DATA SHEET

BMF

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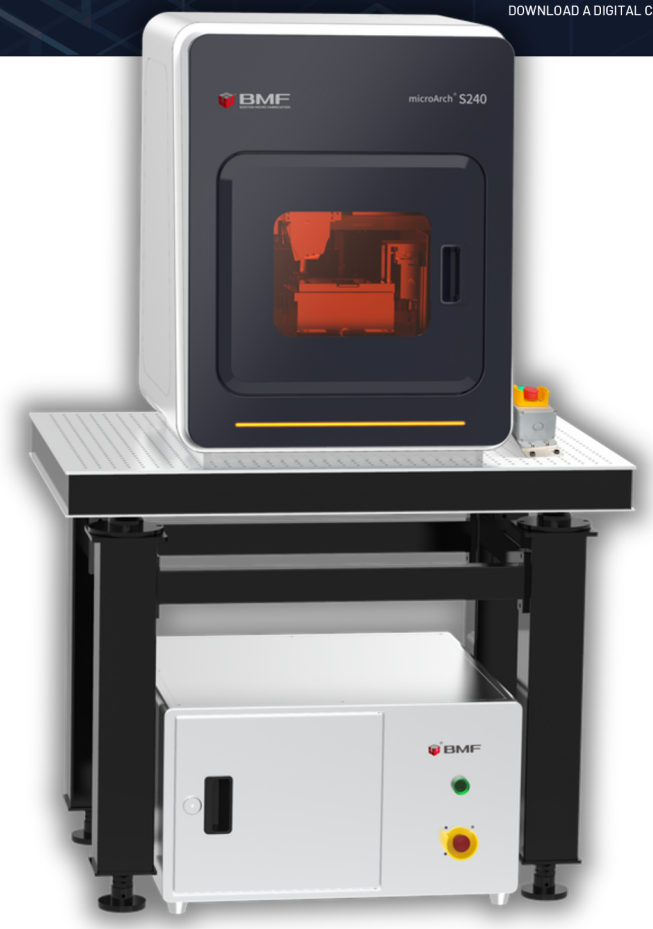
microArch® S240

10µm Resolution Series



The microArch S240 is a microprecision 3D printer designed to meet the needs of short-run industrial production. The printer combines a large build volume, fast printing speeds and advanced materials with ultra-high resolution, accuracy and precision.

The microArch S240 is built upon BMF's Projection Micro Stereolithography technology or PµSL, a technique that allows for rapid photopolymerization of liquid polymers using flashes of UV light at microscale resolution. The production of intricate, exact and replicable parts makes PµSL well-suited for end-part and prototyping use across a wide range of industries, including medical device manufacturing, microfluidics, MEMS, biotech and pharma, electronics, education, and research and development.

Resolution × Accuracy × Precision

Features

- **Feature Size:** Capable of printing with minimal 3D feature size of 50µm or better.
- **Precise Automatic Calibration:** Quickly and automatically calibrate the level of the platform, membrane, and roller, decreasing printer turnover time. Increased throughput, ease of use, and build-to-build repeatability.
- **Open Material System:** Capable of running with 405nm resin formulations prepared by the customer or sourced from other suppliers.
- **Fully Customizable Printing Parameters:** For full control over builds, with the option for some automatic parameters for ease of use as well.
- **Light Source:** Stability with a pixel resolution of 10µm.
- **Laser Displacement Sensor:** To assist with precise leveling and calibration.
- **Heated Resin Vat:** To provide a consistent printing temperature suitable for more complex environments and diverse materials.
- **3 Print Modes:** Single Exposure, Array, Multi-Exposure
- **Roller:** Reduces material leveling time in between layers and allows for the capability to run with resin formulations up to 15,000 cP.
- **Bubble Scraper:** Equipped with a scraper attachment to remove air bubbles from the resin before polymerization.

System	DIMENSIONS	650 x 700 x 790mm
	WEIGHT	130KG
Performance	BUILD SIZE	100 x 100 x 75mm
	PRINTING MATERIAL	Photosensitive resin, ceramic
	XY RESOLUTION	10µm
	XY POSITIONAL ACCURACY	± 1µm
	LAYER THICKNESS	10~40µm
	SURFACE FINISH	0.4-0.8µm Ra (top) 1.5-2.5µm Ra (side)
Facility	POWER SUPPLY	2000w
	ELECTRICAL REQUIREMENT	110 – 120 VAC, 50-60Hz, Single Phase, 10 Amps 220 – 240 VAC, 50-60Hz, Single Phase, 5 Amps
	CERTIFICATIONS	CE

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