

Data Sheet
Inkjet Head S800



1. PrecisionCore Technology

- a. MEMS manufacturing and thin film piezo element can realize high precision and high density (600 npi/2 rows of nozzles). Contributes to compact, high speed, high quality, and high image quality.
- b. Precision made of Epson unique MEMS nozzles and an ink flow path ensure the perfectly round ink droplets are placed accurately and consistently.

2. Support for grey scale

Epson's unique Variable Sized Droplet Technology (VSDT) delivers smooth gradation by freely control to eject the droplet volume.

3. Compact design

Achieved high productivity, multi-colours with space saving and high flexible assembly to devise. Contributes to miniaturize the device.

4. Curved surface printing

Achieved a thinness of 8.3 mm width and between nozzle row is around 1 mm. Distance between nozzle surface and printed material are small gap, high image quality can be achieved. Printable to curved surface and complicated surface.

5. High durability

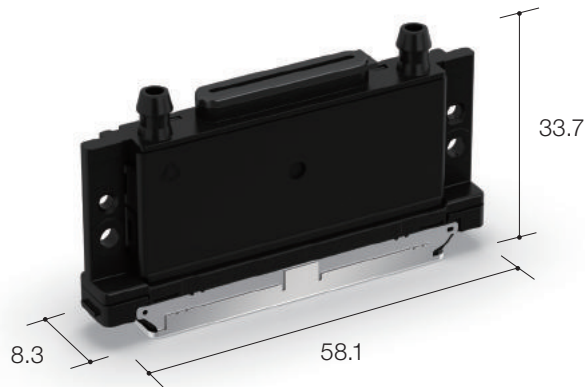
PrecisionCore print head has proven high durability and extended service life by Epson's industrial printers.

Product Specifications

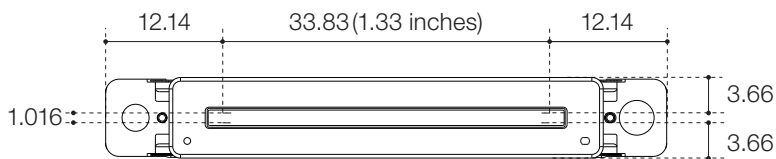
Product name		S800-U1	S800-U3	S800-A1
Ink type		UV		Aqueous
Type		PrecisionCore MicroTFP printhead		
Width x Depth x Height		58.1 x 8.34 x 33.79 mm		
Weight		11 g		
Number of nozzle		800		
Nozzle pitch / nozzle row		1/300 inch		
Nozzle rows		2 rows		
Nozzle Resolution		300 npi/row 600 npi/2 rows		
Max. 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	7 pl at 48 kHz
	4 levels greyscale	3.2, 5, 10 pl at 24 kHz	4.8, 9, 15 pl at 24 kHz	3.3, 7, 13 pl at 24 kHz
Viscosity range		8-11 mPa·s	8-9 mPa·s	3-4 mPa·s
Ink recirculation		Common channel recirculation		None
Positioning Mechanism		Reference hole		

* Combining the various grey scale and the droplet size can be realized by Epson unique waveform design.

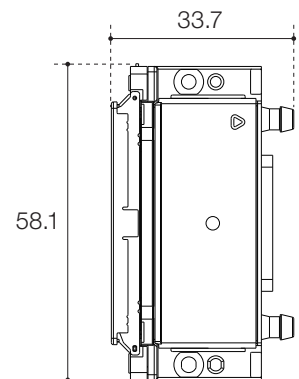
Product size (mm)

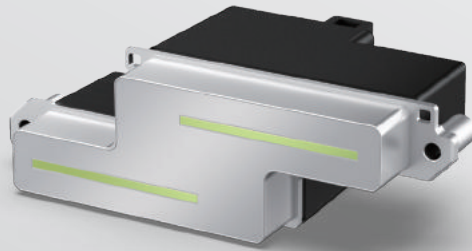


Nozzle (mm)



External dimensions (mm)





Data Sheet
Inkjet Head S1600



1. PrecisionCore Technology

- a. MEMS manufacturing and thin film piezo element can realize high precision and high density (600 npi/2 rows of nozzles). Contributes to compact, high speed, high quality, and high image quality.
- b. Precision made of Epson unique MEMS nozzles and an ink flow path ensure the perfectly round ink droplets are placed accurately and consistently.

2. Support for grey scale

Epson's unique Variable Sized Droplet Technology (VSDT) delivers smooth gradation by freely control to eject the droplet volume.

3. High Productivity

The wide printing width of 67.2 mm (2.65 inches) is excellent for high production. Minimum-pass printing is possible because there is very little variation between nozzles.

4. Scalability

Highly scalable S-shape design can realize space-saving for increasing productivity and multi-colours. Contributes to miniaturize the printer.

5. Maintenance

A high-precision positioning hole allow the user to replace the head quickly and efficiently without further adjustments.

6. High durability

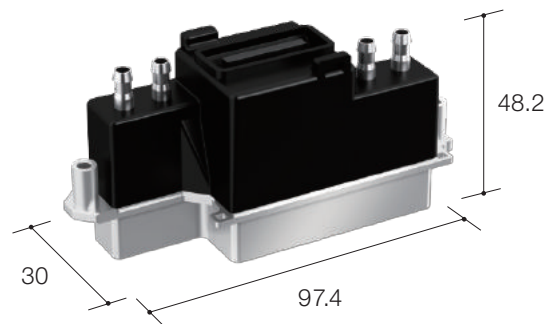
PrecisionCore print head has proven high durability and extended service life by Epson's industrial printers.

