# ProJet® 3500 SD & HD



**Professional 3D Printers** 

# Easily create high-definition, precise plastic functional prototypes and end-use parts

The ProJet® 3500 series of plastic 3D printers are ideal for creating durable, high-definition functional prototypes, rapid tooling such as injection molds and casting patterns, and end-use parts right in your office. This versatile range of workhorse printers is easy to use, with fast print times and easy post-processing. Parts made on ProJet 3500s are beautifully precise, with sharp edges and true-to-CAD fidelity. Efficient material use, low-maintenance operation and a five-year print head warranty means you can print with confidence and keep costs down.

Using 3D Systems' MultiJet Printing (MJP) technology and VisiJet® M3 performance engineered materials, ProJet 3500s print in hard ABS-like plastics in a variety of colors, tensile strengths and other properties to match your application—including clear and biocompatible parts. You can even print sacrificial patterns in precision-castable plastics



www.3dsystems.com

**MANUFACTURING** THE FUTURE



## Productive, high-capacity ProJet® 3500 professional printers



The widest applications range: concept models, verification models, pre-production, digital manufacturing

### Easy connectivity and high productivity with high resolution and accuracy

#### ProJet 3510 SD

The affordable ProJet 3510 SD prints high-quality, durable plastic parts for engineering and mechanical design applications, including functional testing, form and fit verification, rapid prototyping, design communication, rapid tooling and more. This office-friendly 3D printer delivers exceptional parts on demand.

AFFORDABILITY • QUALITY • EASE-OF-USE

#### ProJet 3510 HDPlus

The ProJet 3510 HDPlus offers the flexibility to choose between three resolution modes to print concept models, verification prototypes and patterns for pre-production and digital manufacturing. Just connect to the printer to create extremely fine-featured plastic parts with greater output.

RESOLUTION Plus • PARTS SIZE Plus • FLEXIBILITY Plus

#### ProJet 3510 HD

The ProJet 3510 HD prints precision, durable plastic parts ideal for functional testing, design communication, rapid manufacturing, rapid tooling and more. With a choice in materials and selectable print resolutions, this office-friendly, easy-to-use 3D printer is packed with features that help you maximize your return on investment (ROI).

HIGH DEFINITION • PRECISION • PRODUCTIVITY

#### ProJet 3500 HDMax

The high-capacity ProJet 3500 HD*Max* offers greater productivity, especially with the high-speed printing mode, and larger high-definition prints for the production of functional plastic parts. Users also benefit from increased throughput, part size, feature detail and quality only possible with ProJet printers.

Max THROUGHPUT • Max DEFINITION • Max VOLUME

#### VisiJet® M3 Materials for ProJet SD & HD Printers

The VisiJet line of plastic materials offers numerous capabilities to meet a variety of commercial applications. 3D Systems' ProJet 3500 3D printers use VisiJet M3 materials to build accurate, high-definition models and prototypes for proof of concept, functional testing, master patterns for moldmaking, and direct investment casting. Vertical markets for the ProJet 3500 line include transportation, energy, consumer products, recreation, healthcare and education. Toughness, high temperature resistance, durability, stability, watertightness, biocompatibility and castability are a few of the key attributes you will find within the VisiJet M3 materials line. Parts can be drilled, glued, painted, plated, etc. Support material offers easy, non-hazardous post-processing and preserves delicate features.

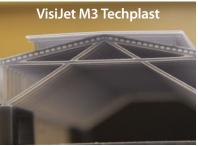
Properties	Condition	VisiJet M3-X	VisiJet M3 Black	VisiJet M3 Crystal	VisiJet M3 Proplast	VisiJet M3 Navy	VisiJet M3 Techplast	VisiJet M3 Procast	VisiJet® S300
Composition					UV Curable Pla	stic			Wax Support Material
Color		White	Black	Natural	Natural	Blue	Gray	Dark Blue	White
Bottle Quantity		2 kg	2 kg	2 kg	2 kg	2 kg	2 kg	2 kg	2 kg
Density @ 80 °C (liquid)	ASTM D4164	1.04 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>	1.02 g/cm <sup>3</sup>	N/A
Tensile Strength	ASTM D638	49 MPa	35.2 MPa	42.4 MPa	26.2 MPa	20.5 MPa	22.1 MPa	32 MPa	N/A
Tensile Modulus	ASTM D638	2168 MPa	1594 MPa	1463 MPa	1108 MPa	735 MPa	866 MPa	1724 MPa	N/A
Elongation at Break	ASTM D638	8.3 %	19.7 %	6.83 %	8.97 %	8 %	6.1 %	12.3 %	N/A
Flexural Strength	ASTM D790	65 MPa	44.5 MPa	49 MPa	26.6 MPa	28.1 MPa	28.1 MPa	45 MPa	N/A
Heat Distortion Temperature @ 0.45MPa	ASTM D648	88 °C	57 °C	56 °C	46 °C	46 °C	46 °C	N/A	N/A
Ash Content		N/A	N/A	N/A	0.01 %	0.01 %	0.01 %	0.01 %	N/A
Melting Point		N/A	N/A	N/A	N/A	N/A	N/A	N/A	60 °C
Softening Point		N/A	N/A	N/A	N/A	N/A	N/A	N/A	40 °C
USP Class VI Certified*		No	No	Yes	No	No	No	No	N/A
ProJet Compatibility		SD, HD	SD, HD	SD, HD	SD, HD	SD, HD	SD, HD	HD	SD, HD
Description		ABS-like Plastic	High strength & flexibility plastic	Tough Plastic, Translucent	Plastic, Natural	Plastic, Blue	Plastic, Gray	Castable Plastic	Non-toxic wax ma- terial for hands-free melt-away supports

DISCLAIMER: It is the responsibility of each customer to determine that its use of any VisiJet\* material is safe, lawful and technically suitable to the customer's intended applications. The values presented here are for reference only and may vary. Customers should conduct their own testing to ensure suitability for their intended application.















