

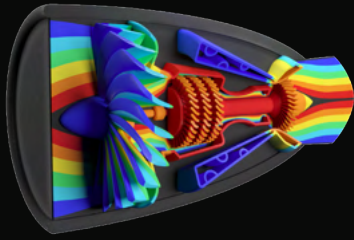
ELEMENT HT

Product Sheet

High quality, multi-material,
industrial grade 3D printing.

ELEMENT HT

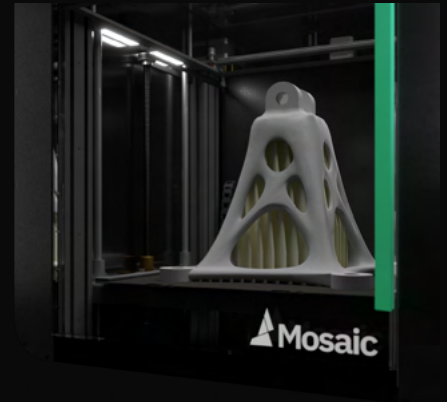
Key Features



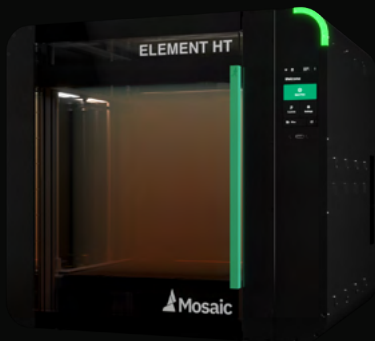
Large volume prints in up to 8 different materials



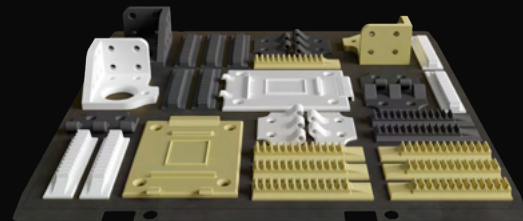
Modular printhead & hardened steel nozzle for precision printing



Support for industrial print materials like PEEK, PEKK and Ultem



Heated built plate & chamber for advanced thermal plastics₁



Element HT can print high-strength parts with tight tolerances.

- ✓ Starting at **\$9,999 USD**
- ✓ **Controlled remotely** to monitor and start prints from anywhere
- ✓ Removable build plate speeds up and simplifies bed changes
- ✓ **Automated** calibration with onboard sensors further increases ease of use
- ✓ **Automated** filament changeover to maximize printer uptime
- ✓ Cloud based print management with **Canvas** software integration₂
- ✓ All metal construction and on-board UI to maximize usability

1. Mosaic Materials are specially made to work in Element HT and are strongly recommended when printing materials like PEEK, PEKK and Ultem .
2. Standard single user license included with both Element and Element HT.

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Specification Sheet

Technologies	Fused Filament Fabrication (FFF) enhanced with Mosaic's patented Series Enabled Multi-Material Extrusion (SEME)
Build Envelope	355mm x 355mm x 355mm (14" x 14" x 14")
Construction	Durable all-metal motion systems
Layer Resolution	20-320 microns
XYZ Resolution	12.5 μ m, 12.5 μ m, 0.4 μ m (X, Y, Z)
Max Speed (Travel)	200mm/s
Build Speed	100mm/s
Build Plate	Various coatings on spring steel removable build plate for easy rapid build plate changes
Heated Bed	Max 120°C
Thermal Chamber	Heated, up to 80°C ₁
Air Filtration	HEPA filter to remove up to 99.7% of UFP's, or a BOFA filter
External Fume Extraction	Integrated 50mm (2 in) inlet and outlet for optional external fume extraction hook up (purchased separately)
Operating Sound	< 60 dBA
User Interface	5" Color touch screen or remote access from Canvas
Monitoring	Live camera inside chamber
Status Indication	RGB stack light
Connectivity / File Transfer	WiFi, LAN, USB port
Compatible Models	Print Head 0.4, Print Head 0.4 HT ₁
Nozzle	0.4mm hardened steel nozzle
Max Nozzle Temperature	500°C ₁
Serviceability	Modular extruder, tool-less removable in < 60 seconds
Sensors	filament homing, filament motion, T _{environment} , T _{hotend} , T _{coldend}

