



Data Sheet Inkjet Head S800



1. PrecisionCore Technology

- a. MEMS manufacturing and thin film piezo technology enable high precision and high nozzle density, contributing to compact, high speed, high quality print heads with excellent image quality.
- b. Epson's unique precision MEMS nozzles and ink flow path, ensure that perfectly round ink droplets are placed accurately and consistently.

2. Support for greyscale

Epson's unique Variable Sized Droplet Technology (VSDT) delivers smooth graduations by ejecting droplets of different volumes.

3. Compact design

The high productivity in a small form factor permits the design of more compact devices.

4. Printing on curved surfaces

The printhead depth of 8.3 mm and distance between nozzle rows of just over 1.0 mm make the S800 ideal for printing around curved or complicated surfaces.

5. High durability

PrecisionCore print heads have proven durability and extended service life demonstrated by Epson's own industrial printers.

6. Compatible with wide range of inks

With 4 print head types available, the S800 supports a wide range of inks and can be used for a wide variety of industrial applications.

U1 and U3 are compatible with UV inks.

A1 is compatible with water-based inks.

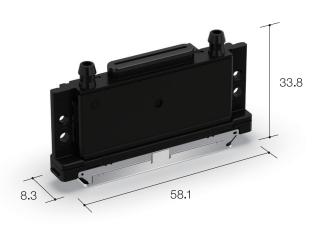
S1 is compatible with the strong solvents used in some coatings, functional fluids, etc.

■ Product Specifications

Product name		S800-S1	S800-U1	S800-U3	S800-A1
Ink type		Solvent	UV / Eco Solvent		Aqueous
Type		PrecisionCore MicroTFP printhead			
Width x Depth x Height*		58.1 x 8.3 x 33.8 mm			
Weight*		13 g			11 g
Number of nozzle		800			
Nozzle pitch/nozzle row		1/300 inch			
Nozzle rows		2 rows			
Nozzle Resolution		300 npi/row 600 npi/2 rows			
Max. number of colour inks		1 colour			
Effective print width		33.8 mm (1.33 inches)			
Droplet ejection performance*	Binary	5 pl at	48 kHz	7.5 pl at 48 kHz	5 pl at 48 kHz
	4 levels grey scale	3.2, 5.1, 10	.1 at 24 kHz	5.1, 8.8, 15.0pl at 24 kHz	4.0, 6.0, 11.0pl at 23.6kHz
Viscosity range*		9.0 ~ 11	.0mPa·s	8.0 ~ 9.0mPa·s	3.2 ~ 4.4mPa·s
Ink recirculation		Common channel recirculation			Not available
Internal heater		Not available			
Positioning Mechanism		Reference hole			

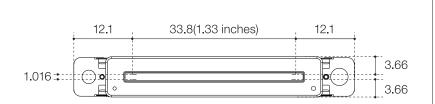
 $[\]label{prop:prop:sunique} \mbox{$\mbox{$\%$} Epson's unique waveform design allows for a variety of greyscale and droplet size combinations.}$

■ Product size (mm)

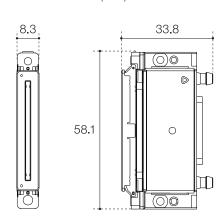


 $\mbox{\em \%}$ The images and drawings are S800-U1 / U3 / S1.

■ Nozzle (mm)



■ External dimensions (mm)



^{*}Figures are reference values

⁻ Specifications and designs in this catalog are current as of March, 2022.