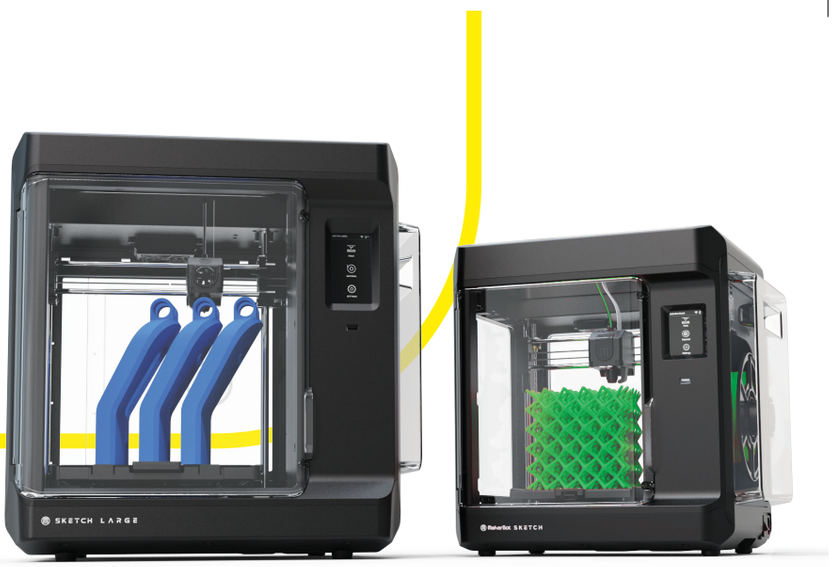
MakerBot Sketch series

Product data sheet



A 3D printer platform fit for any classroom
The top 3D printing solution for education, the Makerbot Sketch platform has set the standard in thousands of classrooms across North America. The Sketch and Sketch Large 3D printers make it easy for educators to test ideas, grow student engagement, revive aging curricula, and boost design thinking on a platform that grows with you.

Resources every step of the way
Sketch is the only 3D printer platform that has been helping educators pioneer 3D printing in the classroom for over 10 years. The system minimizes the hassle of learning how to operate the technology. Instead, you just hit 'print' and Sketch will take care of the rest. Every feature ensures a fast, reliable, and easy-to-use 3D printing experience – one that prioritizes print quality and student safety above all.

- **From digital model to 3D print**: Tap into a 3D printing software with built-in features that make 3D printing in the classroom easier than ever before
- **3D printer training**: Access our ISTE-approved guided printer training (included with every Sketch printer), and gain extra confidence in setting up and printing with the Sketch 3D printers
- **Enclosed printer with particulate filter**: Place your printer anywhere in the classroom without worrying about curious hands and print with peace of mind with a particulate filter preinstalled in each printer
- **Heated and flexible removable build plate**: Heated build plate for secure, successful printing and a flexible surface to make removing finished prints a breeze
- **Touchscreen controls and 1080p camera**: Start and pause students' prints with an intuitive interface combined with an onboard camera to make monitoring prints possible from anywhere

The MakerBot platform

Ideal for every skill level
MakerBot Sketch is a solution that works for your classroom – whether it's your first print, 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 account creation.

Nurture design thinking
Self-paced, interactive training curriculum will prepare you and your students for 3D printing and build career 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 and Sketch Large specifications

Technology	Fused deposition modeling (FDM)
Print head	Single extrusion print head with replaceable extruder
Build volume Sketch Standard (XYZ)	150 x 150 x 150 mm (5.9 x 5.9 x 5.9 in)
Build volume Sketch Large (XYZ)	220 x 200 x 250 mm (8.66 x 7.87 x 9.84 in)
Layer resolution	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
Dimensions Sketch Standard	W 423 x D 365 x H 433 mm (W 16.6 x D 14.4 x H 17 in)
Dimensions Sketch Large	W 535 x D 470 x H 547 mm (W 21 x D 18.5 x H 21.5 in)
Net weight Sketch Standard	11.8 kg (26 lbs)
Net weight Sketch Large	23.2 kg (51.2 lbs)
Free supplied software	CloudPrint
Connectivity	Wi-Fi (2.4GHz + 5GHz), LAN, USB port
Supported OS	MacOS, Windows

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.

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 CloudPrint with print queuing
- 1 year warranty

Learn more at makerbot.com

MakerBot

Specifications subject to change. EN 08/23 v2.00