# LulzBot AO-100 Desktop 3D Printer

Freedom. Flexibility. LulzBot™ delivers the ultimate 3D printer so you can turn your ideas into reality. Empower your innovative and entrepreneurial spirit with our quality, affordable printer. Complete with hardware designs, source code, software, and documentation, you can modify the LulzBot to meet your needs. It's for the producer, inventor, and creator.
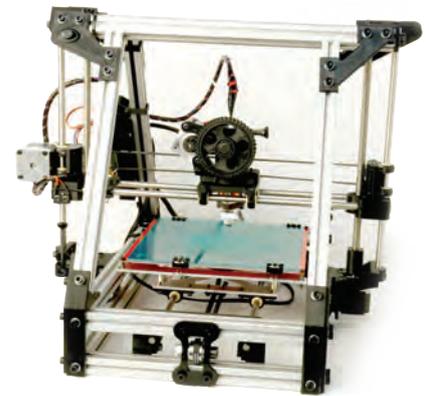
OPEN FOR BUSINESS, OPEN FOR ALL.

We get it. Frustrated by the status quo, we started a company that allows people the freedom they need to get the job done.

Built upon the philosophy of freedom, the LulzBot AO-100, from Aleph Objects, Inc., is transforming the 3D printer industry. Our high-quality, cost-effective solution embodies the spirit of the free software movement.

As part of the revolution, we put the power back in your hands. Our products come complete with printer designs and specifications, so you can continually adapt your printer.

Our technology allows you to design and manufacture virtually anywhere, whether that's short-run manufacturing or rapid prototyping. From innovators, prototypers, manufacturers, hobbyists, engineers, universities, architects, or medical — as a community we are advancing the world of 3D printing.

Our roots run deep and we've gained credibility among experts — we've been there, done that. We offer the best quality machine on the market, fully assembled, robust and ready to ship next day. Our printers come with the toolkit, plastic for printing and step-by-step manual.

The LulzBot AO-100 is quieter, faster, and has better resolution than other 3D printers on the market.

Our manufacturing process produces rock-solid, durable printers that allow you to repeat projects time and time again with fewer errors.

And with our advanced supply chain, your printer is delivered quickly. **Buy today, print tomorrow.**

Have something to share? We'd love to hear it. We value and even incorporate your feedback. Our customer service is responsive, supportive, and all ears. Like you, we believe in freedom of expression, and yours will be respected and heard.


The AO-100 3D-printer is a **Respects Your Freedom** *certified product by the Free Software Foundation. The AO-100 is the first hardware product in FSF's 27-year history to achieve RYF certification.*

WE ARE REVOLUTIONIZING RESOLUTION.

The LulzBot AO-100 produces the highest quality 3D parts on the market. Smoother printed surfaces means less post production, resulting in sleek, sexy, professional-quality models. Every time. Our customers will tell you the LulzBot resolution is as unmatched as the speed. Quickly create functional prototypes, physical models, patterns, tooling, and more at a fraction of the cost. LulzBot allows you to generate parts that may be impossible to create any other way. And the result? Superior.

Our advanced technology produces the thinnest accumulative layers. At 75 microns — that's thinner than a strand of hair.

