

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

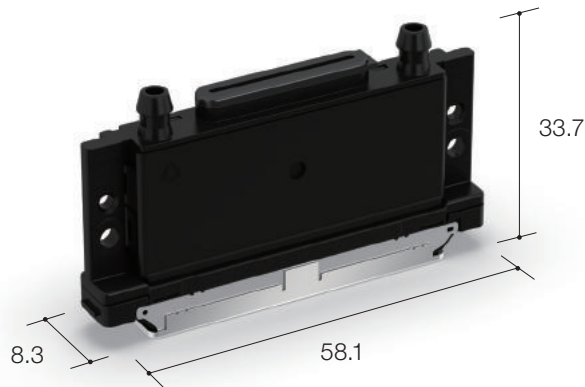
PrecisionCore print head has proven high durability and extended service life by Epson's industrial printers.

## Product Specifications

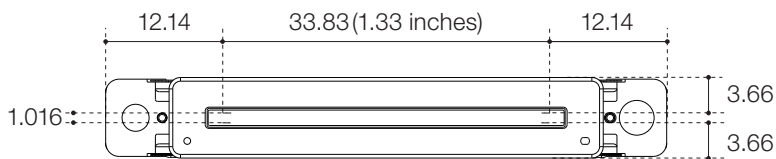
Product name		S800-U1	S800-U3	S800-A1
Ink type		UV		Aqueous
Type		PrecisionCore MicroTFP printhead		
Width x Depth x Height		58.1 x 8.34 x 33.79 mm		
Weight		11 g		
Number of nozzle		800		
Nozzle pitch / nozzle row		1/300 inch		
Nozzle rows		2 rows		
Nozzle Resolution		300 npi/row 600 npi/2 rows		
Max. 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.

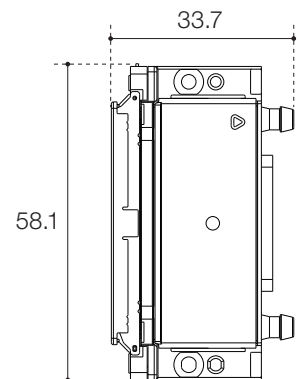
## Product size (mm)



## 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

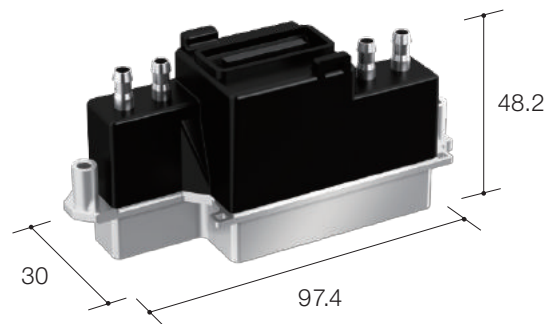
PrecisionCore print head has proven high durability and extended service life by Epson's industrial printers.

## ■ Product Specifications

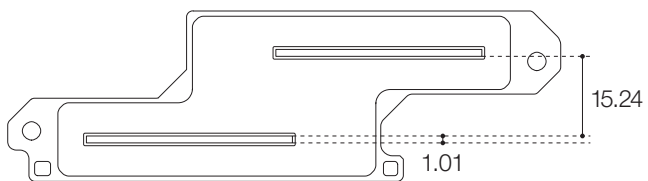
Product name		S1600-U1
Ink type		UV
Type		PrecisionCore MicroTFP printhead
Width x Depth x Height		97.4 x 30 x 48.2 mm
Weight		150 g
Number of nozzle		1600 (Net: 1558)
Nozzle pitch / nozzle row		1/300 inch
Nozzle rows		2 rows
Nozzle Resolution		300 npi/row 600 npi/2 rows
Max. number of colour inks		2 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.

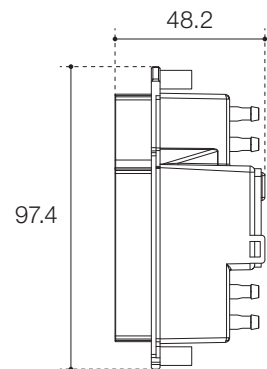
## ■ Product size (mm)

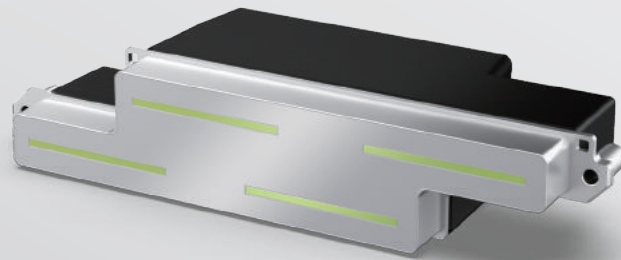


## ■ Nozzle (mm)



## ■ 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

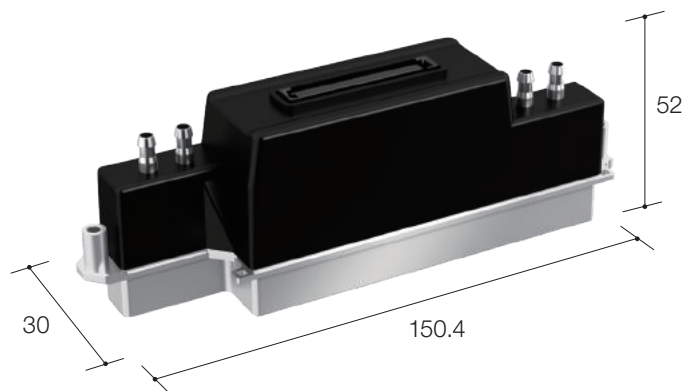
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## ■ Product Specifications

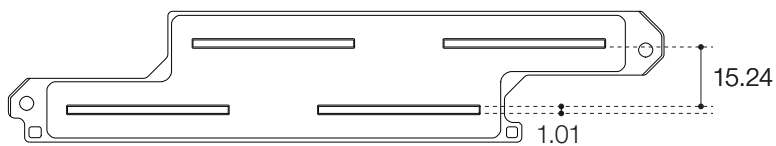
Product name		S3200-U1	S3200-U3	S3200-A1
Ink type		UV / Eco Solvent		Aqueous
Type		PrecisionCore MicroTFP printhead		
Width x Depth x Height		150.4 x 30 x 52 mm		
Weight		235 g		
Number of nozzle		3200 (Net: 2840)		
Nozzle pitch / nozzle row		1/300 inch		
Nozzle rows		2 rows		
Nozzle Resolution		300 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)

