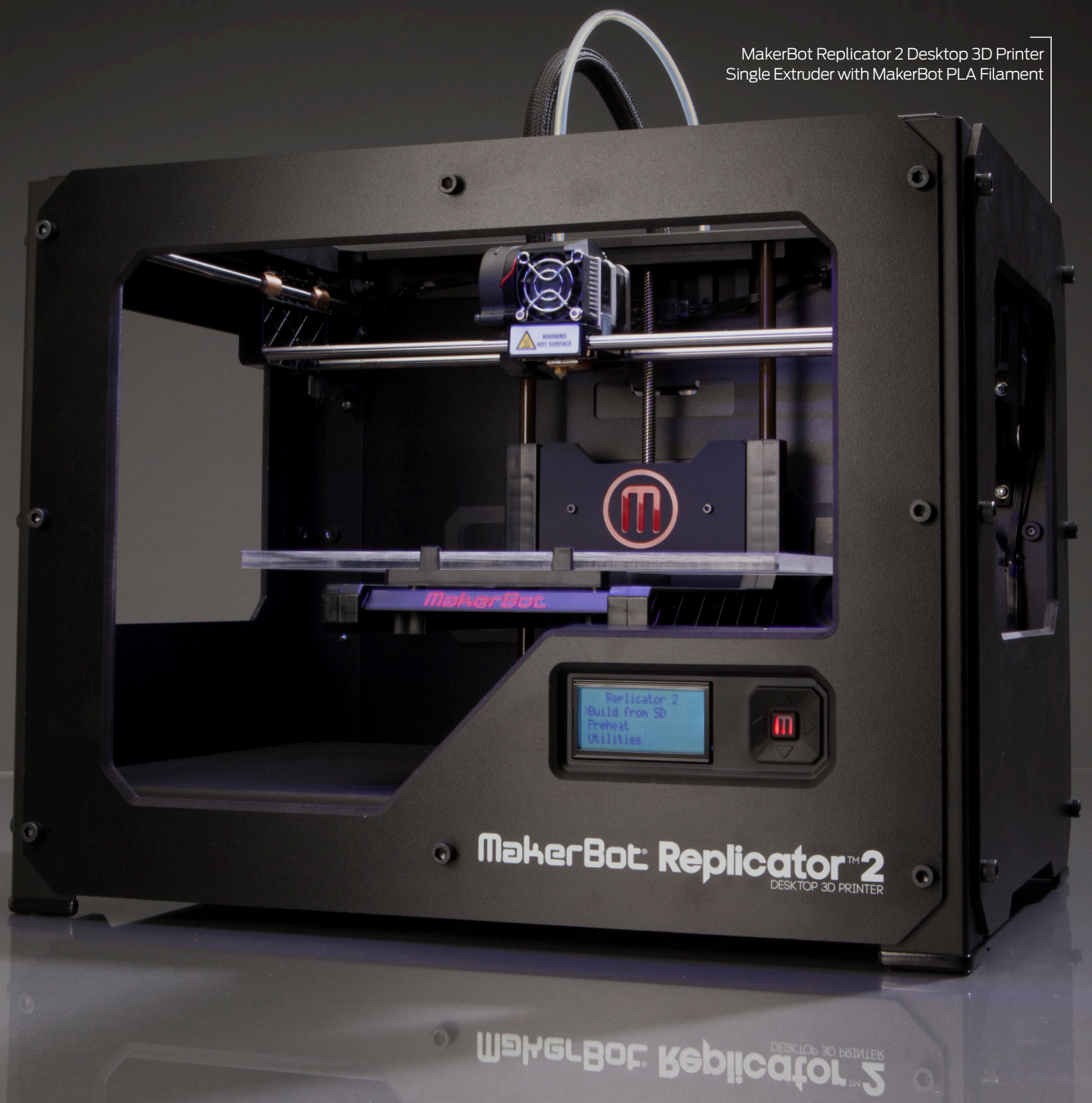
MakerBot® Replicator™2

DESKTOP 3D PRINTER | SINGLE EXTRUDER

Welcome to prosumer 3D printing. With a resolution capability of 100 microns and a massive 410-cubic-inch build volume, the MakerBot Replicator 2 Desktop 3D Printer is our easiest, fastest, and most affordable tool yet for making professional-quality models. We set a new standard with our work, so that you can set a new standard with yours.