- Produce accurate, colorful models and parts that are show and tell worthy
- Layer height: 75 to 500 microns (or even 750 microns with optional .75mm nozzle)
- Thin accumulative layers showcase the essence of your design
- Multitasking products and iterations made easy
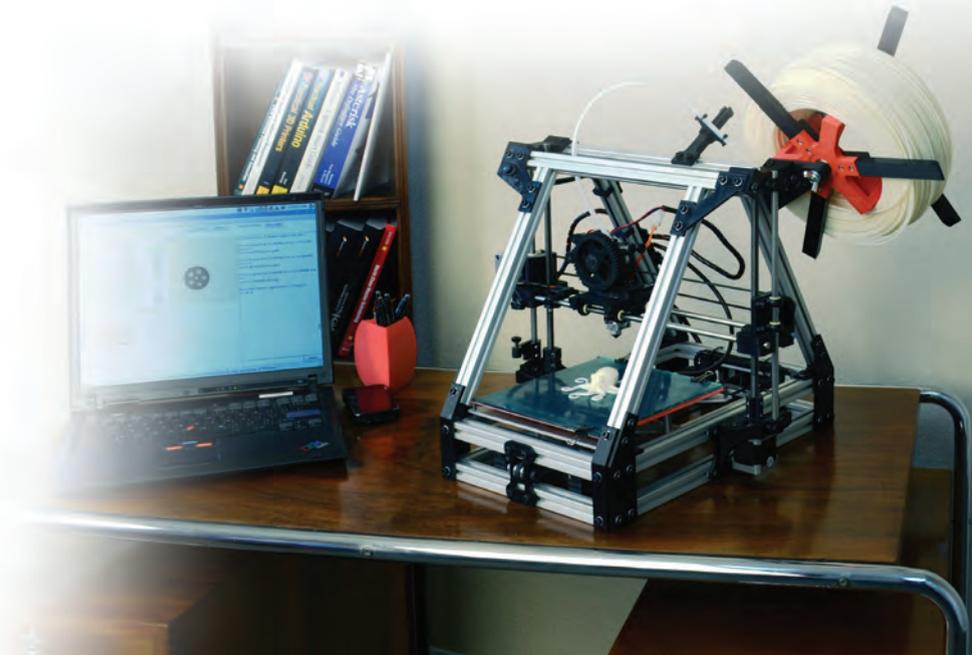
GO BIG OR GO HOME.

When you embrace an open philosophy, you can dream as big as you like — the possibilities are endless. No more small 3D models that require a magnifying glass to see the end product. LulzBot builds the most reliable personal 3D printers on the market, allowing you to turn ideas into reality. The result is a finished product you can actually touch, feel, and hold in the palm of your hand. From simple to complex, our 3D personal printers inspire creativity and problem solving. This industrial-strength desktop 3D printer is fast, efficient, and quiet — engineered to meet the needs of the most demanding hackers and professionals.

- Comes fully-assembled and ready-to-print
- 8" x 8" x 4" heated print bed
- Print ABS and PLA plastics and more: wood, translucent, glow-in-the-dark and other speciality materials
- Fast, quiet, and reliable
- Multitasking and iterations made easy

*Create ready-to-use, high-resolution products.*

CUSTOMIZE FOR YOUR NEEDS.

Don't like to be boxed in? Neither do we. That's why we allow you to customize your LulzBot AO-100 to meet your needs and the project at hand. Need to print quickly? The LulzBot is ready to print upon delivery. Need to adjust for various projects? The open build allows you to modify easily for printing a variety of materials, parts, and pieces. The AO-100 comes ready to print with 0.25mm, 0.35mm, and 0.5mm nozzles. Optional 0.15mm and 0.75mm nozzles available.

Customize the AO-100 with a dual extruder and nozzles that allow you to print with polycarbonate and other specialty materials.

