Dremel DigiLab 3D20 Printer

Key Benefits

- Safe and Quiet: Fully Enclosed Workspace
- Precise: 100 Micron Build Resolution
- Flexible: Removable Build Platform
- Supported: by a One-Year Limited Warranty
- Easy to Use: Onboard Software and Touchscreen

Feature Overview

- Advanced motion control minimizes noise
- Removable build platform for easy object removal
- On-board software enables stand-alone operation
- Full color touch screen lets you go from file to building effortlessly
- Seamless 3D printing with SD card
- Fully enclosed for protected building
- 100 micron build resolution for high quality building

Tech Specs

GENERAL INFORMATION

- Extruder: Single extrusion
- Extruder temperature: Up to 230°C /397°F
- Operating Interface: 3.5" full color IPS touch screen
- Maximum Build Volume: 9" x 5.9" x 5.5" / 230 mm x 150 mm x 140 mm
- Layer Thickness: 4 mil | 0.004 inches 100 microns | 0.10 mm
- SD Card: Up to 32GB in size /3D20 will not work with SD cards larger than 32GB
- Internal Storage: 4GB

Weight (without spool)

- 19 pounds 8 oz (8.845 kg)

Device Dimensions

- Height: 15.7 inches (400 mm)
- Width: 19.1 inches (485 mm)
- Depth: 13.2 inches (335 mm)

Build Platform Dimensions

- Height: 5.5 inches (139.7 mm)
- Width: 9 inches (228.6 mm)
- Depth: 13.2 inches (149.86 mm)

FILAMENT

- ONLY builds Dremel PLA filaments
- Filament: 1.75mm PLA (Blodegradable/Renewable)

Storage

- All polymers degrade with time. The following conditions ensure the material remains high quality:
  - Do not unpack until filament is needed
  - Store at room temperature: 16-29° C / 60 - 85° F
  - Store in a dry environment

SOFTWARE

- Dremel 3D20 comes with complimentary software. This application converts your 3D digital files into buildable model files. Dremel 3D20 is also compatible with Simplify3D; sold separately.

Windows Requirements

- Dremel® Software runs on 32 and 64-bit Operating Systems Windows Vista or later

MAC OS X Requirements

- Dremel® Software runs on Mac OS X 10.8 or later

Ubuntu Requirements

- Dremel® Software runs on Ubuntu 14.04 or later

HARDWARE

- A PC with the below minimum requirements will be required to run the Dremel® Software
  - Processor: Multi-core processor - 2 GHz or faster percore
  - System RAM: 2 GB
  - Screen Resolution: 1024x768
  - USB Port
  - Video Graphics Card to support OpenGL 2.1 or later

ELECTRICAL

- 3D20 input rating: 120V, 60Hz, 1.2A

ENVIRONMENT

- Room Temperature: 16-29° C (60 - 85° F)
- Level workspace
- Dry workspace environment

WARRANTY

- One year warranty for non-commercial use
- 60 day warranty for commercial use
- [Click here to view the full warranty](#)

Dremel Digilab 3D40 Printer

Key Benefits

- **Reliable:** Tested to run for 100's of hours with clog-resistant extruder
- **Easy to Use:** Web-based design and printing software; Lesson plan and professional development to implement 3D in any workspace
- **Supported:** 1-year warranty with lifetime Dremel customer support

Feature Overview

- Innovates extruder with active filament monitoring and clog resistant
- Network added over WIFI and Ethernet
- Semi-automated leveling for fast and accurate calibration
- Easy printing via full color LCD touch screen with intuitive interface
- Quiet and Safe: Fully Enclosed Workspace
- Flexible: Removable Glass Build Plate

Tech Specs

GENERAL INFORMATION

Printing Technology
- Fused Deposition Modeling

Extruder
- Direct Drive
- Single Extruder

Build Volume
- 10 x 6 x 6.7in
- 402 cubic inches

Z-Layer Resolution
- 100-300 microns

Materials
- PLA

Filament Diameter
- 1.75mm (0.069 in)

Nozzle Diameter
- 0.4mm (0.014 in)

Print File Type
- .G3DREM
- .gcode

Internal Storage
- 8GB

Operating Interface
- 4.5" full color IPS touch screen

Build Platform Leveling
- Semi-automated Leveling

SOFTWARE

Software Bundle
- Dremel DigiLab 3D Slicer - Based on Cura (Desktop); Included
- Dremel Print Cloud - Based on 3DPrinterOS (Web-Based); Included
- Simplify3D Software- Compatible; Sold Separately

