ProJet® 5500X

Multi-Material 3D Printer

3DSYSTEMS®

Large, high-quality multi-material parts in a single build.

3D Systems' ProJet® 5500X uses proven MultiJet Printing (MJP) technology to build the highest quality, most accurate and toughest multi-material parts available. Print finely detailed parts with varying degrees of flexibility, material transparency and color (black, white, or select shades of grey), all from one 3D printer. The ProJet 5500X features the fastest print speeds, a large build volume, and the most convenient print-to-part process, so it's easier to create parts with engineered plastic or rubber properties.

Using the new VisiJet® Composite materials, the ProJet 5500X offers hundreds of material variations in a single print to precisely match your specifications. With so many options, the ProJet 5500X is perfect for a variety of applications, including overmolded parts, multi-material assemblies, rubber-like components, long-lasting living hinges and high-temperature testing.

MANUFACTURING*THE*FUTURE

ProJet® 5500X

Multi-Material 3D Printer

ProJet 5500X

Net Build Volume (xyz)	
HD Mode (High Definition)	21 x 15 x 11.8 in (533 x 381 x 300 mm)
UHD Mode (Ultra High Definition)	21 x 15 x 11.8 in (533 x 381 x 300 mm)
Resolution (xyz)	
HD Mode	375 x 375 x 790 DPI; 32µ (0.0012 in) layers
UHD Mode	750 x 750 x 890 DPI; 29µ (0.0011 in) layers
Build Materials	
VisiJet® CR-CL	Rigid Plastic Material - Clear
VisiJet® CR-WT	Rigid Plastic Material - White
VisiJet® CF-BK	Rubber-like Material - Black
Support Material	VisiJet® S500 Support Material
Material Packaging	Build materials in clean 2.0 kg cartridges and support material in clean 1.75 kg cartridges (printer holds 4 build and 4 support cartridges with auto-switching)
Electrical	100 VAC, 50/60 Hz, single-phase, 15 Amps 115 VAC, 50/60 Hz, single-phase, 15 Amps 240 VAC, 50/60 Hz, single-phase, 8 Amps
Dimensions (WxDxH)	
3D Printer Crated	80 x 48 x 78 in (2032 x 1219 x 1981 mm)
3D Printer Uncrated	67 x 35.4 x 65 in (1700 x 900 x 1650 mm)
Weight	
3D Printer Crated	2550 lbs (1157 kg)
3D Printer Uncrated	2060 lbs (934 kg)
ProJet Accelerator Software	Easy build job set-up, submission and job queue management; Automatic part placement and build optimization tools; Part stacking and nesting capability; Extensive part editing tools; Automatic support generation; Job statistics reporting tools
Network Compatibility	Network ready with 10/100 Ethernet interface
Client Hardware Recommendation	1.7 GHz or better with 4GB RAM OpenGL 1.1 Compatible 1280x1024 resolution or better
Client Operating System	Windows® 7, Windows® 8 or Windows® 8.1
Input Data File Formats Supported	STL, CTL
Operating Temperature Range	18 - 28 °C (64-82 °F)
Noise	< 65 dBa estimated (at medium fan setting)
Certification	CE

Multi-material composite printing in one part, at one time

- **Have more material options** – Print the precise variety of engineered plastic or rubber you need, no assembly required.

- **Make quality, exact parts** – Produce the most detailed, most accurate multi-material parts with superior strength, stability and temperature performance.

- **Fit your part size requirements** – High throughput to quickly print a large variety of small or big precision parts.

- **Increase productivity** – The ProJet 5500X features fast build speeds, ease of use, and hands-free post processing, all at lower cost of ownership.

- **Maximize spending** – By using less material than similar printers, and a 5-year guarantee on the print head, the ProJet 5500X offers a lower TCO.

- **Vary tone and clearness** – Print stunning clear parts as well as parts in white, black and select shades of grey.

Features:

- Print in multiple materials in a single build
- Produces strong, finely detailed, precise parts
- Easy post processing
- Larger net build volume for bigger parts or more parts per build
- Build speeds up to two times faster than other printers in class

VisiJet® Build Materials	Condition	VisiJet® CR-CL	VisiJet® CR-WT	VisiJet® CF-BK
Description		Clear	White	Black
		Polycarbonate-like	ABS-like	Rubber-like
Density @ 80 °C (liquid)	ASTM D 4164	1.04 g/cm³	1.04 g/cm³	1.04 g/cm³
Tensile Strength	ASTM D 638	58 MPa	56 MPa	2.2 MPa
Tensile Modulus	ASTM D 638	2442 MPa	2414 MPa	0.7 MPa
Elongation at Break	ASTM D 638	13 %	8.1 %	293%
Flexural Strength	ASTM D 790	65 MPa	66 MPa	n/a
Shore D	Scale D	83	83	n/a

MultiJet Printing (MJP)

MultiJet 3D Printers (MJP) print thin layers of UV-curable liquid plastic onto a flat platform, using wax to create supports that brace the part during production. UV lamps cure each layer, and the build platform lowers for the next layer. This process continues layer by layer until the part is complete.