

# Orion AM A-150 Series Industrial Additive Manufacturing System

Orion Additive Manufacturing GmbH provides industrial additive manufacturing solutions for high-performance polymers. It's proprietary thermal radiation heating process achieves 3D-printed parts with 100% density and injection molded strength. This enables the production of fully end-use parts with high strength, temperature resistant, and chemical resistant materials.



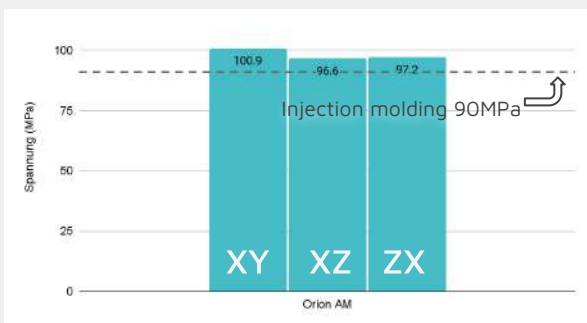
## Benefits

- Over 90% production time savings
- Up to 50% cost reduction
- Metal replacement 50% lighter than aluminum

## Technical Specifications

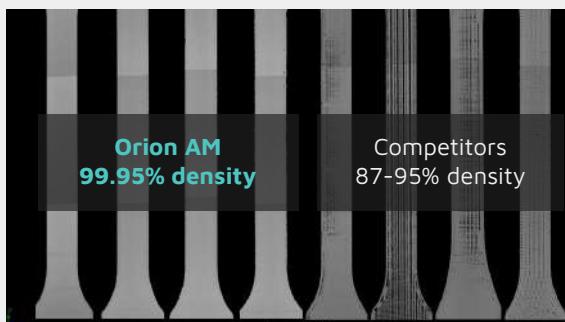
PRINTING	
Build Volume:	180 mm diameter x 150mm high
Nozzle diameter(s)	0.10mm - 0.40mm
Layer Height:	20µm - 400µm
Print Speed:	10mm/s - 400mm/s
Technology:	FFF - Thermal Radiation Fusion
Extruder Max Temp:	500°C
Chamber Max Temp:	320°C
Layer Max Temp:	400°C
Bed Max Temp:	320°C
Filament Diameter:	1.75mm
Materials:	PEEK, PAEK, PEKK, PPSU, PEI (ULTEM), PI, PC, PA
Connectivity:	WiFi, Ethernet, USB
HARDWARE	
Display:	7" capacitive touchscreen display
Overall Dimensions:	570mm x 550mm x 830mm
Weight:	50kg
Motion Kinematics:	Delta 3-Axis platform
Voltage:	380 - 440V AC - 16A
Power consumption:	5kW Peak / 1kW Nominal

## Tensile Strength compared to Injection Molding



Orion AM's process achieves a tensile strength **greater** than injection molding for PEEK

## High Density 3D-Printing Process



Orion AM's process achieves low porosity comparable to injection molding

## Application Areas



PEEK  
Cubesat



CF PEEK  
Battery Pack



Igus A350  
Automation



ULTEM (PEI)  
Spare Parts

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