MakerBot Replicator 2 Desktop 3D Printer
Single Extruder with MakerBot PLA Filament

THE NEW STANDARD IN DESKTOP 3D PRINTING

Founded in 2009, Brooklyn-based MakerBot® has grown to be a global leader in desktop 3D printing. MakerBot had 16% market share of all 3D printers (industrial and personal) made from 2009 to the end of 2011.[1] In 2011, MakerBot had 21.6% market share. There are over 13,000 MakerBot Desktop 3D Printers in use by engineers, designers, researchers, and people who just like to make things.

The MakerBot Store at 298 Mulberry Street in the NoHo district of Manhattan offers people the chance to learn about desktop 3D printing, see demonstrations, and buy all kinds of cool products made on MakerBot Desktop 3D Printers.

At MakerBot's Thingiverse.com, MakerBot owners can access and contribute to a "universe of things." Thingiverse has over 28,000 projects, models, and useful things that can be downloaded and made for free.

MakerBot has been featured in *The New York Times*, *The Wall Street Journal*, *The Economist*, *Wired*, The Colbert Report, *Fast Company*, *Engadget*, *Make: Magazine*, *Rolling Stone*, Time.com, IEEE Spectrum, CNN, *Financial Times*, NPR, *Vogue Italia* and elsewhere. The original MakerBot Replicator was named "Best Emerging Tech" at the 2012 Consumer Electronics Show in Las Vegas. The MakerBot Replicator 2 Desktop 3D Printer is another huge step forward for MakerBot.

BRE PETTIS
CEO, MakerBot

[1] Source: Wohlers Report 2012

Why should you purchase the MakerBot® Replicator™ 2 Desktop 3D Printer?

A

100-MICRON LAYER RESOLUTION*

World-class additive manufacturing at 100-micron layer resolution

Professional-quality prototypes. Highly complex models. Attractive pieces of art. With the new MakerBot Replicator 2 Desktop 3D Printer, you can expect to make these and more. On a 3D printer, quality is often measured by the height of each layer, with smaller layers meaning higher resolution. The capability of a 100-micron layer height gives you smooth surfaces without any post-production. Make things you're proud to demo to your boss or show off to your family. Discover the look and feel of the new standard in desktop 3D printing.

KEY FEATURES

- Make true-to-life, high-resolution models and objects.
- Surfaces are so smooth they don't need sanding or post-production.
- Hold real-life objects that feel good to the touch.
- Create professional-quality, realistic products.

100 microns is as thin as a standard sheet of copy paper.

Get your ideas across more smoothly. At 100-micron resolution, your models and prototypes look finished and ready for demonstration.

Model by: Juan Esteban Paz Jáuregui

* With the MakerBot Replicator 2 Desktop 3D Printer, you can choose from a variety of settings that range from a fast-draft mode to the finer high-resolution mode.

Why should you purchase the MakerBot® Replicator™ 2 Desktop 3D Printer?

B

37% MORE SPACE FOR YOUR IDEAS

Enough room to make it BIG

To raise our standard, we made the build volume bigger in all three dimensions. The MakerBot Replicator 2 Desktop 3D Printer has a build volume of 410 cubic inches, so you can think and build bigger than ever. That's 37% more volume than the original MakerBot Replicator Desktop 3D Printer. You will make big things and entire multi-part projects at one time. Combined with our speed improvements, you now get much more done in much less time. Finally a desktop 3D printer made for multitasking.

KEY FEATURES

- Maximize your design. Build pieces up to 11.2 L x 6.0 W x 6.1 H in (12.75 in diagonal).
- 37% more volume than the original MakerBot Replicator: 410 in^3 (compared to 299 in^3).
- Make complex assemblies in fewer runs.
- Make whole projects, not just single things.
- Multitask and save time for the next project on your list.

Maximum build volume of the original MakerBot Replicator (8.9 L x 5.7 W x 5.9 H in).

The MakerBot Replicator 2 Desktop 3D Printer's build volume is massive, and MakerBot PLA Filament lets you maximize your projects with consistent quality.

Why should you purchase the MakerBot® Replicator™ 2 Desktop 3D Printer?

C

PLA FILAMENT: LESS CURLING AND SHRINKING

Optimized for MakerBot PLA Filament

Now you can do your highest-quality work and do a favor for the environment, too. We've adapted the MakerBot Replicator 2 Desktop 3D Printer to work perfectly with PLA, the renewable bioplastic that sticks to the platform reliably with practically no peeling, curling, sliding, or shrinking. With MakerBot PLA Filament, you will make professional-quality prototypes and huge pieces with dimensional stability. What's more, you will use 32% less energy than building with ABS filament*. When it comes to build material, MakerBot PLA Filament is the new standard in desktop 3D printing.

