

# Fusion3 F400 High-Performance Desktop 3D Printer



## The Affordable 3D Printer for Business and Education, Featuring:

- Best-In-Class Performance
- Large, Enclosed Print Area
- Ease Of Operation
- Wide Range of Materials
- Enhanced Safety & Comfort
- Proven Durability & Reliability

## PERFORMANCE THAT RIVALS EXPENSIVE INDUSTRIAL 3D PRINTERS

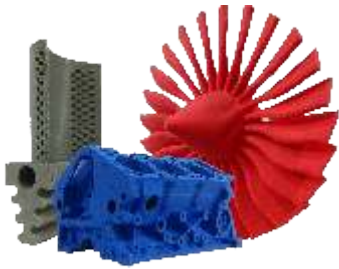
Proprietary 'F-Series' Core XY Design produces high quality parts at incredibly fast speeds.



- Print Speed up to 250MM/sec and layer resolution as low as .05MM
- All metal E3D print head with hardened steel nozzle for superior performance
- New 32-Bit controller provides even faster (20%) print speeds (vs. F306)
- Durable metal enclosure & rigid frame provides unparalleled mechanical stability
- Pre-assembled and calibrated at Fusion3's factory for optimal performance

## BUILD LARGE, BEAUTIFUL PARTS

The F400's large, enclosed print area enables high-precision printing with high temperature materials.



- 1.46 cu ft print area (14.2"×14.4"×12.6")
- Aluminum enclosure provides stable temperature environment for printing high temperature materials including ABS and Polycarbonate
- Large, clear windows allow you to view the printer as it operates
- Modular components and convenient access to the interior for easy maintenance and servicing

## TWO VERSIONS: STANDARD SINGLE EXTRUDER & 'HIGH FLOW RATE'

**F400-S**



**Balanced performance for most customers** using the renowned E3Dv6 print head with a .4mm Steel Hardened Nozzle.

**F400-HFR**



**Faster production / manufacturing** thanks to the E3D "Volcano" print head and larger .8mm steel hardened nozzle.

## DESIGNED FOR EASE OF USE & MANAGEABILITY

We've added a number of features to make operation easy and less time consuming.



Touch Screen

- Easy to read 4.7" touch screen puts advanced controls at your fingertips
- Full-featured remote management; upload files, monitor print progress and manage your F400 remotely from anywhere on your network (via ethernet) (wifi capable, requires 3rd party adapter)
- Automated Bed Leveling via built in IR sensor which samples the bed height and adjusts the Z axis in real time to maintain the correct height
- Every F400 comes with a 2 seat license of Simplify3D Creator (\$149 value). This easy to use, slicing software is lightning fast and generates superior output of your models, optimized for the selected material.



Remote / Web Interface

## OPEN MATERIALS PHILOSOPHY

We test and approve variety of materials, encouraging price competition and experimentation.



- Tested to work with a wide range of materials beyond PLA & ABS, including Nylon(s), PCTPE, t-glase, PETG, N-Vent, HIPS, Infused PLAs, PC-ABS, Polycarbonate, PMMA, and more
- E3D print head with included hardened steel nozzle ensure performance, even with metal, ceramic and other abrasive filaments
- Capable of printing most materials with melting points <300°C
- Fusion3 tests & certifies new materials, publishing optimized profiles on a regular basis

## ENHANCED SAFETY & COMFORT

Our enclosed design, unlike open-frame consumer printers, enhances safety & comfort for use in schools and the workplace.



- Door with large windows provides engaging visual experience in educational environments while protecting against contact with high temperature surfaces & sensitive electronics
- Quiet operation for office and libraries (36db with door closed)
- Optional HEPA / Carbon Filter System provides filtration for sites lacking adequate ventilation
- Addition of new sensors that provide additional protection and automatic shutdown in the event of heat-related issues during long prints

## PROVEN DURABILITY & RELIABILITY FOR MAXIMUM UPTIME

We're so confident in the performance of our 'F-Series Platform', we include the best warranty and most professional and responsive service & support in the industry.

