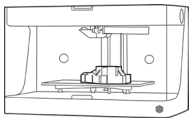
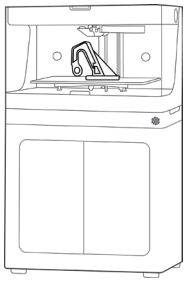
Markforged Composite Printer Comparison

Markforged



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							Material Variety
Fused Filament Fabrication	x	x	x	x	x	x	
Continuous Fiber Reinforcement		x	x		x	x	
Base Materials							
Onyx (Nylon w. Chopped Carbon Fiber)	x	x	x	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	
Features							Automation + Usability
Laser Bed Leveling				x	x	x	
Laser Active Print Calibration				x	x	x	
Fiber Jam Detection		x	x		x	x	
Out-of-Plastic Detection	x	x	x	x	x	x	
Out-of-Fiber Detection					x	x	
Turbo Print (up to 4x faster)						x	
Live Build Inspection*						x	
Hardware							Part Quality
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 peel away; Turbo supports available (supports print 2x faster)						
Infill	Closed-cell infill; Multiple geometries available						
Specifications							+
Storage	Cloud or Local included; On-Premise 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)			

*accuracy of Z = 1 µm, XY = 25 µm