KEY FEATURES

- Rely on builds that stick to the platform; Practically no peeling, curling, or sliding.
- Build big with dimensional stability.
- Expand your creative palette with a whole new range of matte, translucent, shimmery, metallic, and sparkly colors.
- Super strong, great for moving parts and complex assemblies.
- Ready to print in less than two minutes.
- Minimal shrinkage factor means smooth builds with no cracks.
- 32% energy savings versus building with ABS Filament.
- Make things that feel great to the touch.
- Design accurately: get what you expect.
- Environmentally friendly.

MakerBot PLA Filament is an ideal material for even the most complex projects, like this functional five-cylinder radial engine.

*based on 150 Watt consumption by Replicator 2 versus 221 Watts by original MakerBot Replicator.

Why should you purchase the MakerBot® Replicator™2 Desktop 3D Printer?

D

Our easiest to use, most affordable desktop 3D printer yet. We've simplified everything for quick startup and ease of use.

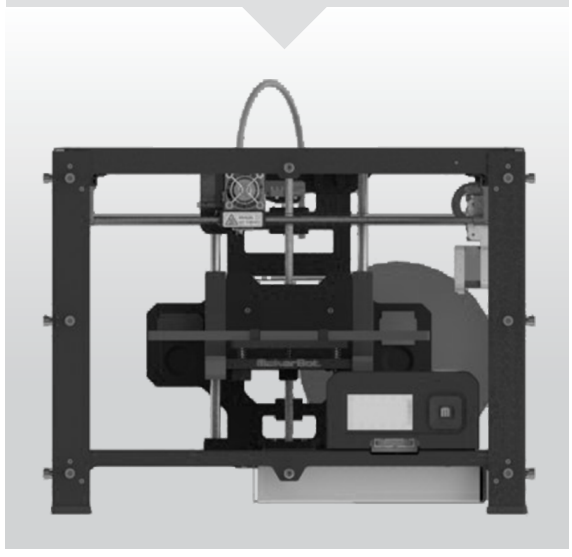
- No assembly required.
- Wear-resistant, oil-infused bronze bearings mean less maintenance.
- Nothing to wash, dissolve, scrub, or tape.
- 3-point leveling system adjusts more precisely than previous model, and stays level longer.
- Grab your designs more easily with a pop-out platform.
- Uses 32% less power than the original MakerBot Replicator.
- Updated extruder requires less maintenance.

Why should you purchase the MakerBot® Replicator™2 Desktop 3D Printer?

E

Professionally engineered and expertly built for speed. Design it, then hold it. Faster than ever.

- With advancements over original Replicator, achieve better prototypes and product designs, with more iterations in less time.
- Multitask and meet deadlines.
- Industrial-strength, powder-coated steel frame, made to handle high printing speeds.
- Quickly print projects with optimized software and hardware.
- Improved acceleration control firmware.
- Engineered with exacting tolerance to please any caliper-toting engineer.



Why should you purchase the MakerBot® Replicator™2 Desktop 3D Printer?

F

MakerBot MakerWare™ is designed for the ultimate MakerBot Replicator 2 experience. A fast machine needs even faster software.

- Prepare models for printing up to 20 times faster with the new MakerBot slicing engine.
- Drag and drop multiple models right onto the virtual build space, and then make them all at once.
- Now supports .stl and .obj files from all leading design software.
- New .thing file format saves multipart projects in one file.
- Friendly interface has intuitive icons and controls.
- Compatible across Mac/Linux/Windows.

MakerWare™

Why should you purchase the MakerBot® Replicator™2 Desktop 3D Printer?

G

Brand new look and feel. Our fourth generation MakerBot is made for the desktop *and* the workbench.

- Designed to look great on a desk or table in your home, office, lab, or classroom.
- Black powder-coated steel frame for incredible strength and durability.
- Resistant to changes in temperature and humidity.
- Sleek and customizable.
- Designed for quiet desktop operation.
- Assembled with pride in our Brooklyn factory.

Why should you purchase the MakerBot® Replicator™2 Desktop 3D Printer?

H

Responsive, expert customer support. We're ready to help if you need it.

