

Fusion3 F410

The Professional 3D Printer For Your Demanding Application




Affordable for
business & education,
only \$4,599

Heavy-Duty Rolling Cart sold separately

HIGH PERFORMANCE 3D PRINTING

Fusion3's business & education customers have demanding applications that require a combination of precision, speed, and reliability. Many 3D printers can meet one or two of these requirements, but only Fusion3 delivers on all three, thanks to our unique technology and focus on throughput.



250^{mm}/sec
PRINT SPEEDS



WITHIN .003"
PRINT TOLERANCES



AS LOW AS
20 MICRONS
LAYER RESOLUTION

POWERED BY FUSION3'S 'F-TYPE' PLATFORM

Validated through millions of operating hours with thousands of customers, our 'F-Type' platform is the foundation of the F410's class-leading performance.

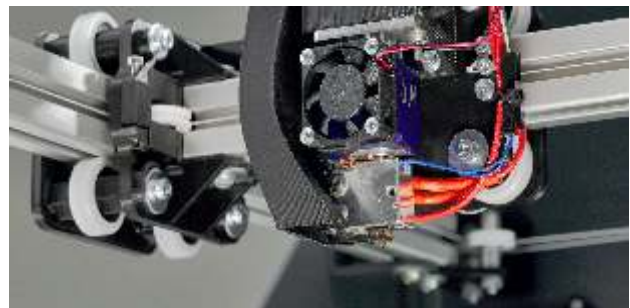
2.0 EXTRUDER

The F410's completely redesigned extruder includes filament monitoring (pauses system if you run out of filament or if filament stops feeding), filament cleaning (prevents contaminants from entering the print system), and provides improved grip and enhanced performance with all materials.



PROPRIETARY MOTION CONTROL SYSTEM

The 'F-Type' platform combines high stiffness, low moving mass, and a unique Kevlar® cable system (instead of rubber belts which generate backlash and will wear/stretch over time). This enables the F410 to print faster and more accurately than other 3D printers in its class.



RIGID METAL ENCLOSURE

Similar to a unibody car, our structurally rigid aluminum enclosure not only looks great but provides a stable platform, eliminating vibration and ensuring quality 3D prints.



LARGE, ENCLOSED BUILD AREA

The F410's enclosed print chamber and interchangeable print heads enable you to produce large parts, using high-temperature materials, at your desired speed and print quality, while maintaining class-leading accuracy.

BUILD LARGE PARTS QUICKLY

With a maximum build volume of 1.38 cubic feet (max build size of 355 x 355 x 315mm), the F410's large print bed enables fabrication of large parts, or large numbers of smaller parts, in one print job.



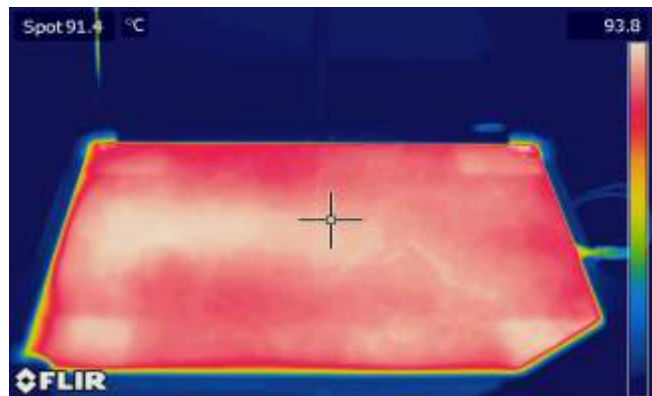
INTERCHANGABLE PRINT HEADS

With the F410, you have the choice between three interchangeable print heads. Select the perfect size for your application to achieve the best balance of speed and print quality. (.4mm included, .6mm and .8mm purchased separately)



STABLE, HIGH-TEMPERATURE ENVIRONMENT

The F410's enclosed print area and multi-zone heated bed provide a stable 45°C environment, ensuring excellent print results with high-temperature, engineering-grade materials including Polycarbonate, ABS and Nylon.



