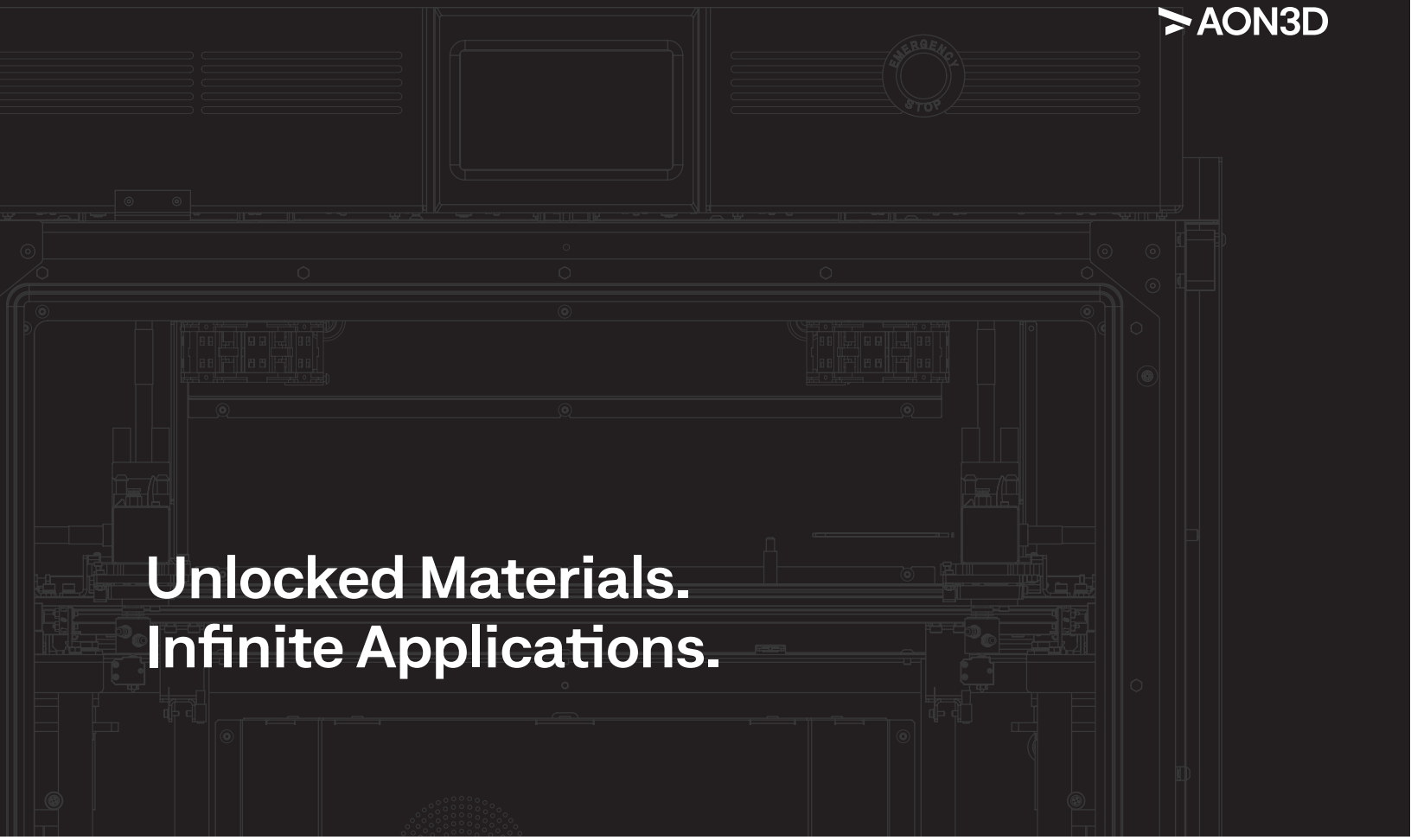
AON3D

AON M2+ 3D Printer



Unlocked Materials. Infinite Applications.

A high temperature industrial 3D printer for manufacturing full-scale, strong, high-performance parts. The AON M2+ unlocks additive manufacturing applications with ungated access to the world's most advanced materials, including PEEK, PEKK, and ULTEM™.

Create Large Functional Parts

Print full scale designs in the world's most advanced thermoplastics.

Achieve the Best Final Part Properties

Achieve high crystallinity parts, reduce part porosity, and more with precision thermals and advanced process controls.

Production-Ready Printing

Print more, reliably and repeatably, and reduce time-consuming post-processing.

AON M2+ 3D Printer
Specifications

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Technology	Material Extrusion (MEX) / Fused Filament Fabrication (FFF)
Build Volume	450 x 450 x 565 mm (x,y,z)
Extruders	Dual Independent
Chamber Temperature	135°C
Max. Extruder Temperature	500°C+
Bed Temperature	200°C+
Print Surface Options	CF PEEK, PEI, PC, PPSU, and more Reusable plates or disposable sheets.
Z Layer Height	≥ 0.05 mm to 1+ mm
Max Speed (Travel)	500 mm/s
Resolution (Positional Accuracy)	X/Y: 25 micron Z: 1 micron
Filament Size	1.75 mm
Standard Nozzle Size	0.6 mm
Available Nozzle Sizes	0.2, 0.25, 0.3, 0.4, 0.6, 0.8, 1.0, 1.2 mm
Recommended Slicer	Simplify3D
Connectivity	Ethernet, Wi-Fi (Can be disconnected upon request)
Control Interface	LCD touch screen, web browser interface
Supply Voltage	208-230 VAC, 50/60 Hz, 24.5A, Single phase
Installed Dimensions	1450 x 955 x 1150 mm (H x W x D)
Compatible Materials	ABS, ASA, Nylon (PA 6, 6/66, 12), PAEK, PC, PEEK, PEI (ULTEM™ 9085, 1010), PEKK, PETG, POM, PP, PPSU, PSU, PVDF, TPE, TPU Carbon fiber, glass fiber, Kevlar®, and ESD safe variants of the above. Various soluble and breakaway support materials.

Trusted By

AON M2+ 3D Printer
Features

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Open Materials Format
Print with nearly any 1.75 mm thermoplastic filament available on the open market, from any supplier.

Largest-in-Class Build Volume
Print full scale designs with a massive 450 x 450 x 565 mm (18 x 18 x 22 in) actively heated build volume.

Composite-Ready Extruders
Print up to 4x stronger parts with carbon fiber, Kevlar®, glass fiber, and ESD safe composites - no upgrades required.

Configurable Process Parameters
Reduce part porosity, increase crystallinity, speed up print times, explore new materials, and more with open access to process parameters.

Actively Heated Build Volume
A thermally optimized, precision-controlled 135°C build chamber provides consistent part properties and high isotropy across the build volume while maximizing in-situ crystallization.

Water-Cooled Tool Heads
Get high quality surface finish parts with clean transitions between materials. Superior hot end cooling improves retraction and prevents filament oozing, stripping, and clogs.

No Fuss First Layers
Automated high precision leveling with swappable build surfaces ensures uniform adhesion and bead- widths across the print bed. No rafts required.

Independent Dual Extruders
Access greater design freedom and minimize time consuming manual part cleanup with breakaway or soluble supports.

Access Sensor Data
Access real time sensor data to develop quality management processes which fit your application and industry requirements.