- Online support available 6 days a week: support@makerbot.com [Mon–Sat, 9 AM–6 PM ET].
- Each of our support team members has thousands of hours of experience. Get expert help and advice when you need it.
- Feel the difference of a support team that cares as much as you do about your projects.
- Reference videos, tutorials, and thorough documentation 24/7.

MAKERBOT® REPLICATOR™ CUSTOMER LIST

3D Imaging
Activision
Alaska Manufacturing Extension Partnership
Amherst County Public Schools
Bainbridge Island School District
Bartlett School of Architecture
Biola University
Bloomington Public Library
Boston College
Boston University
Bowling Green State University
Brooklyn College
Brown University
BUR Bikes
CBS Network West Coast
Chang Bioscience, Inc
City University of Hong Kong
Coinstar
Columbus School for Girls
Corcoran Gallery of Art/College of Art & Design
Cornell University
Deloitte Innovation
Duke University
Edelman
Electronic Arts
Finnish Institute of Occupational Health
GE Power Conversion
Georgia Institute of Technology
Gonzaga University
Google
Gulfstream Aerospace Corporation
Hardin Marine
Harkins Custom Knives
Intel Corporation
JELD-WEN
Kennedy-Matsumoto Design
Kent State University
Kitchen Concepts LLC
Libero Jewelers
Mars Space Flight Facility
MIT
NASA
NASA Glenn Research Center
NASA Marshall Space Flight Center
NASA Goddard Space Flight Center
National Federation of the Blind
Neurosciences Research Foundation
New York Hall of Science
Northrop Grumman
The New York Times Company
Proctor & Gamble
Pixil Inc.
PPG Industries
Purdue University
Qualcomm Inc.
Rochester Institute of Technology
San Francisco Art Institute
Sandia National Labs
Seattle Academy of Arts and Science
SIU - School of Architecture
Sony Electronics
Southwest Energy
Stanford University
Texas A&M University
The Eli Whitney Museum
The New York Public Library
The University of Chicago
UC Berkeley
US Army
US Cutter
United Nations International School
Valley Fine Foods
Woodbury University School of Architecture
Yale University

SPECIFICATIONS

PRINTING

Print Technology:	Fused Filament Fabrication	
Build Volume:	11.2 L x 6.0 W x 6.1 H in [28.5 x 15.3 x 15.5 cm]	
Layer Resolution Settings:	High	100 microns [0.0039 in]
	Medium	270 microns [0.0106 in]
	Low	340 microns [0.0133 in]
Positioning Precision:	XY: 11 microns [0.0004 in]; Z: 2.5 microns [0.0001 in]	
Filament Diameter:	1.75 mm [0.069 in]	
Nozzle Diameter:	0.4 mm [0.015 in]	

SOFTWARE

Software Bundle:	MakerBot MakerWare™ Bundle 1.0
File Types:	.stl, .obj, .thing
Supports:	Windows (XP/7), Linux (Ubuntu 10.04+), Mac OS X (10.7/10.8)

PHYSICAL DIMENSIONS

Without Spool:	19.1 x 12.8 x 14.7 in [49 x 32 x 38 cm]
With Spool:	19.1 x 16.5 x 14.7 in [49 x 42 x 38 cm]
Shipping Box:	23 x 21.5 x 17 in [59 x 55 x 43 cm]
Weight:	25.4 lbs [11.5 kg]
Shipping Weight:	32.0 lbs [14.5 kg]

TEMPERATURE

Ambient Operating Temperature:	15° – 32° C [60° – 90° F]
Storage Temperature:	0° – 32° C [32° – 90° F]

ELECTRICAL

AC Input:	100 – 240 V, ~2 amps, 50 – 60 Hz
Power Requirements:	24 V DC @ 6.25 amps
Connectivity:	USB, SD card [included]

MECHANICAL

Chassis:	Powder-coated steel
Body:	PVC Panels
Build Platform:	Acrylic
XYZ Bearings:	Wear-resistant, oil-infused bronze
Stepper Motors:	1.8° step angle with 1/16 micro-stepping

COMPLETE FEATURE LIST MakerBot® Replicator™ 2 Desktop 3D Printer

A

World-class additive manufacturing at 100-micron layer resolution. High resolution is now a standard feature.

- Discover what it's like to make true-to-life, high-resolution models and things.
- Make surfaces so smooth they don't need sanding or post-production.
- Hold real-life objects that feel good to the touch.
- Create professional-quality, realistic products.

