

# ELEMENT

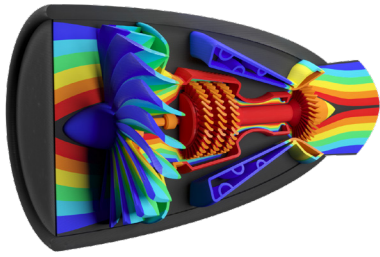
## Product Sheet

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Reliable, Flexible and Intuitive

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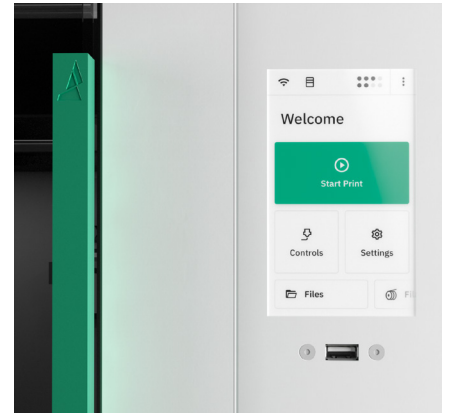
## Key Features



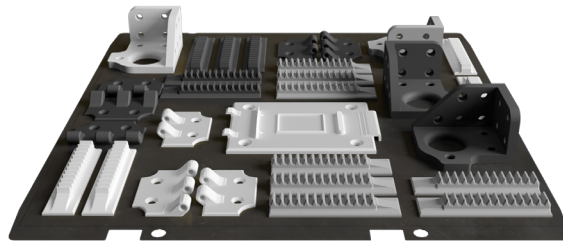
**Large volume prints in up to 8 different materials**



**Modular printhead & hardened steel nozzle for precision printing**



**Integrated touchscreen provides intuitive access to controls.**



**Print a wide variety of parts with tight tolerances.**

- ✓ Starting at **\$5,999 USD**. Shipping begins **November 2021**<sup>1</sup>
- ✓ **Controlled remotely** to monitor and start prints from anywhere
- ✓ Removable build plate speeds up and simplifies bed changes
- ✓ **Automated** filament changeover to maximize printer uptime
- ✓ Cloud based print management with **Canvas** software integration<sup>2</sup>
- ✓ Same durable, all-metal chassis as Element HT

1. Subject to availability, shipping terms and conditions apply.

2. Standard single user license included with both Element and Element HT.

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## Specification Sheet

<b>Technologies</b>	Fused Filament Fabrication (FFF) enhanced with Mosaic's patented Series Enabled Multi-Material Extrusion (SEME)
<b>Build Envelope</b>	350mm x 350mm x 350mm (14" x 14" x 14")
<b>Construction</b>	Durable all-metal motion systems
<b>Layer Resolution</b>	20-230 microns
<b>XYZ Resolution</b>	12.5 $\mu$ m, 12.5 $\mu$ m, 0.4 $\mu$ m (X, Y, Z)
<b>Max Speed (Travel)</b>	200mm/s
<b>Build Speed</b>	100mm/s
<b>Build Plate</b>	Various coatings on spring steel removable build plate for easy rapid build plate changes
<b>Heated Bed</b>	120°C
<b>Thermal Chamber</b>	N/A
<b>Air Filtration</b>	HEPA filter to remove up to 97.5% of UFP's, and activated carbon filter to reduce VOC's
<b>External Fume Extraction</b>	Integrated 50mm (2 inch) inlet and outlet for optional external fume extraction hook up (purchased separately)
<b>Operating Sound</b>	< 60 dBA
<b>User Interface</b>	On Board 5" color touch screen or remote access from Canvas
<b>Monitoring</b>	Live camera inside chamber
<b>Status Indication</b>	RGB Stack Light
<b>Connectivity</b>	WiFi, LAN, USB port
<b>Compatible Models</b>	Print Head 0.4 <sub>1</sub>
<b>Nozzle</b>	0.4mm hardened steel nozzle
<b>Max Nozzle Temp</b>	300°C <sub>1</sub>
<b>Serviceability</b>	Modular extruder, tool-less removable in < 60 seconds
<b>Sensors</b>	filament homing, filament motion, T <sub>environment</sub> , T <sub>hotend</sub> , T <sub>coldend</sub>