- Most reliable printer on the market
- Low maintenance hot end is the industry workhorse
- Stable and robust — print your own replacement parts and customizations
- Publicly available free software allows for immediate upgrades
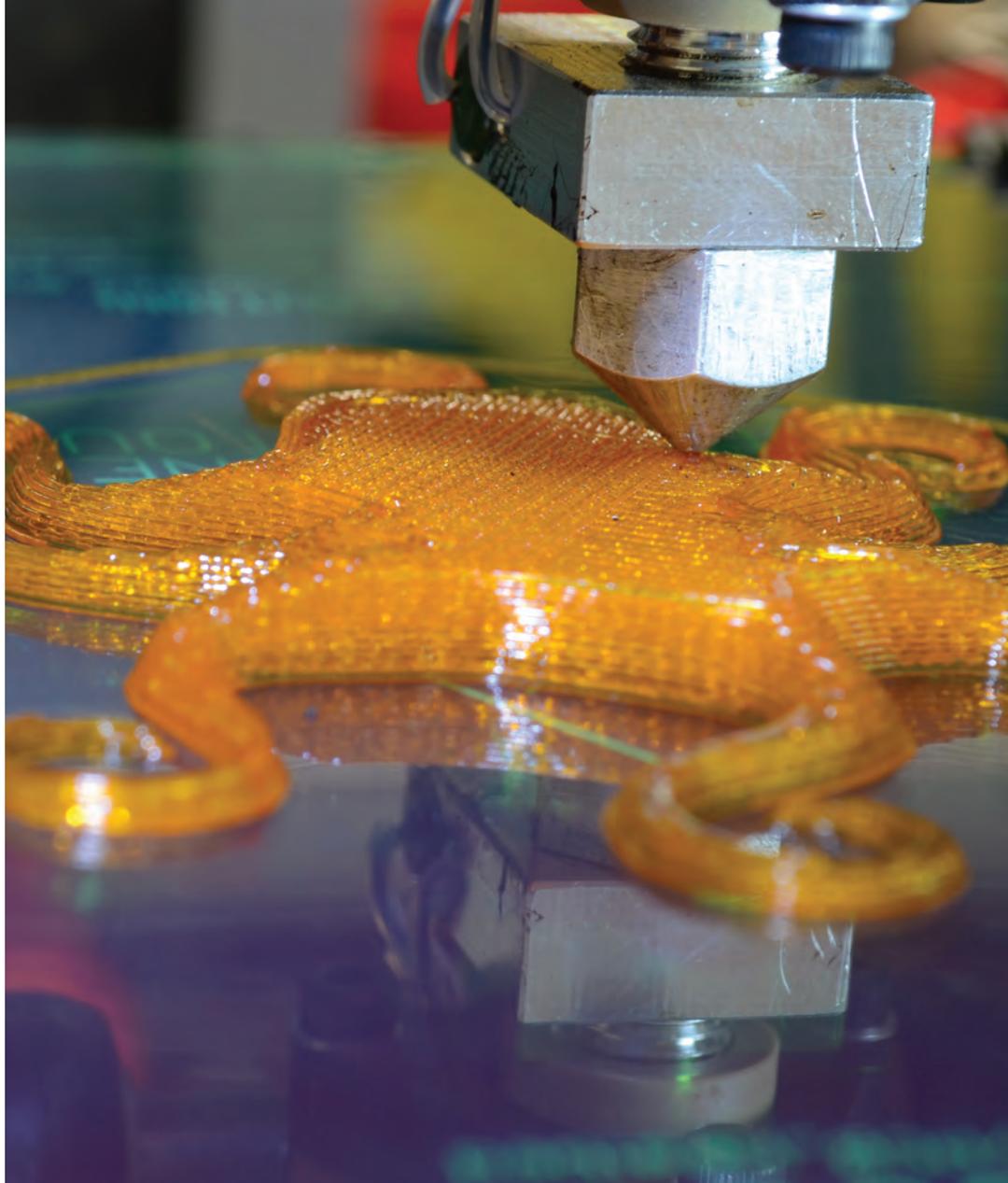
ASSEMBLED AND READY TO PRINT, OUT OF THE BOX.

We are busy people and know you are as well. While we allow the flexibility to tweak our products, we also know there's work to get done — and quickly! That's why every LulzBot printer ships fully assembled, calibrated, and ready to print. Time is money and we dramatically reduce the product development cycle so you can design and print functional 3D prototypes, models, and products from the moment your printer arrives.

Built for Speed and Performance

Instant gratification is intensely satisfying. Why wait? We believe that fast is better and can be achieved without sacrificing quality. It's true, you can have both. The LulzBot 3D desktop printer is intentionally engineered with speed and quality in mind. Improve your 3D print production in a shorter amount of time than you ever imagined possible. With a 150mm print speed you can relax and let the printer do the work — tight deadlines are a thing of the past. Now isn't that gratifying?

Order Today. Print Tomorrow.

Ask and you shall receive. With our advanced and flexible supply chain, there's no need to wait around for your LulzBot 3D printer. Unlike other 3D desktop printers on the market, which can take as long as six to eight weeks to ship, we've bypassed logistic complexities and ship products efficiently and on time. We deliver packages, not empty promises. Stop twiddling your thumbs waiting for packages to arrive and start creating.

Open. For Business.

We believe you should be free to use, learn from, and improve the hardware and software you use. It's good for innovation — and it's just good business. Our hardware and software is built with that philosophy. You can customize, improve, and evolve the industry by sharing with the community. True innovation comes from empowerment. Creators, innovators, and hackers unite!

Long Live Libre.

LulzBot AO-100 Desktop 3D Printer

Finally, affordable rapid prototyping and low-volume production is available for your business or office. The AO-100 personal printer is perfect for product development in research and development organizations and for those companies looking to reduce the manufacturing costs of their low-volume products.

