

## μMICROFLUIDICS PRINTER

### A LEADING OPEN SOURCE 3D PRINTER FOR MICROFLUIDICS

EXCEPTIONAL PRINT QUALITY & SPEED

INDUSTRY LEADING SUPPORT

COST PER DEVICE AS LOW AS \$1\*



#### ENCAPSULATED CHIPS

- Optimized materials for microfluidics, allowing for a wide range of design, layouts and features
- Ideal to quickly evaluate designs for functionality

#### PDMS MASTER MOLDS

- Create master molds, ideal for PDMS devices with features as fine as 60μm
- Exceptional print surface, resulting in glass-like transparent PDMS devices
- Available materials optimized for PDMS master molds

#### DROPLET SYSTEMS

- Exceptional surface finish, resulting in superior transparency and ease of evaluation
- Enclosed features as fine as 100μm
- Available materials optimized for microfluidic applications



————— CADworks3D μMICROFLUIDICS PRINTER POWERS RESEARCH AT —————

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## TECHNICAL SPECIFICATIONS

The MiiCraft powered by CADworks3D is the most versatile open source 3D printer available. With three possible light engines, at 365nm, 385nm and 405nm with a wide range of XY resolution configurations; researchers, engineers and professionals can quickly evaluate a wide range of possible resins, hydrogels and bioinks for their unique applications. Each printer is further optimized and calibrated by CADworks3D to meet the exact standards expected by users. With the support of the CADworks3D team, users will be able to reconfigure and optimize their printer to suit their exact needs for the best possible printing results. MiiCraft powered by CADworks3D printers have a variable and user modifiable Z-axis resolution of 5 to 200μm. The printers are shipped with all accessories and tools needed to start printing once the unit is delivered. All MiiCraft powered by CADworks3D printers come with one year warranty against manufacturer defects.

	Model	Building Size (mm)	X:Y Resolution	Ideal Printing Applications
Light engine optimized for 405nm photoinitiator resins, hydrogels and bioinks	M50-405nm	57x32x120	30μm	Exceptional resolution, ideal for encapsulated chips and PDMS master molds requiring printed features as small as 60μm.
	M80-405nm	80x45x120	41.5μm	High resolution with a large print area, ideal for microfluidic connectors, encapsulated chips and PDMS devices requiring printed features as small as 80 to 100μm.
	M100-405nm	100x57.5x120	50μm	Larger print area with uncompromising resolution, ideal for microfluidic connectors, encapsulated chips, PDMS devices and prototyping requiring printed features as small as 100μm.
Light engine optimized for 385nm photoinitiator hydrogels and bioinks	M50-385nm	57x32x120	30μm	Exceptional detailed hydrogel or bioink applications requiring fine printed parts.
	M80-385nm	80x45x120	41.5μm	High detailed hydrogel or bioink applications requiring a large print area.
	M100-385nm	100x57.5x120	50μm	Hydrogel or bioink applications requiring a larger print area without compromising resolution.
Light engine optimized for 365nm photoinitiator hydrogels and bioinks	M50-365nm	57x32x120	30μm	Exceptional detailed hydrogel or bioink applications requiring fine printed parts.
	M80-365nm	80x45x120	41.5μm	High detailed hydrogel or bioink applications requiring a large print area.
	M100-365nm	100x57.5x120	50μm	Hydrogel or bioink applications requiring a larger print area without compromising resolution.
				Custom bioinks and hydrogels can be calibrated through the open source printer hardware and software.

\*All specifications and designs are subject to changes without notice  
 \*\* Printed details achieved using Resinworks3D PDMS master mold resin