

SAMBA[®] G3L/G5L

Designed for Aqueous, Solvent
and UV Curable Inks

Fujifilm's FUJIFILM Dimatix SAMBA1200dpi printhead technology provides speed, versatility, and reliability suitable for a broad range of demanding applications. The SAMBA printhead leverages the accuracy and precision of Silicon MEMS (Si-MEMS) fabrication with the reliability and useful life of sputtered PZT in an ingenious parallelogram shape to deliver breathtaking image quality at production speeds.

Unique Si-MEMS Design

- Superb drop placement accuracy and uniformity for high quality printing
- Broad fluid compatibility (UV, Aqueous, Solvent, Latex)
- Long useful actuator life enabled by sputtered PZT
- Multiple REDIJET[®] Coating (RJC) options including non-wetting coatings and internal protective coatings to meet various application requirements
- Wide range of drop sizes

Optimized for Single-Pass

- Parallelogram shape provides compact in-line stitching for minimizing printbar depth
- High-frequency with high duty cycle for challenging high productivity applications
- REDIJET[®] — Dual recirculation for reliable jetting & Support fast system start-up
- 600 or 1200dpi modes in process direction
- Grayscale for robust high-quality printing
- Versadrop binary and grayscale jetting with open and editable waveform utility

Proven Performance in Many Applications

The SAMBA printhead is the proven leader in high-speed applications such as commercial print, textile, label, packaging, and 3D printing. The SAMBA family includes two models providing two native drop size for single-pass applications which demand different ink coverage.

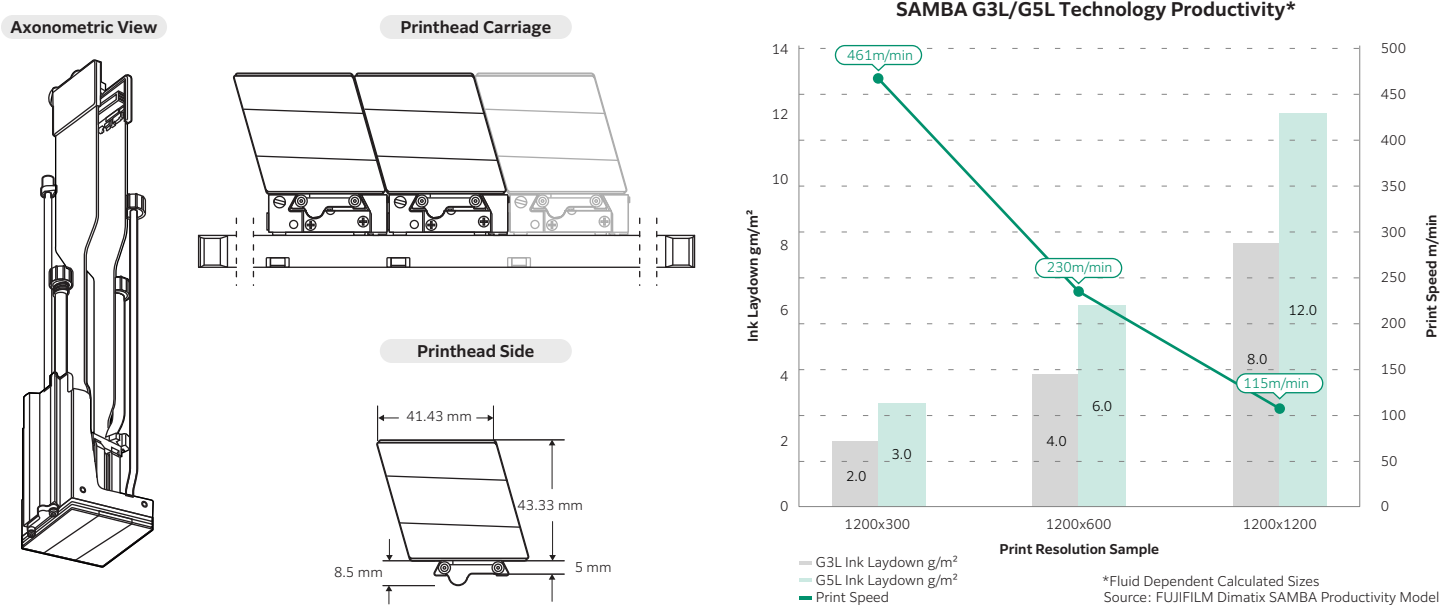
Support

- Backed by exceptional support organization
- Dedicated worldwide field organization to ensure successful product development
- Lab and quality assurance investigative team to ensure satisfaction with FUJIFILM Dimatix products through your product lifecycle

Technical Specifications

SAMBA G3L/G5L	SAMBA G3L Printhead	SAMBA G5L Printhead
Number of Addressable Jets / Module	2048	
Print Width (mm/in)	43 (1.7)	
Native Resolution (dpi)	1200	
Native Drop Size / Largest Drop Size (pL)	2.4 / 10	3.5 / 13
Versadrop Max Productivity (ng-kHz)	360	450
Firing Frequency (kHz)	Over 100	
Nozzle Plate Technology	Silicon MEMS w/ protective REDIJET coating	
Compatible Fluids	UV, AQ, Latex, Solvents, Other	AQ, Latex, Solvents, Other
Viscosity Range (cP)	4–8 (For Highest Performance)	5–9 (For Highest Performance)
Temperature Control	Fluid Thermal Transfer	
Inkjet Operating Temperature Range (C/F)	Up to 60°C / 140°F	
Integrated Temperature Sensor	Included	
OEM Accessible Non-volatile Memory	64-byte rewritable	

Physical Characteristics



SAMBA G3L/G5L Technology Productivity*

Print Resolution Sample	G3L Ink Laydown (g/m²)	G5L Ink Laydown (g/m²)	Print Speed (m/min)
1200x300	2.0	3.0	461
1200x600	4.0	6.0	230
1200x1200	8.0	12.0	115

*Fluid Dependent Calculated Sizes
Source: FUJIFILM Dimatix SAMBA Productivity Model

Product characteristics and depictions are not drawn to scale and are general illustrations only. Technical specifications above may vary based on usage conditions and overall system environment

For design and engineering work using this SAMBA printhead, please contact Dimatix Technical Support for the appropriate Product Manual containing full Product Specifications.

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