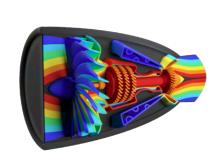


# **ELEMENT**Product Sheet

Reliable, Flexible and Intuitive 3D Printing

### ELEMENT Key Features



Large volume print s in up to 8 different materials



Modular print head & hardened steel nozzle for precision printing



Integrated touchscreen provides intuitive access to controls.



Print a wide variety of parts with tight tolerences.

- ✓ Starting at \$6,999 USD
- Controlled remotely to monitor and start prints from anywhere
- Removable build plate speeds up and simplifies bed changes
- Automated calibration with on board sensors further increases ease of use
- Automated filament changeover to maximize printer uptime
- Cloud based print management with Canvas software integration
- Same durable, all-metal chassis as Element HT

<sup>1.</sup> Subject to availability, shipping terms and conditions apply.

<sup>2.</sup> Standard single user license included with both Element and Element HT.

## **ELEMENT**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	12.5μm, 12.5μm, 0.4μm (X ,Y, Z)
Max Speed (Travel)	200mm/s
Build Speed	100mm/s
Build Plat e	Various coatings on spring steel removable build plate for easy rapid build plate changes
Heated Bed	120°C
Thermal Chamber	N/A <sub>1</sub>
Air Filtration	HEPA filter to remove up to 97.5% of UFP's, and activated carbon filter to reduce VOC's
External Fume Extraction	Integrated 50mm (2 inch) 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	WiFi, LAN, USB port
Compatible Models	Print Head 0.4 <sub>1</sub>
Nozzle	0.4mm hardened steel nozzle
Max Nozzle Temp	300°C <sub>1</sub>
Serviceability	Modular extruder, tool-less removable in < 60 seconds
Sensors	filament homing, filament motion, T <sub>environment</sub> , T <sub>hotend</sub> , T <sub>coldend</sub>

## **ELEMENT**

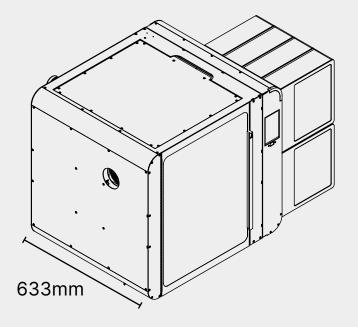
### Specification Sheet

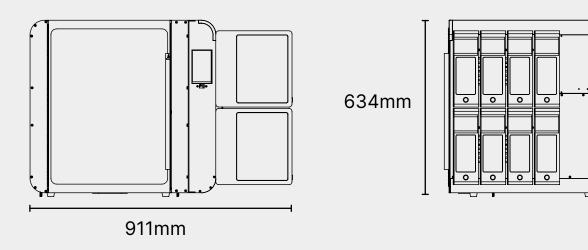
Filament Car tridges	Mosaic Material Pod V1
Filament Containment	Mosaic Material Pods are reusable, environmentally sealed dry boxes.
Filament Bays	8 receivers for Mosaic Material Pods (1 two-pack of Material Pods included with base Element package)
Filament Loading	Automated filament load, filament retraction
Filament Sensors	Filament homing, filament consumption meter, filament relative humidity, filament temperature
Filament Chango ver 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 350°C
Transition Container	Removable container with 38mm x 264mm x 253mm (X x Y x Z) of storage
Currently Supported Materials	Mosaic PLA, Mosaic PETG, Mosaic Origin, Mosaic Matrix, Mosaic Dissolve LT, Mosaic ABS, Mosaic Breakaway LT. Mosaic ESD. Mosaic Flex <sub>2</sub>
3rd Party Filament Support	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
Dimensions	911mm x 634mm x 613mm (X x Y x Z) (with 8 Material Pods attached)
Net Weight	26 Kg (57 lbs) (With 8 Material Pods, No Filament)
Gross Weight	50 kg (110 lbs) (With Packaging and Pallet)
Supplied Softwar e	Canvas. Free print preparation software with optional paid functionality.
Supported OS	MacOS, Windows, and Linux
Electrical Requirements	100-240V AC, 50/60Hz. Maximum current: 6.6A (115V), 2.7A (230V)
Certficiations	cTUVus, EN62368-1: 2014, EN55032: 2015, EMC, CE, RoHS
Warranty	12 months for Element <sub>3</sub>

<sup>1.</sup> The heated chamber, Print Head 0.4 HT and high temperature nozzle are only available on the HT Element configurations.
2. TPE (Thermoplastic Elastimer) as well as many TPU (thermoplastic eurothane) materials are not supported for printing in Element. Mosaic Flex is recommended.

<sup>3.</sup> See individual product warranty for full details.

## **ELEMENT**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.



Mosaic Manuf acturing Ltd. 110 Spadina Ave, Unit 600 Toronto, ON M5V 2K4 Canada

Sales@mosaicmfg.com

© 2022 All Rights Reserved.