

Data Sheet

Inkjet Head D3000



1. PrecisionCore Technology

- a. MEMS manufacturing and thin film piezo technology enable high precision and a high nozzle density, creating 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 grey scale

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

3. High resolution and high productivity

With 1200dpi resolution and high driving frequency, the D3000 enables digital printers to deliver image quality and print speeds comparable to those of existing analog printers.

The printhead can be used either in single colour 1200dpi mode or with two colours at 600dpi resolution.

4. Nozzle level recirculation

Ink is circulated at the nozzle level to prevent potential issues caused by evaporation or sedimentation near the nozzles and achieves stable printing.

5. Easy assembly

There is no need to adjust the position of heads in multi-head arrays. This significantly reduces the amount of time it takes to assemble and replace the heads.

6. Easy use

Adopt a Tough and durable printhead casing. Robust materials protect the printhead from unexpected damage during installation or replacement.

7. High durability

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

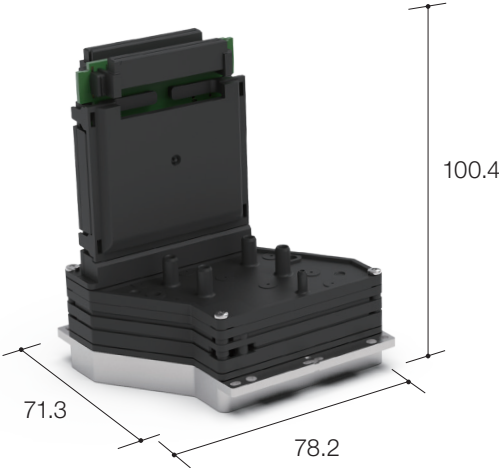
■ Product Specifications

Product name		D3000-A1R
Ink type		Aqueous
Type		PrecisionCore MicroTFP printhead
Width x Depth x Height *		78.2 x 71.3 x 100.4 mm
Weight *		298 g
Number of nozzle		2952
Nozzle pitch / nozzle row		1/333 inch
Nozzle rows		6 rows
Nozzle Resolution		1200 npi (1colour) / 600npi (2colours)
Max. number of colour inks		1 colour / 2colours
Effective print width		61.2 mm (2.41 inches)
Droplet ejection performance *	Binary	3.0 pl at 63.0 kHz
	3levels grey scale	3.0, 5.5 pl at 63.0 kHz
Viscosity range *		5.0-6.0 mPa·s
Ink recirculation		Nozzle level recirculation
Internal heater		Not available

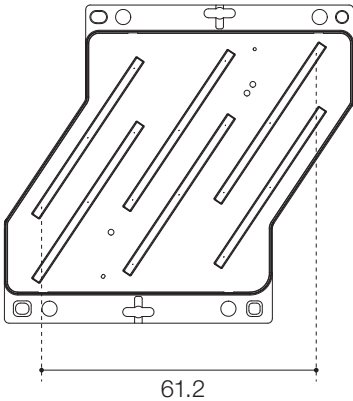
※ Combining the various grey scale and the droplet size can be realized by Epson unique waveform design.

*Figures are reference values

■ Product size (mm)



■ Effective print width(mm)



■ External dimensions (mm)

