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PROFESSIONAL RESIN PRINTING FOR ANYONE

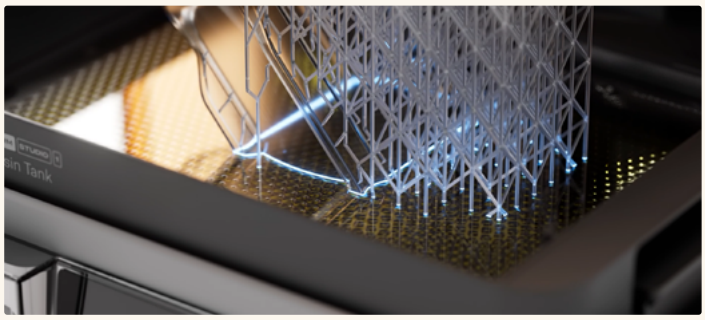
formlabs

FORM STUDIO 1

SLA ECOSYSTEM

Hardware Overview

Pro Resin Printing Made Accessible

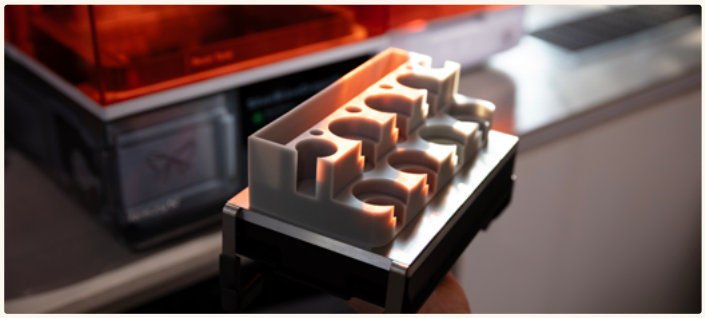


ENGINEERED FOR SPEED

Most prints finish in under two hours. A custom lens array and 28 LEDs deliver a uniform, highly collimated 6 mW/cm² light field that cures resin quickly and evenly. Release Texture V2 and a flexible film tank reduce peel forces for faster printing without compromising surface finish or fine detail.

A RESIN PRINTER THAT'S SAFE TO USE WHEREVER YOU WORK

Low-odor Alpha Resins are the first to achieve UL GREENGUARD Gold, certifying low VOC emissions for the printing process when printed on Form Studio 1 with VOC Extractor. Liquid resin scores as a non-skin irritant under OECD 439, and post-processed parts meet ISO 10993 requirements for long-term skin contact, making them suitable for wearables.



PRINT AMAZING PARTS

30 µm pixels and finely tuned anti-aliasing capture subpixel detail, while lower peel forces and light-touch supports leave smooth, clean surfaces. Every material setting is calibrated for dimensional accuracy, holding ±0.15% XY tolerance so assemblies fit together as designed.

UNMATCHED RELIABILITY

Every material comes with validated print settings, tuned on hundreds of test parts. During each print, intelligent control systems monitor resin temperature, resin level, print forces, and leveling, and an integrated camera shows progress remotely in the Form Mobile App.

PRINT WITH ANY RESIN

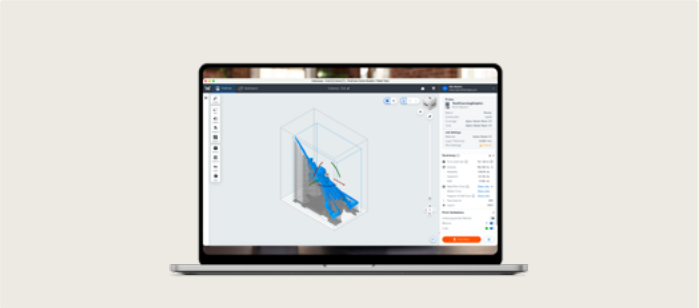
Start with validated Formlabs resins for reliable results out of the box, or branch out to third-party resins with no license fee.

Everything you need to go from design to finished part

Learn to Print in 10 Minutes

01 SELECT A MATERIAL

Load a validated Formlabs resin cartridge and print with validated settings tuned for that material.



02 FILE SET UP

Import your model into the print preparation software, PreForm, and set up your print with one click, or orient and add supports yourself. Real-time printability checks flag issues before you hit print.

03 PRINT

Insert a cartridge, tank, and build platform, and automatic resin dispensing handles the rest. Confirm your setup and start, queue, or track prints remotely from the Form Mobile App or free Dashboard software.

04 WASH

Wash parts on or off the build platform in the Form Studio Wash+Cure. When you are ready to remove them, a quick flex of the quick-release build platform pops parts free with no scraping. Let parts air dry completely before curing.