### Industry-Leading 2 Year Warranty

Fusion3 covers materials & workmanship with the longest warranty offered by any manufacturer (as of 4/1/2016).

### Free Lifetime Phone & E-mail Support

Our expert support staff is available between 8am and 6pm EST, Monday – Friday to help troubleshoot any product issues.

### Advanced Exchange Service & Support Plan

This optional plan provides support beyond basic troubleshooting. Our team will help with topics ranging from operating your printer, optimizing your models for best output and selecting optimal materials for your application.

### Replacement Parts At Cost

Even out of warranty, should you need replacement parts, we'll provide those to you at our cost (cost of parts plus shipping & handling).

# SPECIFICATIONS

# F400-S

# F400-HFR

## MAXIMUM PRINT SIZE / PRINT VOLUME

Length x Width x Height (in/mm)	14.17in x 14.37in x 12.60in (360mm x 365mm x 320mm)	14.17in x 14.37in x 12.15in (360mm x 365mm x 309mm)
Max Build Volume (cu/ft)	1.48 ft <sup>3</sup>	1.46ft <sup>3</sup>

## EXTERIOR DIMENSIONS & WEIGHTS

Length x Width x Height (in / mm)	30.6in x 28.1in x 25.25in (777.24mm x 713.74mm x 641.35mm)
Weight	85lb / 38.56kg

## PRINTER SPECIFICATIONS

Print Technology	Fused Filament Fabrication (FFF)	
Assembly Type	Pre-Assembled & Calibrated	
Layer Height / Resolution	0.05 – 0.3 mm (50 – 300 microns)	0.2 – 0.5 mm (200 – 500 microns)
Build Plate / Max Bed Temp	Heated Glass up to 140°C	
Build Plate / Nozzle Heat Up Time	<6 minutes to 100°C / <3 minutes to 200°C	
Build Plate Leveling	Automatic (via touchless IR sensor)	
Print Head	E3Dv6 All Metal Print Head; Swappable	E3D 'Volcano' All Metal Print Head
Print Nozzle	.4MM Hardened Steel Nozzle (.6MM optional)	.8MM Hardened Steel Nozzle
Build Speed	Up to 20.1 mm <sup>3</sup> /sec (.4MM Nozzle)	Up to 36.1mm <sup>3</sup> /sec (.8MM Nozzle)
Max. Print Speed / Max. Travel Speed	250mm/sec / 500mm/sec	
Extruder / Feeder Type	Bowden / Geared Feeder	
Operating Sound Level	36dBA (Closed), 41 dBA (open)	
Min. Feature Size	0.5mm <sup>2</sup>	1.0mm <sup>2</sup>
Feature Tolerances	+/- .003" per inch of size	+/- .006" per inch of size
Enclosure Internal Temperature / Filtration	45°C max / Optional HEPA / Carbon Filtration	

## MATERIALS

Filament Size / Max Spool Size	1.75MM / Up to 10kg Spool
Supported Materials	PLA, ABS, Nylon, HIPS, PVA, Polycarbonate, PC-ABS, Alloy 910, PETG, PCTPE, PMMA, t-glasse, Tritan and more

## SOFTWARE

Processing Software	Simplify3D Creator (2 seat license included)
Supported Operating Systems / File Types	Windows, Mac, Linux / .STL, .OBJ

## ONBOARD CONTROLLER / OTHER

Onboard Controller / Interface	32bit 84Mhz ARM-Based Controller / Touch display, on-board webserver via web browser
Connection Options	MicroSD Card (Included), Ethernet, Wi-Fi (via 3rd party adapter)
Electrical Input / Output	110V 6A peak / 230V 3A peak, 24v DC, 600W peak

## SERVICE & SUPPORT

Base Warranty	2 Years, Materials & Workmanship (including hotend)
Lifetime Support	Expert support to troubleshoot issues via phone & email

## PRICE (USD)

**\$4,499 + shipping**

**\$4,699 + shipping**