The AO-100 is the perfect alternative to the high-dollar additive manufacturing systems on the market today and is equally the perfect fit for first-time 3D printer enthusiasts. Affordability, ease of use, compact size, large print area, preassembled and calibrated, low maintenance, exceptional print quality, industry leading print speed, 90-day warranty.

Specifications:

Printing

Usable Print Area: 200mm x 190mm x 100mm (7.9in x 7.5in x 3.9in)

Top Print Speed: 200mm/sec (7.9in/sec)

Print Tolerance: 0.2mm (0.008in) in X and Y axes. Z axis is dependent on layer thickness

Layer Thickness: 0.075mm (0.0029in) to 0.75mm (0.029in)
with optional nozzles: 0.15mm (0.0006in), 0.25mm (0.01in), 0.35mm (0.014in), 0.5mm (0.02in), and 0.75mm (0.029in)

Supported Materials: ABS and PLA plastic filaments

Usable Filament Sizes: standard 3mm (0.1in) and 1.75mm (0.007in) with included accessory and setup

Physical Dimensions

Overall Dimensions: 464mm x 483mm x 381mm (18.3in x 19in x 15in)

Weight: 8.18kg (18lbs)

Electrical

Power Requirements: 110-220 VAC, set by default to 110V (USA) with USA power cord

Temperature: Maximum Operating Temperature (Extruder): 240C

Your AO-100 includes all of the following:

Your printer comes with complete documentation including a detailed manual with information for unpacking the printer, setup, downloading and using software, and starting your first print.

Mountable Spool Holder

Filament Feedtube

Filament Feedtube Holder

ABS Filament, Red, 3mm dia. – 5lbs (2.3kg)

ABS Filament, Black, 3mm dia. – 5lbs (2.3kg)

ABS Filament, Natural, 3mm dia. – 5lbs (2.3kg)

Toolkit Bag

Allen Wrenches: 1.5mm, 2.5mm, 3mm, 4mm

Combination Wrenches: 5.5mm, 13mm, 18mm

Pliers, Needle Nose

Tweezers

Xacto Knife (and blades)

Dental Pick

Pin Vise

Drill Bits: 3.5mm, 5mm, 5.5mm

Mini Screwdrivers: .080", .125"

Flathead Bristle Brush

Part Removal Knife (clam knife)

Metric Ruler

PET Tape

Acetone-safe Bottle (acetone not included)

Nozzles: .5mm installed, includes .25mm and .35mm Nozzles

PTFE Tube for 1.75mm Filament

Extra Borosilicate Glass Bed

Velcro Straps (for filament)

90-day Warranty

1 Year Support

Source

Source Files

Printed Manual

MendelMax RepRap Derived

Free Software

Marlin Firmware

Slic3r G-Code Generator

Pronterface Host Software
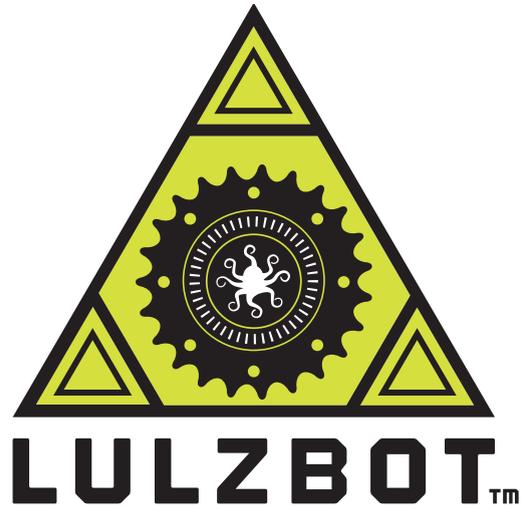
LULZBOT™

www.LulzBot.com

For more information, call **+1-970-377-1111** or email **sales@lulzbot.com**

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LulzBot is a trademark of Aleph Objects, Inc.

Free software, libre hardware, collaborative communities:

fsf.org/ryf	**RepRap**	**Slic3r**	**FreeCAD**	**OpenSCAD**	**Printrun**	debian	UltiMachine	open hardware	**fsfla.org**	**Průša Research s.r.o.**