WIDEST VARIETY OF 3D PRINTABLE MATERIALS

Many Fusion3 customers seek to 3D print the same engineering-grade plastics they use for injection molding. Other customers desire unique properties that new, innovative filaments can provide. Unlike other 3D printer manufacturers who restrict the types of materials used with their machines, Fusion3's testing & certification process ensures our customers can successfully print the widest variety of materials 'out of the box'.

EVERY TYPE OF 3D PRINTABLE PLASTICS

Fusion3's 3D printers can print filament from all major families of 3D printable plastics, including standard and hybrid formulations of:

PLA
ABS
ASA
PETG

CARBON FIBER FILLED
FIBERGLASS FILLED
NYLON
POLYCARBONATE

FLEXIBLE (including TPU/TPE)
POLYESTER
ACRYLIC / PMMA
and MORE...

TESTED & CERTIFIED TO ENSURE COMPATIBILITY & PERFORMANCE

PURCHASE DIRECTLY FROM SUPPLIERS



Unlike other 3D printers that require customers to purchase from a limited assortment of expensive materials, Fusion3 does not sell filament. We test and certify filament from a variety of leading manufacturers, encouraging competition in price, quality, and innovation.

RIGOROUS TESTING PROCESS



Fusion3 subjects new materials to a rigorous testing process: we evaluate the performance and suitability of the material, and develop the process settings our customers need to print successfully on their own.

CUSTOMER REQUESTS



We encourage our customers to request the testing of new materials. Requests range from evaluating a new plastic or formulation, to certifying a generic filament sold by a familiar or local supplier.

FREQUENT UPDATES



Fusion3 seeks out new materials to test and frequently publishes updates to our 'Certified Materials List' and the Simplify3D configuration files ("profiles").

TAKING THE GUESSWORK OUT OF 3D PRINTING

3D printing sometimes seems more art than science. The F410 takes some of the guesswork out of producing excellent results by including features that make 3D printing easier, including auto bed leveling, powerful slicing software, and remote management.

AUTOMATIC, CONDUCTIVE BED LEVELING

A level print bed is key to printing well. The F410's bed level compensation technology checks and adjusts the bed height before every print. Our conductive system is elegantly simple, using the print head instead of an external sensor and ensures excellent, repeatable results.



THE BEST SLICING SOFTWARE INCLUDED

Every F410 includes a copy of Simplify3D Creator (\$149 value). This easy to use software is lightning fast and generates superior output of your models, for the selected material.



REMOTELY MANAGE OVER YOUR NETWORK

Through a web browser and the F410's built-in ethernet connection, you can remotely control your 3D printer over your network, including the ability to upload files, monitor print progress and start/pause/stop. (wi-fi capable using 3rd party adapter)



INTUITIVE TOUCH SCREEN INTERFACE

The user interface on the F410's 4.7" full-color touchscreen makes printing and maintaining your F410 simple and easy while still giving you access to advanced controls when you need them.



SAFETY & COMFORT IN YOUR WORKPLACE

Our enclosed design, unlike the open-frame consumer 3D printers, enhances safety & comfort in the workplace and schools.

PROTECTION FROM HOT SURFACES

The F410's door, with large windows, protects users from contact with high-temperature surfaces and sensitive electronics while providing an engaging visual experience.



QUIET FOR USE IN OFFICES & CLASSROOMS

The F410 is the quietest 3D printer we've ever built, reducing distraction to co-workers and students.



CARBON & HEPA AIR FILTERS (OPTIONAL)

Our optional air filter assembly connects to the F410's exhaust port and houses two different filters for use in locations lacking adequate ventilation: a carbon filter to reduce unpleasant odors and a HEPA filter which captures some amount of potentially hazardous emissions.



HEAVY-DUTY ROLLING CART (OPTIONAL)

Our rolling cart helps you save valuable desk space and makes it easy to move your 3D printer. The cart mirrors the design of the F410 with all-metal, heavy-duty construction, a large storage area and pass-through ports for your power and network cables.



COMMITMENT TO MAXIMUM UPTIME



Customers select Fusion3 3D printers for demanding, mission-critical applications and cannot afford downtime. To ensure maximum uptime, we designed the F410 to be durable and reliable. Every Fusion3 3D printer is designed, assembled, and calibrated at our USA Factory. In the unlikely event of an issue, Fusion3 provides the best warranty in the 3D printing

BEST WARRANTY IN 3D PRINTING: 2 YEARS

Fusion3 covers materials and workmanship with the longest standard warranty offered by any 3D printer manufacturer (as of 4/1/2018).

