



Data Sheet Inkjet Head S3200



1. PrecisionCore Technology

- a. MEMS manufacturing and thin film piezo technology enable high precision and a high nozzle density, creat ing 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.

4. Scalability

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

6. High durability

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

3. High Productivity

The wide printing width of 120 mm (4.73 inches) is excellent for high production. Minimum-pass printing is possible because there is a very small variation between nozzles.

5. Maintenance

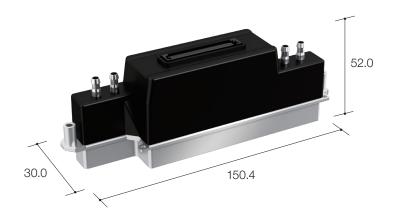
A high-precision positioning hole allows users to replace the head quickly and efficiently without further adjustments.

■ Product Specifications

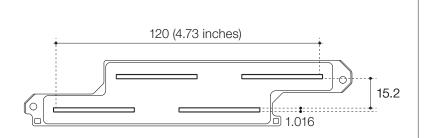
Product name		S3200-U1-2	S3200-U3-2	S3200-A1	S3200-A3
Ink type		UV / Eco Solvent		Aqueous	
Туре		PrecisionCore MicroTFP printhead			
Width x Depth x Height		150.4 x 30.0 x 52.0 mm			
Weight*		238 g		234 g	
Number of nozzle		3200 (Net: 2840)			
Nozzle pitch/nozzle row		1/300 inch			
Nozzle rows		8 rows			
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	9 pl at 48 kHz
	4 levels grey scale	3.2, 5.1, 10.1 pl at 24 kHz	5.1, 8.8, 15.0 pl at 24 kHz	3.2, 7.0, 12.8 pl at 24 kHz	5.0, 9.8, 18.0pl at 24 kHz
Viscosity range*		9.0-11.0 mPa·s	8.0-9.0 mPa·s	3.2-4.4 mPa·s	5.0-7.0 mPa·s
Ink recirculation		Common channel recirculation			
Internal heater		Not available			
Positioning Mechanism		Reference hole			

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

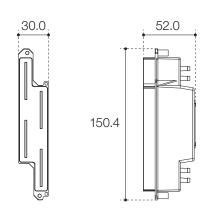
■ Product size (mm)



■ Nozzle (mm)



■ External dimensions (mm)



^{*}Figures are reference values