■ Product Specifications

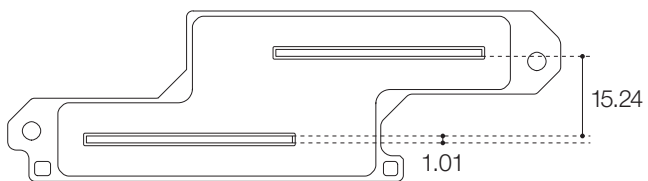
Product name		S1600-U1
Ink type		UV
Type		PrecisionCore MicroTFP printhead
Width x Depth x Height		97.4 x 30 x 48.2 mm
Weight		150 g
Number of nozzle		1600 (Net: 1558)
Nozzle pitch / nozzle row		1/300 inch
Nozzle rows		2 rows
Nozzle Resolution		300 npi/row 600 npi/2 rows
Max. number of colour inks		2 colour
Effective print width		67.2 mm (2.65 inches)
Droplet ejection performance	Binary	5 pl at 48kHz
	4 levels grey scale	3.2, 5, 10 pl at 24 kHz
Viscosity range		8-11 mPa·s
Ink recirculation		Common channel recirculation
Positioning Mechanism		Reference hole

※ Combining the various grey scale and the droplet size can be realized by Epson unique waveform design.

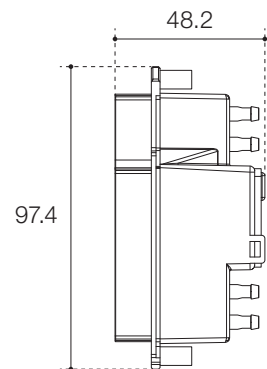
■ Product size (mm)

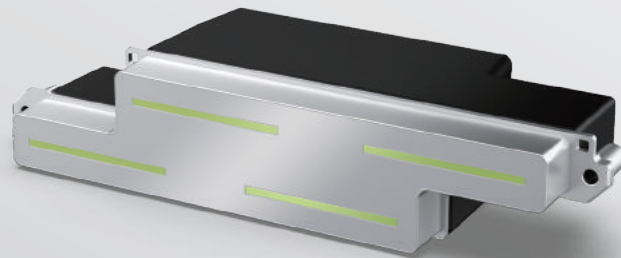


■ Nozzle (mm)



■ External dimensions (mm)





Data Sheet
Inkjet Head S3200



1. PrecisionCore Technology

- a. MEMS manufacturing and thin film piezo element can realize high precision and high density (600 npi / 2 rows of nozzles). Contributes to compact, high speed, high quality, and high image quality.
- b. Precision made of Epson unique MEMS nozzles and an ink flow path ensure the perfectly round ink droplets are placed accurately and consistently.

2. Support for grey scale

Epson's unique Variable Sized Droplet Technology (VSDT) delivers smooth gradation by freely control to eject the droplet volume.

3. High Productivity

The wide printing width of 120.2 mm (4.73 inches) is excellent for high production. Minimum-pass printing is possible because there is very little variation between nozzles.

4. Scalability

Highly scalable S-shape design can realize space-saving for increasing productivity and multi-colours. Contributes to miniaturize the printer.

5. Maintenance

A high-precision positioning hole allow the user to replace the head quickly and efficiently without further adjustments.

6. High durability

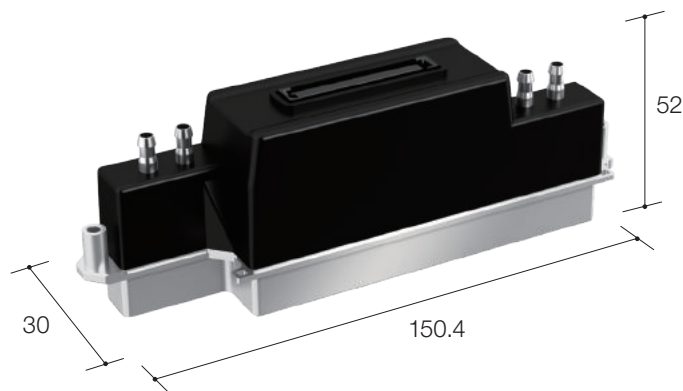
PrecisionCore print head has proven high durability and extended service life by Epson's industrial printers.

■ Product Specifications

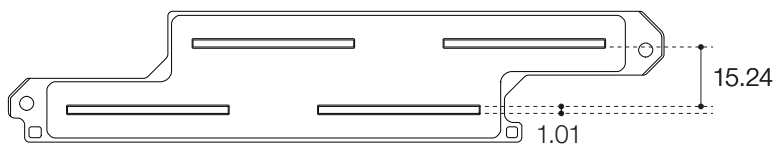
Product name		S3200-U1	S3200-U3	S3200-A1
Ink type		UV / Eco Solvent		Aqueous
Type		PrecisionCore MicroTFP printhead		
Width x Depth x Height		150.4 x 30 x 52 mm		
Weight		235 g		
Number of nozzle		3200 (Net: 2840)		
Nozzle pitch / nozzle row		1/300 inch		
Nozzle rows		2 rows		
Nozzle Resolution		300 npi/row 600 npi/2 rows		
Max. number of colour inks		2 colours		
Effective print width		120.2 mm (4.73 inches)		
Droplet ejection performance	Binary	5 pl at 48 kHz	7.5 pl at 48 kHz	7 pl at 48 kHz
	4 levels grey scale	3.2, 5, 10 pl at 24 kHz	4.8, 9, 15 pl at 24 kHz	3.3, 7, 13 pl at 24 kHz
Viscosity range		8-11 mPa·s	8-9 mPa·s	3-4 mPa·s
Ink recirculation		Common channel recirculation		
Positioning Mechanism		Reference hole		

※ Combining the various grey scale and the droplet size can be realized by Epson unique waveform design.

■ Product size (mm)



■ Nozzle (mm)



■ External dimensions (mm)

