



# 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



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

### Trusted By



BLUE ORIGIN



xerox



infinite™  
material solutions



NRC · CNRC



Fermilab



# AON M2+ 3D Printer

## Features

> AON3D

### 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.