CAD File Types
- STL
- OBJ

Windows Requirements
- Windows (7, 8, 8.1, 10)

MAC OS X Requirements
- Mac OS X (v10.9+)

TEMPERATURE

Extruder Maximum Temperature
- 230°C

Operating Temperature
- 16-29°C

ELECTRICAL

Input Rating
- 100-240V, 47-60Hz, 0.85-2.3Amps

Connectivity
- Wifi, USB, Ethernet

WEIGHT AND DIMENSIONS

Weight
- 19.8kg (43.6lb)

Dimensions
- 20.25 x 16 x 15.9 in

WARRANTY
- One year warranty

Dremel Digilab 3D45 Printer

Key Benefits

- **Advanced:** Print in 50 micron layers with nylon, eco-ABS, and more
- **Reliable:** Tested to run for 100's of hours with clog-resistant extruder
- **Supported:** 1-year warranty with lifetime Dremel customer support

Feature Overview

- Precise Output: 50-micron resolution & temperature-controlled chamber
- Filament Auto-Recognition: Automatically changes temperature settings
- HD Camera: Remotely manage 3D45s & capture time-lapse videos
- Perfect for Makerspaces: Easily network & stack 4 units to 6 ft tall
- Carbon Filters: Protect yourself against harmful VOCs

Tech Specs

GENERAL INFORMATION

Printing Technology
- Fused Deposition Modeling

Extruder
- All-Metal Hot End
- Direct Drive
- Single Extruder

Build Volume
- 10 x 6 x 6.7in
- 402 cubic inches

Z-Layer Resolution
- 50-300 microns

Materials
- Nylon
- Eco-ABS
- PLA

Filament Diameter
- 1.75mm (0.069 in)

Nozzle Diameter
- 0.4mm (0.014 in)

Print File Type
- .G3DREM
- .gcode

Internal Storage
- 8GB

Operating Interface
- 5" full color IPS touch screen

Build Platform Leveling
- Semi-automated Leveling

SOFTWARE

Software Bundle
- Dremel DigiLab 3D Slicer - Based on Cura (Desktop); Included
- Dremel Print Cloud - Based on 3DPrinterOS (Web-Based); Included
- Simplify3D Software- Compatible; Sold Separately

File Types
- STL
- OBJ

Windows Requirements
- Windows (7, 8, 8.1, 10)

MAC OS X Requirements
- Mac OS X (v10.9+)

TEMPERATURE

Extruder Maximum Temperature
- 280°C

Build Platform Maximum Temperature
- 100°C

Operating Temperature
- 16-29°C

ELECTRICAL

Input Rating
- 100-240V, 47-60Hz, 0.85-2.3Amps

Connectivity
- Wifi, USB, Ethernet

WEIGHT AND DIMENSIONS

Weight
- 21.5kg (47.5lb)

Dimensions
- 20.25 x 16 x 15.9 in

WARRANTY

- One year warranty

3D Printer Filament

Key Benefits

- Nylon: Used For Practical Applications Due to Higher Strength and Durability
- Eco-ABS: Similar Mechanical Properties to ABS Without the Harmful VOCs
- PLA: Tested for Hours to Run Flawlessly on Dremel 3D Printers

Feature Overview

- Purple Orchid
- Electric Orange
- Deep Black
- Dremel Blue
- Silver Spoon
- Gold Medal
- Racecar Red
- Cotton White
- Passion Pink
- Natural White Translucent
- Grass Green

Tech Specs

GENERAL INFORMATION

How many prints can you get with every spool?*

- 36 small model OR 14 medium models OR 3 large models
- *Print amounts are approximate and based on moderate fill. Your print amounts may vary based on quality and fill settings for each model.*

Material - Color

- Nylon - Deep Black | Model #DF45-NYP-B
- Eco-ABS - Deep Black | Model #DF45-ECO-B
- PLA - Grass Green | Model #DF07-01
- PLA - Dremel Blue | Model #DF06-01
- PLA - Gold Medal | Model #DF51-01
- PLA - Electric Orange | Model #DF04-01
- PLA - Cotton White | Model #DF01-01
- PLA - Deep Black | Model #DF02-01
- PLA - Racecar Red | Model #DF03-01
- PLA - Purple Orchid | Model #DF05-01
- PLA - Silver Spoon | Model #DF50-01
- PLA - Natural White Translucent | Model #DF70-01
- PLA - Passionate Pink

Item Diameter

- 1.75 millimeters