DATA SHEET

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INTRODUCING THE

microArch® S150 Series

World-class precision.
Desktop accessibility.



Powered by Projection Micro Stereolithography (PμSL), the microArch S150 Series delivers true 25μm optical resolution and layer thicknesses from 10–100μm on a compact desktop and benchtop platform — bringing industrial-grade micro-precision manufacturing within reach of labs, development teams, and production environments.

The series includes two configurations: the microArch S150, optimized for flexible lab and development workflows, and the microArch S150 Ultra, a higher-throughput option for teams scaling production output — delivering print speeds up to 4x faster than the S150. Both deliver the same uncompromising part quality — outstanding accuracy, repeatability, fine feature fidelity, and superior surface finish.

With no calibration required and truly one-touch operation — simply press a button and print — the S150 Series makes deployment effortless across lab, office, and industrial environments. High-viscosity material handling further expands formulation possibilities, supporting the full arc from precision prototyping to production across microfluidics, fiber optics, biomedical devices, electronics, and advanced research applications.

Features

- **Interactive Touch Screen:** Equipped with an integrated touchscreen featuring built-in printing parameters for standard materials and full support for customized printing — simplifying day-to-day operation and improving print success rates.
- **Resin Vat Heating System:** Heated up to 60℃, suitable for multiple application scenarios.
- **Platform with Diamond-Like Carbon (DLC) Coating:** Easier printed part removal and enhanced scratch resistance, increasing platform lifespan.
- **Fresh Air Filtration System:** Built-in HEPA13 filter providing clean and safe operational environment.
- **UV Sterilization**: The inner chamber incorporates a UV-C (253.7nm) sterilization system, keeping the build environment clean between print runs and supporting use in contamination-sensitive applications.
- **Side-shifting membrane:** No need to remove or reinstall the membrane in between builds, which increases uptime
- **Flexible options:** S150 can be placed in the biological safety cabinet, desktop and other office environments; T5ml and T20ml micro resin vats are optional.

System	DIMENSIONS	817mm × 485mm × 460mm
	WEIGHT	70KG
Performance	BUILD SIZE	80mm x 48mm x 50mm
	PRINTING MATERIAL	Photosensitive resin
	XY RESOLUTION	25μm
	XY POSITIONAL ACCURACY	± 3μm
	LAYER THICKNESS	10μm – 100μm
	SURFACE FINISH	0.4-0.8μm Ra (top) 1.5-2.5μm Ra (side)
Facility	POWER SUPPLY	2000w
	ELECTRICAL REQUIREMENT	120 - 240 VAC, 50-60Hz, Single Phase, 10 Amps 1.3kW
	CERTIFICATIONS	CE

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KEY FEATURES

High-Speed Micro-Precision 3D Printing

4–12 s per layer printing speeds — up to 4× faster — enabling high-throughput R&D and production.

Clean & Safe Printing Environment

HEPA13 air filtration and UV sterilization systems control particulate and microbial contamination, making the system suitable for cleanroom environments.

Tight Tolerance Control

Performance, precision, and stability meet industrial standards with tolerances controlled within ±50μm.



Efficient User Experience

Auto-leveling system and touchscreen interface enable one-click printing without complex calibration.

High-Precision Manufacturing

25μm optical resolution supports complex and highly detailed structures with no compromise in feature fidelity.

Industrial-Grade Stability

Side-shift film tensioning system + DLC-coated platform ensure consistent quality, reduced wear, and reliable performance for both small-batch customization and mass production.

APPLICATIONS

Housing (130μm feature size)

Printed **four** in 2 hours on the S150 Ultra



Microfluidic Chip

Printed **three** in 2 hours on the S150 Ultra



Endoscope Shell

Printed **eight** in 3 hours, 10 min on the S150 Ultra



Heat Exchanger for Blood Cooling

Printed **four** in 4 hours, 20 mins on the S150 Ultra



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