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Specification Sheet

Filament Cartridges	Mosaic Material Pod V1
Filament Containment	Mosaic Material Pods are reusable, environmentally sealed dry boxes (1 two-pack of Material Pods included with base Element HT configuration)
Filament Bays	8 receivers for Mosaic Material Pods
Filament Loading	Automated filament load, filament retraction
Filament Sensors	Filament homing, filament consumption meter, filament relative humidity, filament temperature
Filament Changover Model	Palette X - Automated Material Server Module including filament drives, a material cutter, filament homing, and filament measurement systems
Nozzle Cleaning	Integrated nozzle wiping pad for materials up to 300°C, wire nozzle wiping brush and integrated high temp wiping pad for materials up to 500°C
Transition Container	Removable container with 38mm x 264mm x 253mm (X x Y x Z) of storage
Currently Supported Materials₃	Mosaic PLA, Mosaic PETG, Mosaic Origin, Mosaic Matrix, Dissolve LT, Mosaic ABS, Mosaic Breakaway LT. Mosaic PEEK, Mosaic PEKK, Mosaic Ultem 9085, Mosaic ESD. TPE Not Supported ₄
3rd Party Filament Support	The system is open to support 3rd party materials, and any materials that fit in Mosaic's Material Pod will be able to access material automation and multi-material 3D printing
Dimensions	911mm x 613mm x 633mm (X x Y x Z) (with 8 Material Pods attached)
Net Weight	43 kg (95 lbs) (Printer, no material pods attached)
Gross Weight	57kg (125 lbs) (With Packaging, 2 Material pods in-box)
Supplied Software	Canvas. Free print preparation software with optional paid functionality
Supported OS	MacOS, Windows, and Linux
Electrical Requirements	100-240V AC, 50/60Hz. Maximum current: 12.0A (115V), 4.5A (230V)
Certifications	cTUVus, EN62368-1: 2014, EN55032: 2015, EMC, CE, RoHS
Warranty	24 months for Element HT ₅

1. The heated chamber, Print Head 0.4 HT and high temperature nozzle are only available on Element HT.

2. A wire nozzle wiping brush and integrated high temp wiping pad are included with the Element HT configuration.

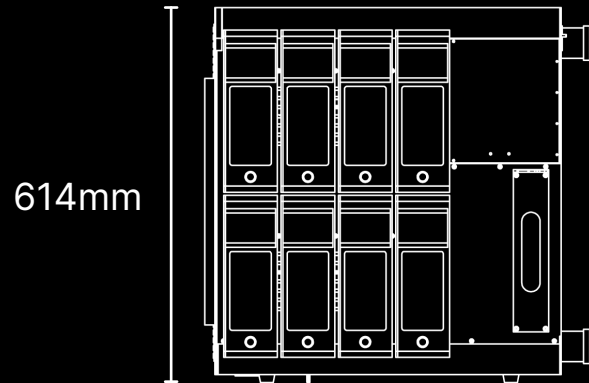
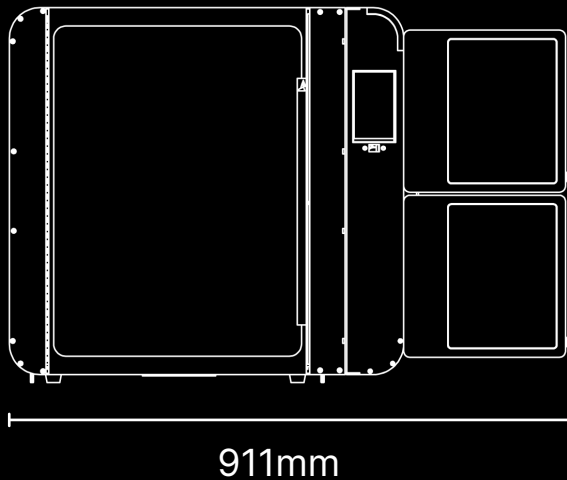
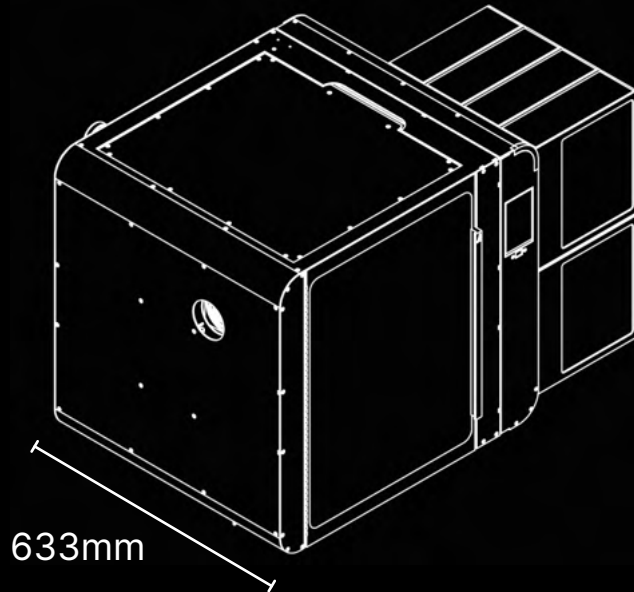
3. Limitations on print size apply, please contact sales@mosaicmfg.com to learn more

4. TPE (Thermoplastic Elastimer) as well as many TPU (thermoplastic eurothane) materials are not supported for printing in Element. Mosaic Flex is recommended.

5. See individual product warranty for full details.

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Product Diagrams



Note: All diagrams and technical specifications are approximate and subject to change.

5. High temperature beds, chambers and nozzles are only available on the Element HT configuration.

6. Industrial materials like Mosaic Peek, PEKK, Ultem 9085 and ESD are only available for print on the Element HT configurations.

7. See product warranty for full details.



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