STANDARD 3D PRINTER WARRANTIES <small>(as of 4/1/2018)</small>		
MANUFACTURER	DURATION	PRINT HEADS COVERED IF JAM?
Fusion3	2 Years	YES
Stratasys	1 Year	Yes
Ultimaker	1 Year	No
Zortrax	1 Year	No
Raise3D	1 Year	No
Markforged	90 Days	No

FREE LIFETIME PHONE & EMAIL TECHNICAL SUPPORT

Fusion3's expert, US-based, technical support team is available between 8 am and 8 pm US Eastern Time, Monday through Friday, to troubleshoot and assist in the repair of any technical issues that might arise.



REPLACEMENT PARTS AT COST

Our online store offers consumables, optional items and out-of-warranty parts for sale at cost to our customers. Orders received by 3 pm ship out via UPS® Ground or International Air the same business day. Orders can be expedited upon request for an additional fee.



ENHANCED SUPPORT PLAN (OPTIONAL)

This optional plan provides customer support for topics not related to a technical issue. Under our Enhanced Support Plan, the team can help you with topics such as designing your 3D models for best output, optimizing throughput for production, and identifying the ideal material(s) for your application.



PRICE & SPECIFICATIONS

PHYSICAL DIMENSIONS & WEIGHT

Dimensions (DxWxH) 724 x 775 x 648 mm
(28.5 x 30.5 x 25.5 in)
Weight: 38.56 kg (85 lb)

PRINT SIZE & VOLUME

Max Print Size (LxWxH): 355 x 355 x 315 mm
(14x14x12.4 in)
Max Build Volume: 1.38 cubic feet

PRINTING

Print Technology: Fused Filament Fabrication (FFF)
Max Print Speed: 250 mm/sec
Max Travel Speed: 500 mm/sec
Extruder / Feeder Type: Bowden drive / Geared feeder

ENCLOSURE & PRINT SURFACE

Ambient Operating Temperature: 7°C - 29°C . 45°F to 85°F
Enclosure Temperature: 45°C max
Print Surface: Heated glass with multizone heater
Maximum Bed Temp: 140°C
Bed Leveling: Automatic (via conductive sensors) & manual

PRINT HEADS / PERFORMANCE

	.4MM	.6MM	.8MM
Print Head:	E3D Volcano	E3D Volcano	E3D Volcano
Layer Height (Min - Max):	20 - 300 microns	100 - 400 microns	200 - 500 microns
Min Feature Size:	.5 mm ²	.75 mm ²	1.0 mm ²
Feature Tolerance:	+/- .003" per inch	+/- .0045" per inch	+/- .006" per inch
Print Nozzle:	.4 mm hardened steel	.6 mm hardened steel	.8 mm hardened steel
Maximum Melt Temperature:	300°C	300°C	300°C

ONBOARD CONTROLLER & STORAGE

Onboard Controller: 32-bit, 120mhz ARM-Based controller
Storage: Onboard 4GB flash storage, SD Card Slot

ELECTRICAL

AC Input: 110V / 230V, 350W avg
Peak Power: 6A / 3A, 600W

PRICE & SHIPPING

F410 3D Printer: \$4,599
Shipping (USA & Can): via LTL Freight
International Shipping: via Air Freight
Shipping Cost: Varies based on location, please contact for quote

AVAILABLE OPTIONS

Heavy-Duty Rolling Cart: \$649
Print Head (any size): \$160
Set, 3 Glass Print Beds: \$30
Air Filter Assembly: \$49
Replacement Filter Set: \$30

MATERIALS

Diameter: 1.75 mm
Types: All major printable plastics (See certified materials list)
Max Spool Size: 3.5 kg / 12" diameter, 6" width

SOFTWARE

Processing Software: Simplify3D Creator 4.X
Operating Systems: Windows, Mac, Linux
File Types: .STL, .OBJ

WARRANTY & SUPPORT

Standard Warranty: 2 Years, materials & workmanship (including printhead)
Technical Support: FREE for life of 3D printer

Fusion3

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