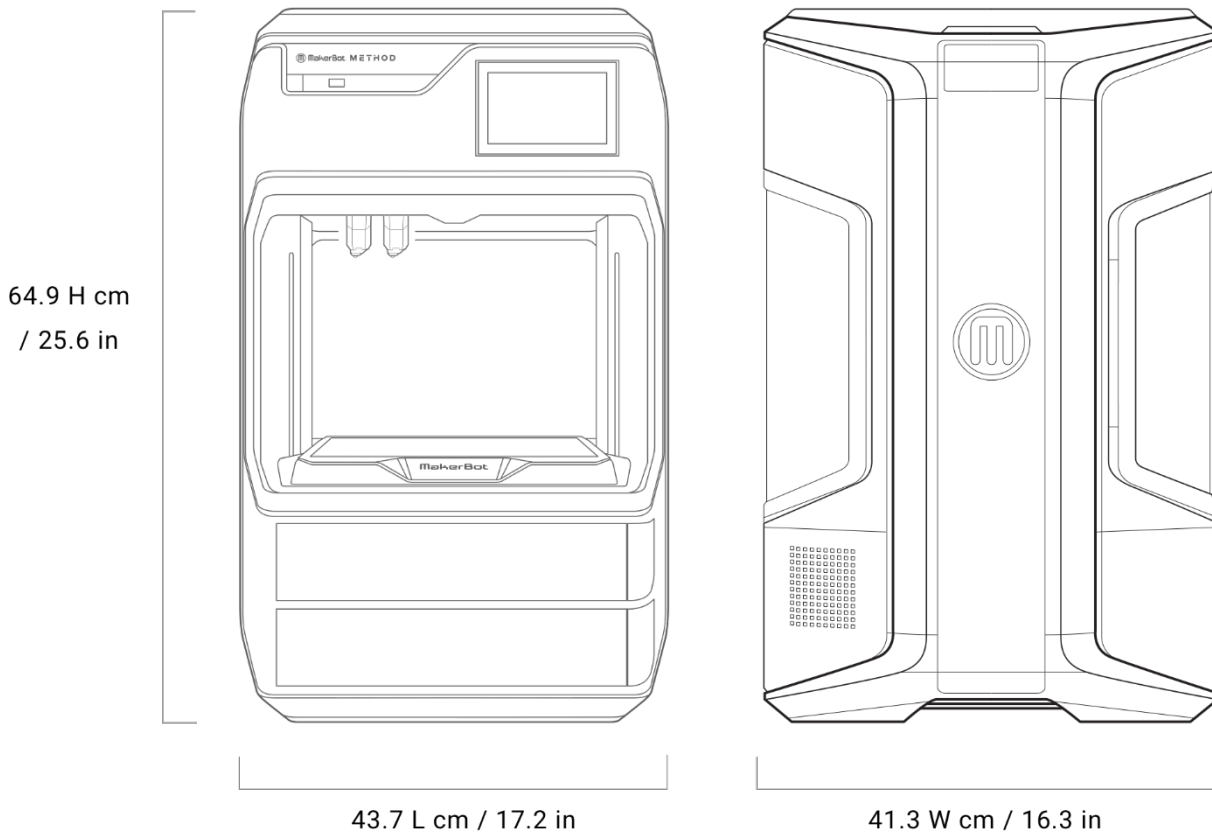


TECH SPECS



Printing

Print Technology
Fused Deposition Modeling (FDM)

Print Heads



2

Dimensional Accuracy
± 0.2 mm¹

Layer Resolution
Range: 20 - 400 microns

Print Modes tuned and optimized for:
100 microns - High Quality Print Mode
200 microns - Balanced Print Mode

Build Speed
Up to 2x faster than desktop 3D printers²

Maximum Build Volume
190 x 190 x 196 mm / single extrusion
152 x 190 x 196 mm / dual extrusion

Max Material Flow Rate: ~50 mm³ per sec
Print Head Travel Speed: Up to 500 mm per sec

Product Testing
Test Hours
220,000+ total testing hours³
reliability, subsystem, and print quality)

TESTED	EQUIVALENT TO	220K HOURS OF PRINTING ACROSS 110 PRINTERS
	25 YEARS	

(system

Printer Hardware



Product Dimensions
437 x 413 x 649 mm

Shipping Box Dimensions
765 x 500 x 555 mm

Frame Construction
Aluminum Die Cast Base
Extruded Aluminum Uprights

Steel Weldment Gantry Frame

Product Weight
29.5 kg

Shipping Box Weight
37.1 kg

Temperature Control
Circulating Heated Chamber



Build Plate
Flexible Steel Build Plate

Build Surface
Reusable Grip Surface



Display
5" Full-Color Capacitive Touch Screen

Camera Resolution
640 x 480 pixels

Sensor Suite

21 sensors including:

Drawer
Temperature
Humidity Control
Material Detection

Performance Extruders
Temperature
Material Detection
Encoder (Jam Detection)

Printer
Lid – Open/Closed
Door – Open/Closed
Temperature Sensors RFID
– Heated Chamber
Calibration Sensors

Extruder Hardware

Extruder Thermal Core Length
48.2 mm

Max Extruder Drive Force
200 Newtons

Nozzle Diameter
0.4 mm



Materials

Spool Type Spools with RFID sensors

Spool Sensors Remaining Material, Color, Kind



Smart

Material Material



Supported Materials

MakerBot Precision Materials: PLA, Tough, PVA

MakerBot Specialty Materials: PETG, more to come

Color availability

MakerBot Precision Tough

MakerBot Precision PLA

MakerBot Specialty PETG

- Slate Gray
- Onyx Black
- Stone White
- Safety Orange

- Cool Gray
- True Black
- Natural
- True White
- True Orange
- True Red

- Translucent

Operation

Ambient Operating Temperature
15 – 26 °C, 10 - 90% RH non-condensing

Storage Temperature
0 - 38° C

Printer Automation

Automatic Z Calibration, Automatic Nozzle Calibration, Automatic Material Loading

Safety & Compliance

FCC, EMC
Low Voltage Directive 60950-1, 62368

Software

Software Bundle
MakerBot Print, MakerBot Mobile

Supported File Types

MakerBot (.makerbot), STL (.stl), SolidWorks (.sldprt, .sldasm), InventorOBJ (.ipt, .iam), IGES (.iges, .igs), STEP AP203/214 (.step, .stp), CATIA (.CATPart, .CATProduct), Wavefront Object (.obj), Unigraphics/NX (.prt), Solid Edge (.par, .asm), ProE/Creo (.prt, .asm), VRML (.wrl), Parasolid (.x_t, .x_b)

Operating Systems

Windows (7, 10)
Mac OS X (10.9+)

Electrical

Connectivity
USB Drive, USB, Ethernet, WiFi

Power Requirements
100 - 240 V
4A, 50 - 60 Hz
400 W max.

Warranty

Free 1-Year Extended Warranty

Support Plans

MakerCare Gold (2 Years)
MakerCare Platinum (3 Years)
