

Ultimaker 3 Extended/S5 Dual FDM 3D Printer

Last updated: 5/31/23 Haley

Ultimaker 3/S5	
	
Tool Type:	3D printer
Location:	Innovation Workshop
Description:	Dual extrusion FDM 3D printer
Manufacturer:	Ultimaker

About

The Ultimaker 3 extended & Ultimaker S5 are filament fed fusion deposition 3D printers capable of simultaneously printing two different plastics at once. Typically the printer is set up with ABS as a build material, and PVA as a solvable support material.

Safety Concerns

- The print heads can be very hot - do not touch them with bare hands unless positive they are cool.
- As with any automated machinery make sure that your body is clear of the moving parts to avoid injury.

Training Documentation

[FDM Training SOP](#)

Detailed Specifications

Ultimaker 3 Extended:

- Build Volume: 215x215x300 mm for right or left nozzle, 197x215x300 mm for dual material
- Filament diameter: 2.85 mm
- XYZ resolution: 12.5, 12.5, 2.5 microns
- Build plate temperature: 20-100 °C
- Nozzle temperature: 180-280 °C

Ultimaker S5:

- Build Volume: 330x240x300 mm
- Filament diameter: 2.85 mm
- XYZ resolution: 6.9, 6.9, 2.5 micron
- Build plate temperature: 20-140 °C
- Nozzle Temperature: 180-280 °C

Reference Documentation

PVA Temps:

Extruder: 220 C Bed: Whatever structural filament recommends

ABS Temps:

Extruder: 230 C Bed: 100 C

[quick_start_guide_ultimaker_3_v3.2.pdf](#)

[ultimaker_3_extended_specifications.pdf](#)

[um180129_ultimaker_3_manual_rb_v12_english.pdf](#)

<https://support.ultimaker.com/hc/en-us/articles/360012007119>

[pva_drying_recipe.pdf](#)

[ultimaker_filaments_-_sheet1.pdf](#)

[failed_3d_print_procedure.pdf](#)

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