B

Think bigger than ever, make bigger than ever: 410 cubic inches of creative potential.

- Maximize! Build pieces up to 11.2 L x 6.0 W x 6.1 H in(12.75 in diagonal).
- 37% more volume than the original MakerBot Replicator: 410 in^3/6,717 cm^3 (vs. 299 in^3/4905 cm^3).
- Make complex assemblies in fewer runs.
- Make whole projects, not just single things.
- Multitask and save time for the next project on your list.

C

Designed and optimized for MakerBot PLA Filament [renewable bioplastic].

- Rely on builds that stick to the platform; practically no peeling, curling, or sliding.
- Build big with dimensional stability.
- Expand your creative palette with a whole new range of matte, translucent, shimmery, metallic, and sparkly colors.
- Super strong, great for moving parts and complex assemblies.
- Ready to print in less than two minutes.
- Minimal shrinkage factor means smooth builds with no cracks.
- 32% energy savings versus building with ABS Filament.
- Make things that feel great to the touch.
- Design accurately; get what you expect.
- Environmentally friendly.

D

Our easiest to use, most affordable desktop 3D printer yet. We've simplified everything for quick startup and ease of use.

- No assembly required.
- Wear-resistant, oil-infused bronze bearings mean less maintenance.
- Nothing to wash, dissolve, scrub, or tape.
- 3-point leveling system adjusts more precisely than previous model, and stays level longer.
- Grab your designs more easily with a pop-out platform.
- Uses 32% less power than the original MakerBot Replicator.
- Updated extruder requires less maintenance.

E

Professionally engineered and expertly built for speed. Design it, then hold it. Faster than ever.

- With advancements over original Replicator, achieve better prototypes and product designs, with more iterations in less time.
- Multitask and meet deadlines.
- Industrial-strength, powder-coated steel frame, made to handle high printing speeds.
- Quickly print projects with optimized software and hardware.
- Improved acceleration control firmware.
- Engineered with exacting tolerance to please any caliper-toting engineer.

F

MakerBot MakerWare is designed for the ultimate Replicator 2 experience. A fast machine needs even faster software.

- Prepare models for printing up to 20 times faster with the new MakerBot slicing engine.
- Drag and drop multiple models right onto the virtual build space, and then make them all at once.
- Now supports .stl and .obj files from all leading design software.
- New .thing file format saves multipart projects in one file.
- Friendly interface has intuitive icons and controls.
- Compatible across Mac/Linux/Windows.

G

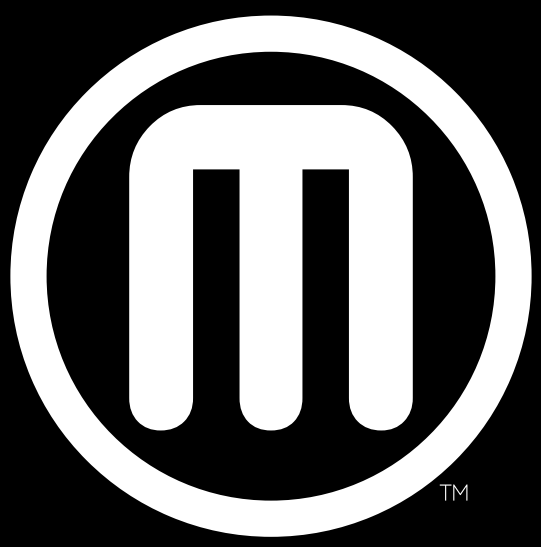
Brand new look and feel. Our fourth-generation machine is made for the desktop...and the workbench.

- Designed to look great on a desk or table in your home, office, lab, or classroom.
- Black powder-coated steel frame for incredible strength and durability.
- Resistant to changes in temperature and humidity.
- Sleek and customizable.
- Designed for quiet desktop operation.
- Assembled with pride in our Brooklyn factory.

H

Responsive, expert customer support. We're ready to help if you need it.

- Online support available 6 days a week: support@makerbot.com [Mon–Sat, 9 AM–6 PM ET].
- Each of our support team members has thousands of hours of experience. Get expert help and advice when you need it.
- Feel the difference of a support team that cares as much as you do about your projects.
- Reference videos, tutorials, and thorough documentation 24/7.



MakerBot®

MakerBot®	87 3rd Avenue, Brooklyn, NY USA	sales@makerbot.com	+1.347.334.6800	makerbot.com