
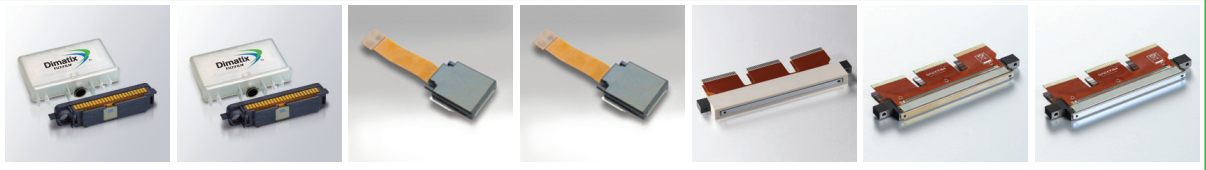




MODEL	DMP-2800	DMP-3000	DMP-5000	DMP-5005	ATTRIBUTES
Format	200 x 300 mm	300 x 300 mm	500 x 500 mm	500 x 500 mm	Vacuum controlled substrate handling placement for accurate registration, up to 60°C heated platen, theta rotation for substrate alignment.
Accuracy	N/A	±5 microns	±5 microns	±5 microns	
Repeatability	±25 microns	±1 microns	±1 microns	±1 microns	
Drop Visualization	✓	✓	✓	✓	Droplet images dynamically captured for printhead tuning and waveform development.
Fiducial Camera	✓	✓	✓	✓	Allows substrate alignment, measurement of features and feature location.
Alignment Camera		✓	✓	✓	Facilitates auto printhead alignment.
PRINTHEADS SUPPORTED					
DMC-11601	✓	✓	✓	✓	16-jet, 1 picoliter silicon MEMS snap-in printhead with user fillable cartridge. Shares physical features with the DMC 10 picoliters allowing easy interchangeability. Features as small as 20 microns can be deposited.
DMC-11610	✓	✓	✓	✓	16-jet, 10 picoliters silicon MEMS snap-in printhead with user fillable cartridge. Shares physical features with the DMC 1 picoliter allowing easy interchangeability.
D-128/1 DPN		✓	✓	✓	128-inline jets, 1 picoliter silicon MEMS production printhead with integrated cooling and driver-per-nozzle and trimming capability. Shares identical physical features with D-128 10 picoliters allowing easy interchangeability.
D-128/10 DPN		✓	✓	✓	128 inline-jets, 10 picoliters silicon MEMS production printhead with integrated cooling and driver-per-nozzle and trimming capability. Shares identical physical features with D-128 1 picoliter allowing easy interchangeability.
SX3		✓	✓		128-inline tunable jets with 8 picoliters calibrated drop size. Hybrid silicon carbon construction. Has silicon nozzle plate with non-wetting coating.
SE-DPN		✓	✓		128-inline tunable jets with 30 picoliters calibrated drop size. Hybrid silicon carbon construction. Has an electroformed nickel-gold nozzle plate.
SE3		✓	✓		128-inline tunable jets with 35 picoliters calibrated drop size. Hybrid silicon carbon construction. Has silicon nozzle plate with non-wetting coating.
	Product Use: Small footprint, laboratory development tool for fluids, process and small format sample generation. Special Features: <ul style="list-style-type: none"> • Simple to use and operate • Tabletop device • Does not require special site-holder improvements 	Product Use: Larger format, high accuracy floor standing system for process, fluids and low volume prototype generation. Special Features: <ul style="list-style-type: none"> • UV cure lamp option • Manual or automatic filling of fluid reservoir 	Product Use: Largest format, high accuracy floor standing system for process, fluids and low volume prototype generation. Special Features: <ul style="list-style-type: none"> • UV cure lamp option • Manual or automatic filling of fluid reservoir • Optional HEPA filter 	Product Use: Largest format, high accuracy floor standing system for production volume manufacturing. Special Features: <ul style="list-style-type: none"> • Support up to 5 printheads • Optional HEPA filter 	<i>See other side for Materials Deposition Printheads</i> 



OPERATING PARAMETERS	DMC-11601	DMC-11610	D-128/1 DPN	D-128/10 DPN	SX3	SE-DPN	SE3
Individual tunable nozzles	✓	✓	✓	✓	✓	✓	✓
Nozzle plate	Silicon with non-wetting coating	Silicon with non-wetting coating	Silicon with non-wetting coating	Silicon with non-wetting coating	Silicon with non-wetting coating	Electroformed nickel-gold plated	Silicon with non-wetting coating
Nozzle spacing (microns)	254	254	254	254	508	508	508
Nozzle diameter (microns)	9	21	9	21	19	35	42
Calibrated drop size (picoliters)	1	10	1	10	8	30	35
Adjustment drop size range (picoliters)	Fixed	Fixed	Fixed	Fixed	8 - 10	25 - 30	30 - 40
Maximum operating frequency (kHz)	15	20	15	20	10	40	15