FUJIFILM

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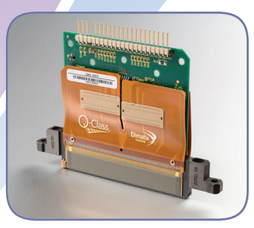
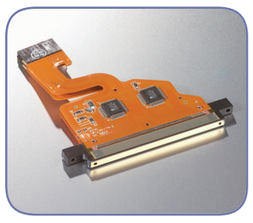
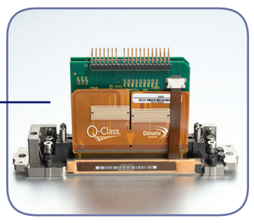
Printhead Reference Chart


High Performance Graphics

OPERATING PARAMETERS	UNIT OF MEASURE	Samba® G3 | G5L	StarFire® 1024 SG-1024/M-C | SG-1024/M-C/2-C SG-1024/S-C | SG-1024/S-C/2-C SG-1024/M-A | SG-1024/M-A/2-C SG-1024/S-A | SG-1024/S-A/2-C	StarFire® 600 SG-600/S-A | SG-600/S-C
Number of addressable jets		2048	1024	1536
Nozzle spacing	µm [in.]	0.0212 [0.000833] [1200 dpi]	63.5 [0.0025] 1-color [400 dpi] | 2-color [200 dpi]	63.5 [0.0025] 1-color [600 dpi]
Number of nozzle rows		32	8	12
Adjustment range for drop size	picoliters	G3L: 2.4 - 10.0 | G5L: 3.5 - 13.0	26 - 65	12 - 33
Jet straightness, 1 sigma	mrad [deg.]	1.0 [0.057]	1.5 [0.086]	1.5 [0.086]
Nominal drop velocity	m/sec	8	8	8
Drop velocity variation, 1 sigma	percent	Fluid Dependent	5	5
Operating temperature maximum	°C [°F]	up to 60 [140]	up to 50 [122]	up to 50 [122]
Fluid viscosity range (at jetting temp)	cP	G3L: 4 - 8 | G5L: 5 - 9	8 - 20 (10 - 14 *r)	8 - 20 (10 - 14 *r)
Compatible jetting fluids		Organic solvent, UV curable, aqueous inks, latex	M-C/S-C: Oil-based ceramics ink M-A/S-A: Organic solvent, UV curable, aqueous inks	S-C: Oil-based ceramics ink S-A: Organic solvent, UV curable, aqueous inks
Maximum operating frequency	picoliters @ kHz	G3L: 2.4 pl @ 100 kHz | G5L: 3.5 @ 100 kHz	M-C/S-C: 26 pl @ 30/50 kHz | M-A: 30 pl @ 30 kHz M-C/S-C: 65 pl @ 30/50 kHz | M-A: 80 pl @ 10 kHz	S-A/S-C: 33 pl @ 50 kHz
PHYSICAL CHARACTERISTICS	**UNIT OF MEASURE**			
Nozzle line length	mm [in.]	42.69 [1.68]	64.77 [2.550]	64.77 [2.550]
Length x width x height	mm	17.5 x 43.5 x 83	126 x 40 x 150	126 x 55 x 150
	[in.]	[0.7 x 1.7 x 3.27]	[4.96 x 1.57 x 5.90]	[4.96 x 2.17 x 5.90]
Weight	grams [oz]	230 [8.1]	320 [12]	450 [15.9]
PRODUCT FEATURES				
Built in heater or thermistor		Thermistor	Thermistor	Thermistor
VersaDrop compatibility (beyond native drop)		VersaDrop – binary & grayscale	VersaDrop – binary & grayscale	VersaDrop – binary & grayscale
Nozzle plate technology		Silicon w/ non-wetting coating	Metal	Metal
Product Data Sheet #		PDS00105	PDS00114, PDS00115, PDS00130	PDS00128

N/A = Not Applicable
N/I = Not Included
*r = recommended

Product data presented above are for guideline purposes only. For design and engineering work using this product, please contact Dimatix Technical Support for the appropriate Product Manual containing full Product Specifications.

