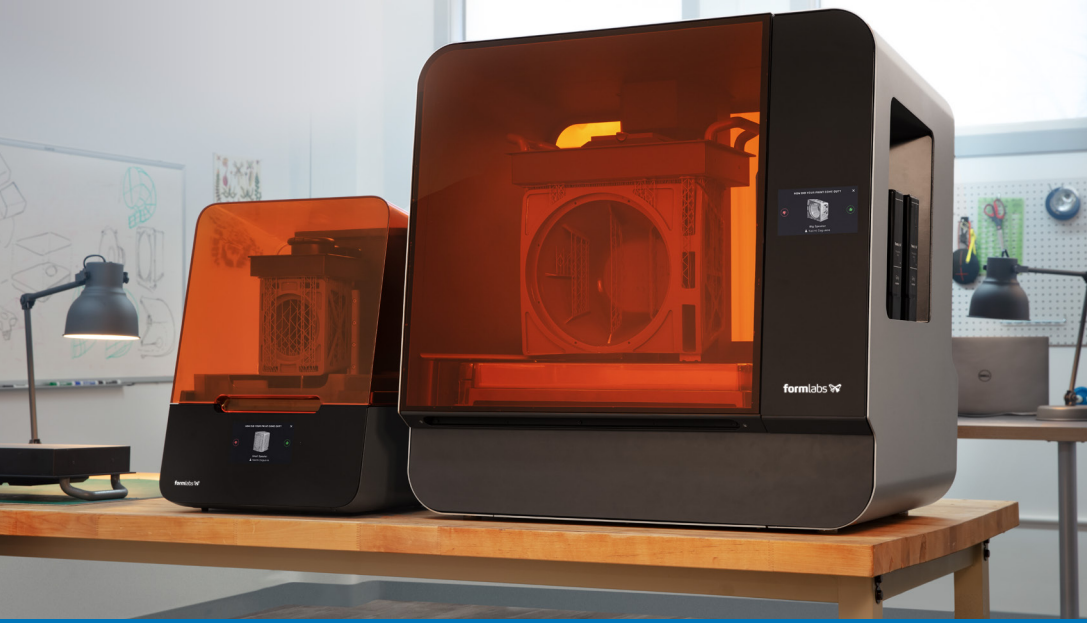
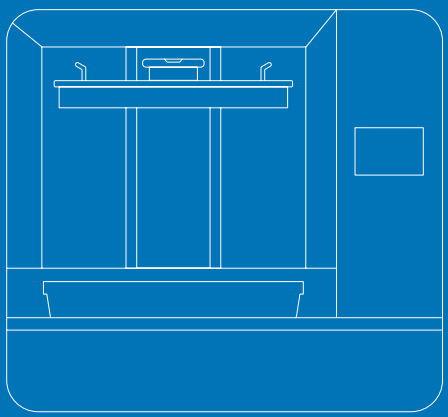
Form 3L

Perfectionism that scales.

Scale up your in-house print production with the Form 3L, an easy-to-use large format 3D printer for reliable production of industrial-quality parts at an unprecedented value.



MICROGENESIS
Building Trust. Delivering Value.



Get started now.

Formlabs 3D printers are ready to plug and print right out of the box, no specialized training required.

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FEATURES

Bring large format 3D printing in-house.

Eliminate the turnaround time of outsourcing or the manual work of assembly for large scale 3D prints. The Form 3L offers a massive build volume at an unprecedented value.

Build Volume	33.5 × 20 × 30 cm	13.2 × 7.9 × 11.8 in

INCREDIBLE PART QUALITY.

Stop sacrificing on quality for larger prints. The Form 3L provides the incredible surface finish and fine detail that stereolithography 3D printing is known for.

XY Resolution	25 µm

CUTTING-EDGE PRINT PROCESS.

Built around powerful Low Force Stereolithography (LFS)™ technology, for professional quality, reliability, and versatility you can rely on for nonstop printing.

Laser Power	250 mW

INTUITIVE, EFFICIENT OPERATION.

