



# 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.

### 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.

### 3. Compact design

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

### 5. High durability

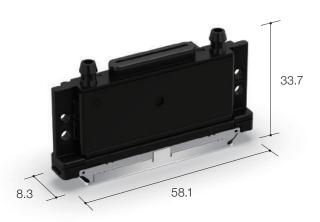
PrecisionCore print head has proven high durability and extended service life by Epson's industrial printers.

### ■ Product Specifications

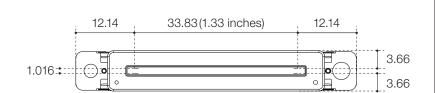
Product name		S800-U1	S800-U3	S800-A1	
Ink type		UV Aqueous			
Type		PrecisionCore MicroTFP printhead			
Width x Depth x Height		58.1 x 8.34 x 33.79 mm			
Weight		11 g			
Number of nozzle		800			
Nozzle pitch/nozzle row		1/300 inch			
Nozzle rows		2 rows			
Nozzle Resolution		300 npi/row 600 npi/2 rows			
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		None	
Positioning Mechanism		Reference hole			

 $<sup>\</sup>label{prop:combining} \mbox{$\mbox{$\%$}$ Combining the various grey scale and the droplet size can be realized by Epson unique waveform design.}$ 

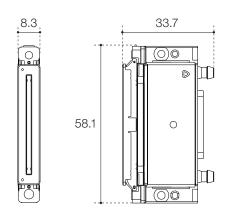
### ■ Product size (mm)



### ■ 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.

### 4. Scalability

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

# 6. High durability

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

# 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.

#### 5. Maintenance

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

### ■ Product Specifications

Product name		S3200-U1	S3200-U3	S3200-A1	
Ink type		UV / Eco Solvent Aqueous			
Type		PrecisionCore MicroTFP printhead			
Widthx Depthx 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 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			
Positioning Mechanism		Reference hole			

 $<sup>\</sup>label{prop:combining} \mbox{$\mbox{$\%$} Combining the various grey scale} \mbox{ and the droplet size can be realized by Epson unique waveform design.}$ 

### ■ Product size (mm)