High Performance Graphics

Universal Graphics

Specialty Printing

OPERATING PARAMETERS	UNIT OF MEASURE	Sapphire QS-256/10 AAA QS-256/30 AAA QS-256/80 AAA	Emerald QE-256/30 AAA QE-256/80 AAA	Polaris PQ-512/15 AAA PQ-512/35 AAA PQ-512/85 AAA	Polaris PQ-512/15 2C PQ-512/35 2C PQ-512/85 AAA-2C	Galaxy 256/30 AAA 256/50 AAA 256/80 AAA	Nova 256/80 AAA	S-Class SE-128 AA SM-128 AA SL-128 AA	Galaxy 256/30 HM 256/80 HM
Number of addressable jets		256	256	512	512	256	256	128	256
Nozzle spacing	µm [in.]	254 [0.010]	254 [0.010]	1-color: 127 [0.005] [200]	2-color: 254 [0.010] [100]	254 [0.010]	279 [0.011]	508 [0.020]	254 [0.010]
Number of nozzle rows		1	1	4	4	28, 50, 80	75	30, 50, 80	28, 80
Adjustment range for drop size	picoliters	10 - 30 | 30 - 80 | 80 - 200	30 - 80 | 80 - 200	15 - 30 | 35 - 80 | 80 - 150	15 - 30 | 35 - 80 | 80 - 150	5	5	4	5
Jet straightness, 1 sigma	mrad [deg.]	1.5 [0.086]	1.5 [0.086]	2 [0.11]	2 [0.11]	5 [0.29]	4 [0.23]	3 [0.17]	5 [0.29]
Nominal drop velocity	m/sec	8	8	8	8	7 - 8	8	8	8
Drop velocity variation, 1 sigma	percent	4	4	5	5	5	5	5	5
Operating temperature maximum	°C [°F]	90 [194]	90 [194]	60 [140]	60 [140]	90 [194]	90 [194]	90 [194]	125 [257]
Fluid viscosity range(at jetting temp.)	cP	8 - 20 (10 - 14 *r)	8 - 20 (10 - 14 *r)	8 - 20 (10 - 14 *r)	8 - 20 (10 - 14 *r)	8 - 20	8 - 20	8 - 20	8 - 20
Compatible jetting fluids		Organic solvent, UV curable, aqueous inks	Organic solvent, UV curable, aqueous inks	Organic solvent, UV curable, aqueous inks	Organic solvent, UV curable, aqueous inks	Organic solvent, UV curable, aqueous inks	Organic solvent, UV curable, aqueous inks	Organic solvent, UV curable	Hot melt
Maximum operating frequency	picoliters @ kHz	10 pl @ 50 kHz | 30 pl @ 33 kHz | 80 pl @ 20 kHz 30 pl @ 16 kHz | 80 pl @ 12 kHz | 200 pl @ 8 kHz	30 pl @ 33 kHz | 80 pl @ 20 kHz 80 pl @ 12 kHz | 200 pl @ 8 kHz	15 pl @ 40 kHz | 35 pl @ 30 kHz | 85 pl @ 20 kHz 30 pl @ 25 kHz | 80 pl @ 13 kHz | 150 pl @ 10 kHz	15 pl @ 40 kHz | 35 pl @ 30 kHz | 85 pl @ 20 kHz 30 pl @ 25 kHz | 80 pl @ 13 kHz | 150 pl @ 10 kHz	20	20	20	12
PHYSICAL CHARACTERISTICS	**UNIT OF MEASURE**								
Nozzle line length	mm [in.]	64.77 [2.550]	64.77 [2.550]	64.77 [2.550]	64.77 [2.550]	64.8 [2.55]	71.1 [2.80]	64.5 [2.54]	64.8 [2.55]
Length x width x height	mm	116.5 x 8 x 84.5	116.5 x 8 x 84.2	150.25 x 29.5 x 84.5	150.25 x 29.5 x 84.5	102 x 25 x 102	102 x 25 x 112	102 x 5 x 110	102 x 6.4 x 111
	[in.]	[4.59 x 0.32 x 3.33]	[4.59 x 0.32 x 3.31]	[5.92 x 1.16 x 3.33]	[5.92 x 1.16 x 3.33]	[4 x 1 x 4]	[4 x 1 x 4.4]	[4 x 0.2 x 4.3]	[4 x 0.25 x 4.3]
Weight	grams [oz]	42.5 [1.5]	42.5 [1.5]	160 [5.6]	160 [5.6]	125 [4.41]	113 [3.98]	25 [0.88], 35 [1.23]	640 [22.57]
PRODUCT FEATURES									
On-head reservoir, ink sensor, lung		N/I	N/I	N/I	N/I	Optional	Optional	Optional	Optional
Built in heater or thermistor		Thermistor	Thermistor	Frame heaters & thermistors	Frame heaters & thermistors	Thermistor	Optional	Thermistor	N/A
VersaDrop compatibility (beyond native drop)		VersaDrop – binary & grayscale	VersaDrop – binary & grayscale	1 and 2-color operation; VersaDrop – binary with multipulse	1 and 2-color operation; VersaDrop – binary with multipulse	N/A	N/A	N/A	N/A
Nozzle plate technology		Silicon	Metal	Metal	Metal	Metal	Metal	Metal	Metal
Product Data Sheet #		PDS00119	PDS00120	PDS00070 PDS00069 PDS00071	PDS00074 PDS00075 PDS00076	PDS00040 (JA) PDS00041 (JA) PDS00042 (PH) PDS00043 (JA) PDS00044 (PH) PDS00045 (PH)	PDS00024 (JA) PDS00031 (PH)	PDS00008 PDS00009 PDS00016	PDS00014 PDS00026

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