

Ultimaker3 Extended Dual FDM 3D Printer



Ultimaker3 Extended Dual FDM 3D Printer	
Tool Type: “FDM 3D printer”	
Location: “CNSI Innovations Workshop”	
Supervisor	Tool Lead
David Bothman	Andrew Furst
(805) 893-4125	(801) 928-8869
bothman@cnsi.ucsb.edu	Andrewfurst@ucsb.edu
Description: “FDM 3D Printer”	
Manufacturer: “Ultimaker”	

About

The Ultimaker 3 extended is a filament fed fusion deposition 3D printer 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.

Training

[FDM Printer SOP](#)

Detailed Specifications

- Build Volume: 215 x 215 x 300 mm
- Filament diameter: 2.85 mm
- layer resolution: 60 to 600 microns depending on print head (see Specifications documentation page 11)
- XYZ accuracy: 12.5, 12.5, 2.5 microns
- Build plate temperature: 20-100 °C
- Nozzle temperature: 80 - 100 °C

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.
- The support removal tank for the F270 is filled with heated caustic chemicals that dissolve the support material. An apron, Gloves, and a face shield must be worn when inserting and removing parts or basket from the tank.

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](#)

From:

<https://bpm-wiki.cnsi.ucsb.edu/> - NSF BioPACIFIC MIP Wiki

Permanent link:

https://bpm-wiki.cnsi.ucsb.edu/doku.php?id=ultimaker3_extended&rev=1601401527

Last update: **2020/09/29 17:45**