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<b>Filament Cartridges</b>	Mosaic Material Pod V1
<b>Filament Containment</b>	Mosaic Material Pods are reusable, environmentally sealed dry boxes. (2 Provided with Element)
<b>Filament Bays</b>	8 receivers for Mosaic Material Pods
<b>Filament Loading</b>	Automated filament load, filament retraction
<b>Filament Sensors</b>	Filament homing, filament consumption meter, filament relative humidity, filament temperature
<b>Filament Changover Model</b>	Palette X - Automated material server module including filament drives, a material cutter, filament homing, and filament measurement systems
<b>Nozzle Cleaning</b>	Integrated nozzle wiping pad for materials up to 350°C
<b>Transition Container</b>	Removable container with 38mm x 264mm x 253mm (X x Y x Z) of storage
<b>Currently Supported Materials</b>	Mosaic PLA, Mosaic PETG, Mosaic Origin, Mosaic Matrix, Mosaic Dissolve LT, Mosaic ABS, Mosaic Breakaway LT. Mosaic ESD. Mosaic Flex <sub>2</sub>
<b>3rd Party Filament Support</b>	This system will 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
<b>Dimensions</b>	911mm x 634mm x 613mm (X x Y x Z) (8 Material Pods attached)
<b>Net Weight</b>	26 Kg (57 lbs) (With 8 Material Pods, No Filament)
<b>Gross Weight</b>	50 kg (110 lbs) (With Packaging and Pallet)
<b>Supplied Software</b>	Canvas. Free print preparation software with optional paid functionality.
<b>Supported OS</b>	MacOS, Windows, and Linux
<b>Power Supply Input</b>	100V - 240V AC, 50/60 Hz, 230V @2A
<b>Certifications</b>	cTUVus, EN62368-1: 2014, EN55032: 2015, EMC, CE, RoHS
<b>Warranty</b>	12 months for Element <sub>3</sub>

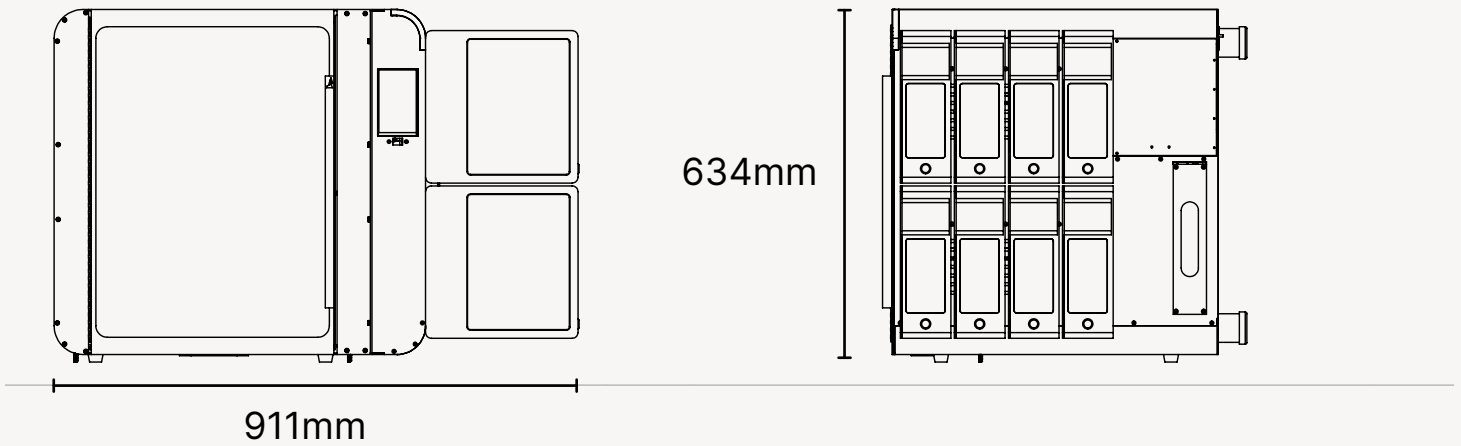
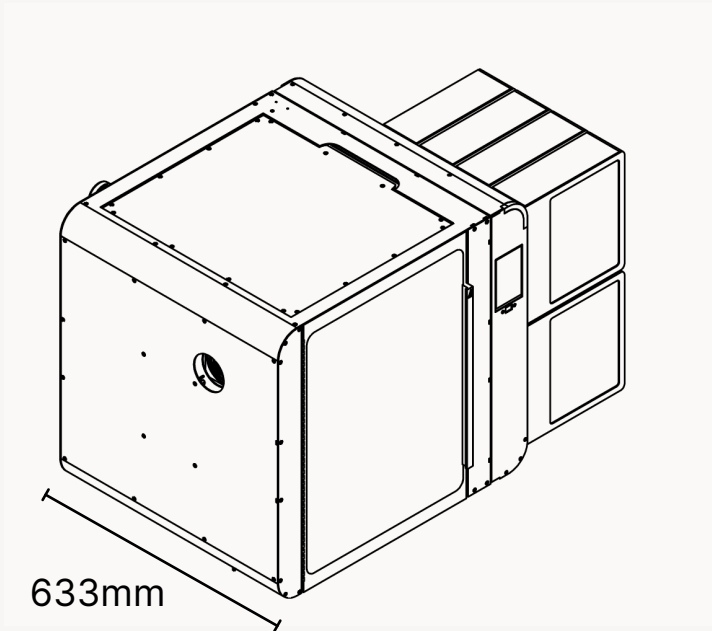
1. The heated chamber, Print Head 0.4 HT and high temperature nozzle are only available on the Element HT configuration.

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

3. 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.  
High temperature beds, chambers and nozzles are only available on Element HT.  
Printing with Industrial materials like Mosaic Peek, PEKK, Ultem 9085 is only available on Element HT.



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