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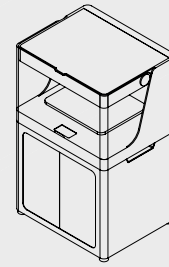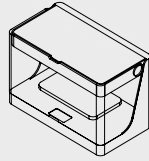# Composite Printer Comparison

Desktop Series

Reliable entry level machines
Accurate parts with good surface finish
Prints with standard materials

Industrial Series

Industrial grade machines with large build envelope
Superior accuracy, resolution, and speed
Full industrial material portfolio

	Onyx One	Onyx Pro	Mark Two	X3	X5	X7
Process						
Fused Filament Fabrication	x	x	x	x	x	x
Continuous Fiber Reinforcement		x	x		x	x
Base Materials						
Onyx (Micro carbon fiber filled nylon)	x	x	x	x	x	x
Onyx ESD				x	x	x
Onyx FR				x	x	x
Nylon			x			x
Continuous Fibers						
Continuous Fiberglass		x	x		x	x
Continuous Carbon Fiber			x			x
Continuous HSHT Fiberglass			x			x
Continuous Kevlar®			x			x
Advanced Features						
Out-of-Plastic Detection	x	x	x	x	x	x
Out-of-Fiber Detection					x	x
Fiber Jam Detection		x	x		x	x
Adaptive Bed Leveling				x	x	x
Turbo Print (up to 4x faster)						x
In-Process Laser Inspection*						x
Hardware						
Build Volume	320 x 132 x 154 mm (12.6 x 5.2 x 6.0 in)			330 x 270 x 200 mm (13.0 x 10.6 x 7.9 in) (2.7x larger)		
Bed Flatness	Flat to within 160 µm; Kinematic coupling			Flat to within 80 µm; Kinematic coupling		
Best Z Resolution	100 µm			50 µm		
Supports	Same material breakaway supports					
Infill	Closed-cell infill; Multiple geometries available					
Specifications						
Storage	Cloud included; Offline available					
Security	Two-factor authentication; Org admin access; Single sign-on					
Power	100-240 VAC, 150W (2A peak)					
Weight	16 kg (35 lb)			48 kg (106 lb)		
Footprint	584 x 330 x 355 mm (23 x 13 x 14 in)			584 x 483 x 914 mm (23 x 19 x 36 in)		

Laser Accuracy: z=1 µm, XY=25 µm