No specialized technicians required. The Form 3L offers automatic resin dispensing, simple print preparation software, and an interface anyone at your company can use.

PART OF THE FORMLABS ECOSYSTEM.

Access the wide range of professional materials within the extensive Formlabs materials library, with cartridges and components cross-compatible with our desktop stereolithography printers.

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Form 3L

Purchasing Guide

The Form 3 and Form 3L are powered by a new 3D printing process called Low Force Stereolithography (LFS). LFS 3D printing uses a flexible tank and linear illumination to turn liquid resin into flawless parts. Inside the Form 3 and Form 3L is a completely redesigned optics engine, the Light Processing Unit (LPU), which contains a system of lenses and mirrors to deliver accurate, repeatable prints.

The modular design of the LPU, uniform linear illumination, and low forces from the flexible tank mean the LFS technology can seamlessly scale up to a larger print area, using two staggered LPUs that work simultaneously along an optimized print path. The Form 3L is the first affordable large-format resin printer on the market, with a build volume of 7.9 x 13.2 x 11.8 in (20 x 33.5 x 30 cm), which is five times that of the Form 3.

THE FORM 3L BASIC PACKAGE

The Form 3L Basic Package is available for pre-order now.

Included in the Form 3L Basic Package:

- 1 Form 3L 3D Printer
- 1 Build Platform
- 1 Resin Tank
- 1 Finish Kit
- PreForm Software

ADDITIONAL CONSUMABLES AND ACCESSORIES

Similar to the Form 2 and Form 3, users purchasing the Form 3L should understand its consumables and accessories, post-processing options, and service offerings to help keep the Form 3L running at peak performance.

Form 3L Build Platform

Spare build platforms speed up your workflow and allow for nonstop printing, for example, starting a new print while post-processing your previous part. The Form 3L build platform holds full-size prints and has two side handles to easily transport your printed part.

Form 3L Resin Tank

The Form 3L Resin Tank relies on the same Low Force Stereolithography technology as the Form 3. Robust yet flexible, this resin tank reduces peel forces during the peel process, improving part quality and surface finish. Each resin tank includes a mixer and is designed to block extraneous UV light and allow for easy stacking.

It is recommended to have at least one tank for each material you are planning to use, understanding that unused resin can be stored in the tank in between use. Tanks do wear over time and are considered consumables. Tank lifetime depends on which resin is being used.

Resin Cartridges

Formlabs offers over 25 different resins, ranging from standard prototyping materials to engineering materials with various material properties. The Form 3L uses the same resin cartridges as the Form 2 and Form 3, but is designed to hold two cartridges at once to account for the larger print volume.

POST-PROCESSING

Form 3L Finish Kit

Similar to the Finish Kit included in all Form 3 packages, the Form 3L Finish Kit is equipped with removal tools to detach your part from the build platform for post-processing and rinse buckets to wash away uncured resin. The rinse buckets are sized to accommodate full-size Form 3L prints. Solvent compatibility and testing on recommended wash times are ongoing and will vary by material.

Large Format Wash and Cure

For customers seeking automated post-processing solution, our large format Form Wash and Cure is currently under development. Availabilty and more information will be shared in the near future

Cure L

Adding post-curing to your stereolithography 3D printing process helps your part reach its maximum material properties, including improved strength and performance. In some cases, post-curing also improves part accuracy.

	Cure L
External Dimensions	700 (H) x 600 (D) x 700 (W) mm
Internal Dimensions	550 (H) x 350 (D) x 500 (W) mm
Temperature Range	0 – 65 °C
Curing Time	15 – 120 min
Availability	H1 2020

Optimal cure times and temperatures with this cure box may vary from those published with the Form Cure.

Form Wash and Form Cure

The Form Wash and Form Cure were developed to automate post-processing for the Form 2 and Form 3. If you are printing smaller parts (14.5 × 14.5 × 18.5 cm) on the Form 3L, the Form Wash and Form Cure may still be viable solutions.