05 CURE

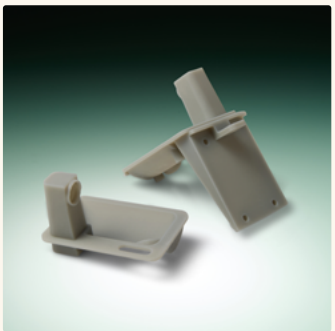
Remove light-touch supports by hand, then slot the turntable into the Form Studio Wash+Cure to cure your parts. Curing brings each part to its final mechanical properties, ready to use as is or to sand, coat, and paint.

Alpha Resins

Next-Generation General Purpose Resins

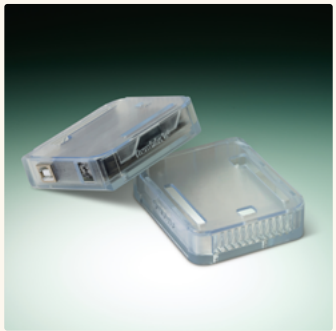
Alpha Model Resin

A deep, fully matte, neutral surface that captures every detail, down to the smallest crevice and texture, and paints beautifully



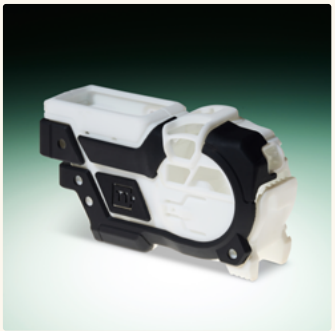
Alpha Fast Resin

Prototype and iterate faster with print speeds up to 130mm/hr, for components in minutes or entire build volumes in less than 2 hours



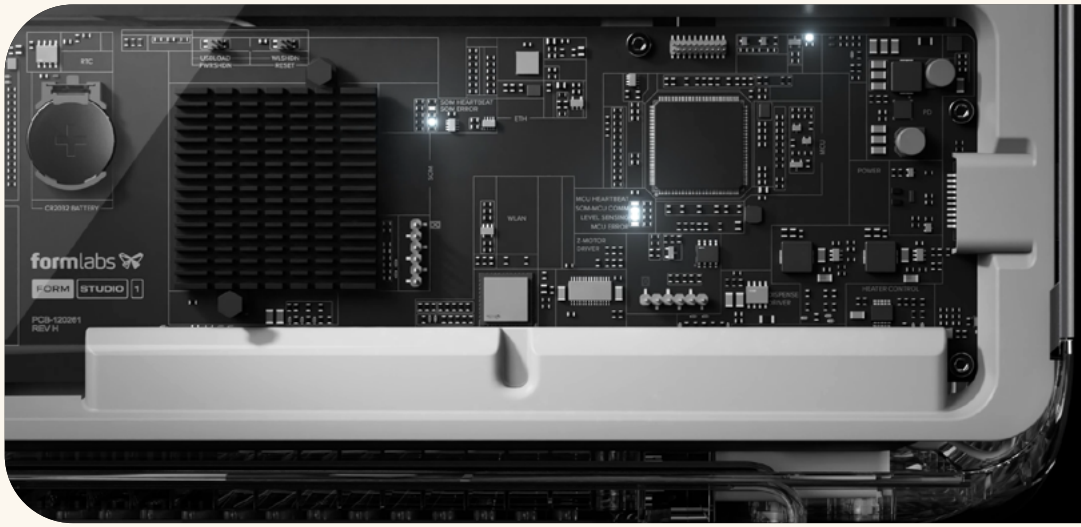
Alpha Clear Resin

Optical clarity, crisp fine features, and smooth, dimensionally accurate surfaces for see-through parts that fit together.



Alpha Black, Grey, and White Resin

Rich matte color, crisp fine features, and smooth, dimensionally accurate surfaces for parts that are display-ready and fit together.



TECH SPECS

FORM STUDIO 1

TECHNOLOGY	Masked Stereolithography (MSLA)
BUILD VOLUME (L x W x H)	20.0 x 12.5 x 23.5 cm | 7.9 x 4.9 x 9.3 in
LAYER THICKNESS (Z resolution)	25–250 µm | 0.001–0.010 in
XY RESOLUTION	35µm
AVERAGE PRINT SPEED (100 µm layer height)	40 mm/hr
MAXIMUM PRINT SPEED	130 mm/hr
PRINTER WEIGHT	14.3 kg | 31.5 lb
PRINTER DIMENSIONS (L x W x H)	34.2 x 31.5 x 50.2 cm | 13.5 x 12.4 x 19.8 in