

INDUSTRIAL PARTS AT BLAZING SPEED



LEARN HOW YOU CAN POWER YOUR PRODUCTIVITY,
AND IMPROVE PART QUALITY, WORKFLOWS, AND TIME EFFICIENCY,
BY UPGRADING FROM FORM 3L TO FORM 4L.

formlabs 

FORM 4L VS. FORM 3L

Improvement

2-4x faster print speeds across all materials for most large prints in under six hours for faster iterations and higher throughput.

"Form 4L allows us to print large parts fast. For example, we use the Form 4L to print setup parts for our weld cell in just hours instead of overnight."

Matthias Schulz,
Seat Division Prototyping Manager, Brose

13% larger build volume and **6% larger maximum part length** for larger parts and increased throughput.

Unmatched reliability. Large format 3D printing you can depend on.

"We've pushed Form 4BL to its limits, and it hasn't failed a single print. Its reliability under pressure has been outstanding."

Brian Albers,
3D Printing Engineer,
St. Louis Children's Hospital

Six new resins provide higher performance, richer color, and crisper features – all at a fraction of the price of the Form 3L equivalents.

Surface finish that rivals injection molding for improved aesthetics and presentation-ready parts.



Fast Model Resin, Formlabs' fastest printing resin, was designed to print on Form 4 Series printers.

Form 4L



4 h 12 m



4 h 12 m

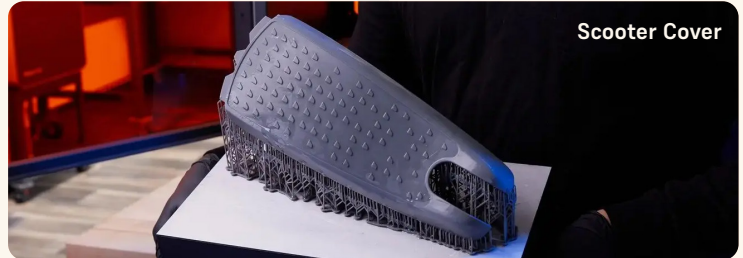
Build volume

35.3 x 19.6 x 35 cm
13.9 x 7.7 x 13.8 in
24.2 L

Form 3L



22 h 52 m



22 h 52 m

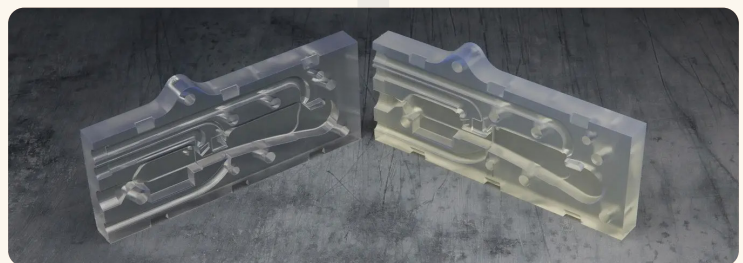
Build volume

33.5 x 20 x 30 cm
13.2 x 7.9 x 11.8 in
21.4 L



White Resin V5 (left, for Form 4L) is brighter and crisper in color

than **White Resin V4** (right, for Form 3L).



Clear Resin V5 (left, for Form 4L) vs

Clear Resin V4 (right, for Form 3L).



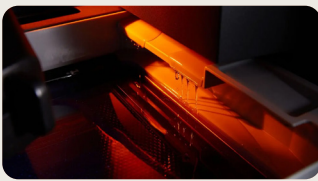
Grey Resin V5 (left, for Form 4L) is darker and richer in color than **Grey Resin V4** (right, for Form 3L).

It is also tougher, with a 30% higher impact strength, and prints 4x faster.

Improvement

Sharpest details to produce parts with the finest and most intricate features, uniform finishes, and **no seamline** for less time spent finishing parts.

Improved tank lifetime and management to minimize upkeep costs and waste.



Cartridge redesign for hassle-free, efficient, and fast automatic resin dispensing.



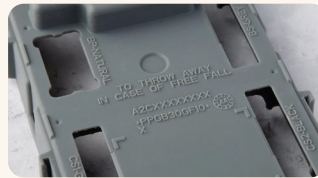
- 5-10x faster tank filling
- 63% less waste
- 30% less shelf space
- Compatible with Resin Pumping System

Access images and timelapses online to remotely monitor your prints.



Integrated 5-megapixel camera, which can be disabled, covered, or removed

Form 4L



46 μm with pre-tuned anti-aliasing for subpixel resolution



Masked stereolithography (MSLA) prints have fine finishes with no seamline, like this ventilator enclosure printed in Grey Resin V5.

Form 4L Tank \$249

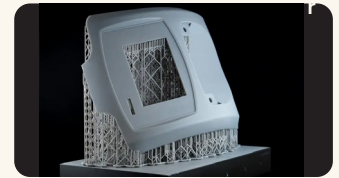
75,000+ layers with any Formlabs material.

For example: approximately 190 prints using an average height model (39 mm tall), any resin, and 100 μm layer height.

Form 3L



85 μm laser spot size, 25 μm XY resolution



Printing with two lasers on Form 3L causes a small seamline in parts. The seamline runs lengthwise from left-to-right through this ventilator enclosure printed in Grey Resin.

Form 3L Tank \$299

250-800 hours of printing and/or 10-35 weeks exposed to resin, depending on the material.

Approximately 70 prints using Grey Resin V4 and average print time (11 hours) or approximately 20 prints using Tough 2000 Resin and average print time (11 hours).

Post-Processing Improvements



- 1.5x more agitation
- Adjustable forks for Build Platforms, configurable at various heights and widths
- Compatible with build platforms for both Form 4 Series printers and Form 3 Series printers



- 5x more UV power and blazing fast heat-up times
- Pre-set cure cycles complete most large Form 4L prints within 60 seconds
- 26% smaller footprint with a compact design and side-hinged door for quick access

Additional Specs

Technology

Key Components of the Print Engine

Typical Dimensional Tolerances

Average Print Speed

100 µm layer height

Maximum Print Speed

Printer Control

Printer Weight

Printer Dimensions

Form 4L

MASKED STEREO LITHOGRAPHY (MSLA)

LOW FORCE DISPLAY™ (LFD)

- Backlight Unit
- Light Processing Unit 4L (LPU 4L)
- Release Texture
- Flexible Film Resin Tank
- Intelligent Control Systems
- High-Speed Automatic Resin Handling

±0.15% XY dimensional tolerances so assemblies always fit

Average: 24 mm/h across all materials
Range: 20-35 mm/h depending on the material

80 mm/hr | 3.1 in/hr

- 7" touchscreen
- Languages: English, German, French, Spanish, Italian, Japanese, Simplified Chinese

58.5 kg | 129 lb

66.4 x 52.8 x 79.4 cm
26.1 x 20.8 x 31.3 in

Form 3L

STEREO LITHOGRAPHY (SLA)

LOW FORCE STEREO LITHOGRAPHY™ (LFS)

- Laser
- Light Processing Unit (LPU)
- Flexible Film Resin Tank
- Intelligent Control Systems
- Automatic Resin Handling

Not measured

Average: 8 mm/h across all materials
Range: 1-14 mm/h depending on the material

23 mm/hr | 0.9 in/hr

- 5.5" touchscreen
- Languages: English

54.4 kg | 120 lb

77 x 52 x 74 cm
30.3 x 20.5 x 29.1 in