



3D Print the World's Strongest Polymers



Fabricate high-strength parts from high-performance thermoplastics that withstand the most demanding operating conditions.

Material Expertise

Benefit from end-to-end applications and materials science support. Leverage the thousands of hours of experience among our team of materials engineers and scientists.

Affordable Innovation

Lower your total cost of ownership with the affordable open materials 3D printer that unlocks thousands of filaments.

Build Bigger & Make More

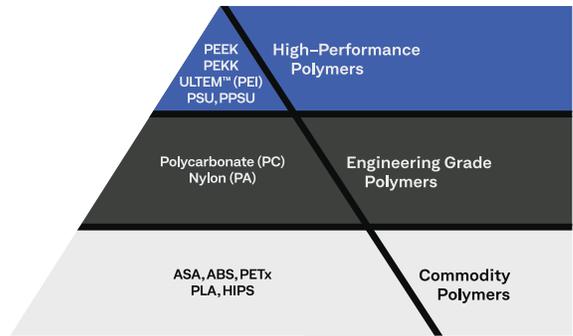
Expand your additive manufacturing options with a massive build envelope.

AON-M2 2020

High-Temperature Industrial 3D Printer

Climb the Thermoplastic Pyramid

The AON-M2 2020 unlocks a wide range of high-performance thermoplastics from leading filament brands.



Widely regarded as one of the strongest thermoplastics, PEEK offers a highly sought-after combination of strong mechanical properties, along with thermal and chemical resistances.

Common Applications:

- Lightweight metal-replacement parts
- Harsh operating conditions
- Wide operating temperature range

PEEK

Offering similar mechanical strength and operating temperature range to PEEK, PEKK is a high-performance option that provides exceptional printability, even for large geometries.

Common Applications:

- Compression-heavy applications
- High-strength, large geometry prints
- Temperature and chemical-resistant parts

PEKK

Also known as polyetherimide or PEI, ULTEM™ is an affordable option near the top of the high-performance plastic pyramid that maintains excellent strength-to-weight ratio as well as thermal resistance.

Common Applications:

- Weight-reduction
- FST-compliant applications
- Cost-effective, high-performance parts

ULTEM™

Polycarbonate is an engineering-grade plastic that offers exceptional strength when 3D printed, along with excellent resistance to most acids.

Common Applications:

- Parts that require bending, flexibility at room temperature
- Demanding applications requiring translucent filaments
- Biocompatible grades can withstand gamma or ETO sterilization

Polycarbonate

Many other materials: ABS, ASA, PETG, PSU, PPSU, TPC, TPU, Nylon (PA66, PA6, PA12), carbon fiber and glass-filled variants, various soluble and break-away support materials, and more.



High-Performance Materials
Designed to print aerospace-grade thermoplastics, including PEEK, PEKK, ULTEM™, polycarbonate and many more.



Heated Build Chamber & Bed
High build chamber and bed temperatures are crucial for ensuring first layer adhesion, preventing warping, maintaining dimensional accuracy, and improving interlayer bonding.



Large Build Envelope
The build envelope allows you to print bigger or run batch jobs of multiple parts at once.



Automated Calibration
A patent-pending mechanical probing system and adaptive mesh leveling ensures precision-calibrated prints across the build platform without the need for manual intervention.



Liquid Cooling Loop
The stepper motors and both hot ends are cooled with a liquid cooling loop, which extends component lifetimes and offers precision control over the filament softening profile.



Dual Extruders
Dual independent tool heads allow you to design parts using multiple materials, improves handling of soluble or break-away support materials, and allows printing with two different nozzle sizes.



Dedicated Expert Support
Expert materials and engineering support come with every machine, including training with each 3D printer delivery.



Easy Remote Management
Remotely manage your print queue and machine from any device on the same network, no software installation required.

Open Materials Commitment

Our open filament 3D printers are designed to unlock material options and opportunities for innovation. Rather than force customers into buying expensive OEM plastics that drive up the total cost of ownership, the AON-M2 2020 is designed to support choice. Our mission is to empower you to select from hundreds of filaments provided by leading suppliers and offer materials expertise to find the right fit for your application.

Printing

Technology	Fused Filament Fabrication (FFF)	
Build Envelope	Height	640 mm
	Standard Build Plate	450 x 450 mm
	High Temperature Build Plate	395 x 420 mm
Max Speed (travel)	500 mm/s	
Z Layer Height	≥ 0.05 mm to 0.5 mm	
Max Temperatures		
Hot End	470°C+	
Heated Bed	200°C+	
Build Chamber	135°C+	
Materials		
ABS, ASA, Nylon (PA66, PA6, PA12), PC, PEEK, PEKK, PETG, PSU, PPSU, TPC, TPU, ULTEM™		
Carbon fiber and glass-filled variants of the above		
Various soluble and break-away support materials		

Software & Connectivity

Slicer	Simplify3D included
Control Interface	LCD touch screen, web browser interface
Connectivity	WiFi, ethernet

Physical

Build Plate	Precision aluminum base, hot-swappable
	Multiple build surfaces available
Tool Heads	Dual, fully independent
Nozzle Sizes (mm)	Hardened Steel: 0.2, 0.25, 0.3, 0.4, 0.6, 0.8, 1.0, 1.2
	Default: 0.6
Filament Size (mm)	1.75
Resolution (theoretical)	XY: 25 µm Z: 1 µm

Electrical

Supply Voltage	208-230 VAC, 50/60Hz, single phase
Outlet	L6-20, European adapter available
Regulatory Compliance	CE
	Additional field certifications available upon request (CSA etc.)

Contact Us Today

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