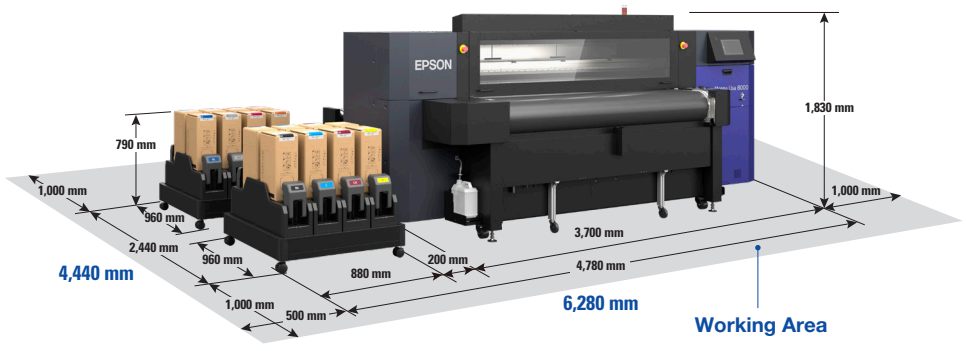
EPSON®
EXCEED YOUR VISION

TECHNICAL SPECIFICATIONS

PRINT		
Printing technology	PrecisionCore inkjet technology	
Number of printheads	8	
Number of colours	8	
Maximum print resolution	1,200 x 1,200 dpi (Pigment), 1,200 x 600 dpi (Reactive, Acid, Disperse)	
Gradation process	Variable-Sized Droplet Technology	
Max print width	1,850 mm (72.8")	
Max print length	Unlimited	
Max fabric width	1,850 mm (72.8")	
Max fabric thickness	5.0 mm	
PRINT SPEED		
Square *1	Maximum printing speed (m^2/h)	290 (300 × 600 dpi, 1 pass) *2
	Typical printing speed 1 (m^2/h)	155 (600 × 600 dpi, 2 pass) *3
	Typical printing speed 2 (m^2/h)	104 (900 × 600 dpi, 3 pass) *4
	Maximum printing speed (sq ft/hr)	3,122 (300 × 600 dpi, 1 pass) *2
	Typical printing speed 1 (sq ft/hr)	1,668 (600 × 600 dpi, 2 pass) *3
	Typical printing speed 2 (sq ft/hr)	1,119 (900 × 600 dpi, 3 pass) *4
PRINT SPEED		
Linear *1	Maximum printing speed (lmt/h)	193 (300 × 600 dpi, 1 pass) *2
	Typical printing speed 1 (lmt/h)	103 (600 × 600 dpi, 2 pass) *3
	Typical printing speed 2 (lmt/h)	69 (900 × 600 dpi, 3 pass) *4
	Maximum printing speed (li ft/hr)	634 (300 × 600 dpi, 1 pass) *2
	Typical printing speed 1 (li ft/hr)	339 (600 × 600 dpi, 2 pass) *3
	Typical printing speed 2 (li ft/hr)	227 (900 × 600 dpi, 3 pass) *4
FABRIC HANDLING		
Fabric drive	Conveyor belt with thermoplastic adhesive	
Belt washing	Automatic	
STANDARD FEEDER		
Fabric roll diameter	400 mm (15.7")	
Fabric roll weight	100 kg (220 lb)	
Fabric roll core diameter	2" or 3"	
ENVIRONMENTAL CHARACTERISTICS		
Temperature	Operating: 20°C - 30°C (68°F - 86°F), Recommended: 22°C - 28°C (72°F - 82°F)	
Humidity	Operating: 35 - 80%RH (no condensation)	
ELECTRICAL		
Voltage	Main unit: 380~415 V, 3 phase + Neutral + Earth 50Hz/60Hz ± 3%	
Rated current	Main unit: 30 A	
Power consumption (Operating)	Main unit: 12 kw	
CERTIFICATIONS		
Safety	Canada: CAN/CSA-C22.2 No.301, CAN/CSA C22.2 No.0, ICES-001 Class A U.S.A: UL2011 or UL775, NFPA79, NFPA70, FCC Part 15 Subpart B, Class A Mexico: NOM-019-SCFI Brazil: NR12 Safety in Machinery and Equipment Work EU, EFTA countries, Turkey: ISO12100,ISO13849-1, IEC/EN60204-1, EN1010-1, EN55011, EN61000-6-2 Morocco: Order No.2573-14, Order Noo.2574-14 Russia, Belarus, Kazakhstan, Ukraine: CISPR 11 India: (HSE, Declaration) Electrics and Information Technology Goods (Requirements for Compulsory Registration) Order, 2012 IS13252 (Part 1) Uzbekistan: Safety and EMC (CE), Factory Audit Jordan: Safety and EMC (CE) Saudi Arabia: Safety and EMC (CE) UAE: Safety and RoHS (CE), Factory Audit Sri Lanka: Safety and EMC (CE)	
Electromagnetic	Korea: Korean MSIP regulation KN11, KN61000-6-2	
AIR SUPPLY		
Air tube connection	Ø8 mm	
Pressure	0.45 Mpa	
WATER INPUT		
Connection	Connect with a Ø15 mm (int. diam) pipe	
Pressure	Min. 0.8 Mpa (8 bar)	
Water flow rate	Min.50 litres per hour	
VENTILATION		
Air tube connection	Ø125 mm	
Air flow	900 m^3 per hour	
WATER DRAIN		
Connector	Connect with a Ø25 mm (int. diam) pipe	
WATER INK DRAIN		
Flushing area connector	Connect with a Ø12 mm (int. diam) hose	
Waste ink connector	Connect with a Ø25 mm (int. diam) hose	
NETWORK		
Transmission speed	USB3.0 Ethernet 1000BASE-T	

*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 At 300 x 300 dpi with 2 halftone layers
*3 At 300 x 300 dpi with 4 halftone layers
*4 At 300 x 300 dpi with 6 halftone layers

ML-8000 & Working Area Dimensions



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, 3 litres

DIMENSIONS

- **Printer**
  3,700 (W) x 2,690 (D) x 1,830 (H) mm
  (146 x 106 x 72 in)
- **Ink rack (with 10L ink)**
  880 (W) x 960 (D) x 790 (H) mm
  (35 x 38 x 31 in)

WEIGHT

- **Printer**
  Approx. 2,150 kg (4,740 lb)
- **Ink rack**
  Approx. 110 kg (243 lb, not including ink)

PRECISIONCORE PRINTHEAD

EPSON®