

MakerBot Sketch Standard

Product data sheet



Access to 3D printing for every student

Fast, reliable, easy-to-use printers designed with print quality and safety in mind. The top 3D printing solution for education, the Makerbot Sketch has set the standard in thousands of schools across North America. Join the only 3D printer platform that has been helping educators pioneer 3D printing in the classroom for over 10 years.

Resources every step of the way

3D printing in the classroom isn't just about the 3D printer. It's about the curriculum, the projects, and knowledge that surrounds it. That's why we include printer training, design thinking curriculum, and easy access to lesson plans and projects with every Sketch. Plus, enough filament to print all your students' projects.

- ✓ **From digital model to 3D print:** Easily access 3D printing software with built-in features that make 3D printing in the classroom simpler than ever before
- ✓ **ISTE-approved 3D printer training:** Included with each Sketch, this expert training gives anyone more confidence in setup and printing
- ✓ **Enclosed chamber with particulate filter:** Place Sketch Large anywhere in the classroom without worrying about curious hands or air quality
- ✓ **Heated and flexible build plate:** Increases print success and makes removing finished parts a breeze
- ✓ **Touchscreen controls and 1080p camera:** 3D print with an intuitive interface and monitor prints from anywhere with an onboard camera

The MakerBot platform



Ideal for every skill level

MakerBot Sketch is a solution that works for your classroom – whether you're printing for the first time, switching to a bigger printer, or scaling your 3D printer program.



CloudPrint software

Turn your students' digital models into physical 3D prints with MakerBot CloudPrint. This easy, cloud-based software requires no installation or student account creation.



Nurture design thinking

Self-paced, interactive training curriculum will prepare you and your students for 3D printing and career-building skills that go beyond the classroom.



Endlessly scalable

Begin with a platform that can serve the 3D printing needs of teachers in a single classroom or scale it across a whole school district..

MakerBot Sketch Standard specifications

Technology	Fused deposition modeling (FDM)
Print head	Single extrusion print head with replaceable extruder
Build volume (XYZ)	150 x 150 x 150 mm (5.9 x 5.9 x 5.9 in)
Layer resolution	Maximum capability: 100 - 400 micron
Heated build plate temperature	Up to 110 °C
Build plate	Heated build plate
Nozzle diameter	0.4 mm
Filament diameter	1.75 mm
Connectivity	Wi-Fi (2.4GHz + 5GHz), LAN, USB port
Dimensions	W 423 x D 365 x H 433 mm (W 16.6 x D 14.4 x H 17 in)
Net weight	23.2 kg (51.2 lbs)
Free supplied software	CloudPrint
Supported OS	MacOS, Windows, ChromeOS

Available curriculum



Educator's Guidebook

Lesson plans, tips, and tricks in how to integrate 3D printing into the classroom. Projects span robotics, engineering, mathematics, science, art, history, and music.



Teacher Certification

Prove your knowledge of 3D printing as a MakerBot expert and stand out as STEM education leaders.

Student Certification

Give middle and high school students a proven edge. This hands-on 3D printing training boosts their design thinking skills and sets a foundation for measuring STEM proficiency.

Learn more at makerbot.com

Compatible materials



Easy to print

- MakerBot PLA
- MakerBot Tough PLA

Customize your setup

The Sketch 3D printer includes:

- 3x spools of PLA
- 2x build plates
- 1x spatula
- 1x seat in Teacher Certification
- 5x seats in Student Certification
- MakerBot Cloud with print queuing
- 1 year warranty



Specifications subject to change. EN 09/23 v2.00