# ProJet® 3500 SD & HD



## **Professional 3D Printers**

Extend Innovation. Extend Production. Extend Choices.









#### ProJet 3510 SD

ProJet 3510 HD

**ProJet 3510 HDPlus** 

ProJet 3500 HDMax

Printing Modes	HD - High Definition	HD - High Definition	HD - High Definition	HD - High Definition				
riniting wodes		-	-	HS - High Speed				
	-	UHD - Ultra High Definition -	UHD - Ultra High Definition XHD - Xtreme High Definition	UHD - Ultra High Definition XHD - Xtreme High Definition				
Net Build Volume (xyz)								
HD Mode HS Mode	11.75 x 7.3 x 8" (298 x 185 x 203 mm)	11.75 x 7.3 x 8" (298 x 185 x 203 mm)	11.75 x 7.3 x 8" (298 x 185 x 203 mm)	11.75 x 7.3 x 8" (298 x 185 x 203 mm) 11.75 x 7.3 x 8" (298 x 185 x 203 mm) 11.75 x 7.3 x 8" (298 x 185 x 203 mm) 11.75 x 7.3 x 8" (298 x 185 x 203 mm)				
UHD Mode XHD Mode	:	5 x 7 x 6" (127 x 178 x 152 mm) -	8 x 7 x 6" (203 x 178 x 152 mm) 8 x 7 x 6" (203 x 178 x 152 mm)					
Resolution HD Mode HS Mode	375 x 375 x 790 DPI (xyz); 32μ layers	375 x 375 x 790 DPI (xyz); 32μ layers	375 x 375 x 790 DPI (xyz); 32μ layers	375 x 375 x 790 DPI (xyz); 32μ layers 375 x 375 x 790 DPI (xyz); 32μ layers 750 x 750 x 890 DPI (xyz); 29μ layers 750 x 750 x 1600 DPI (xyz); 16μ layers				
UHD Mode XHD Mode	:	750 x 750 x 890 DPI (xyz); 29μ layers -	750 x 750 x 890 DPI (xyz); 29µ layers 750 x 750 x 1600 DPI (xyz); 16µ layers					
Accuracy (typical)	0.001-0.002 inch per inch (0.025-0.05 mm per 25.4 mm) of part dimension.  Accuracy may vary depending on build parameters, part geometry and size, part orientation, and post-processing.							
E-mail Notice Capability	Yes	Yes	Yes	Yes				
Tablet/Smartphone connectivity	Yes	Yes	Yes	Yes				
5-Year Printhead Warranty	Optional	Standard	Standard	Standard				
Build Materials	VisiJet M3-X VisiJet M3 Black VisiJet M3 Crystal VisiJet M3 Proplast VisiJet M3 Navy VisiJet M3 Techplast	VisiJet M3-X VisiJet M3 Black VisiJet M3 Crystal VisiJet M3 Proplast VisiJet M3 Navy VisiJet M3 Techplast VisiJet M3 Procast	VisiJet M3-X VisiJet M3 Black VisiJet M3 Crystal VisiJet M3 Proplast VisiJet M3 Navy VisiJet M3 Techplast VisiJet M3 Procast	VisiJet M3-X VisiJet M3 Black VisiJet M3 Crystal VisiJet M3 Proplast VisiJet M3 Navy VisiJet M3 Techplast VisiJet M3 Procast				
Support Material	VisiJet S300	VisiJet S300	VisiJet S300	VisiJet S300				
Material Packaging Build and support materials	In clean 4.41 lbs (2 kg) bottles (machine holds up to 2 with auto-switching)							
Electrical	100-127 VAC, 50/60 Hz, single-phase, 15A; 200-240* VAC, 50 Hz, single-phase, 10A							
Dimensions (WxDxH) 3D Printer Crated 3D Printer Uncrated	32.5 x 56.25 x 68.5 in (826 x 1429 x 1740 mm) 29.5 x 47 x 59.5 in (749 x 1194 x 1511 mm)	32.5 x 56.25 x 68.5 in (826 x 1429 x 1740 mm) 29.5 x 47 x 59.5 in (749 x 1194 x 1511 mm)	32.5 x 56.25 x 68.5 in (826 x 1429 x 1740 mm) 29.5 x 47 x 59.5 in (749 x 1194 x 1511 mm)	32.5 x 56.25 x 68.5 in (826 x 1429 x 1740 mm) 29.5 x 47 x 59.5 in (749 x 1194 x 1511 mm)				
Weight 3D Printer Crated 3D Printer Uncrated	955 lbs, 434 kg 711 lbs, 323 kg	955 lbs, 434 kg 711 lbs, 323 kg	955 lbs, 434 kg 711 lbs, 323 kg	955 lbs, 434 kg 711 lbs, 323 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							
Print3D App	Remote monitoring and control from tablet, computers and smartphones							
Network Compatibility	Network ready with 10/100 Ethernet interface							
Client Hardware Recommendation	1.8 GHz with 1GB RAM (OpenGL support 64 mb video RAM) or higher							
Client Operating System	Windows XP Professional, Windows Vista, Windows 7							
Input Data File Formats Supported	STL and SLC	STL and SLC	STL and SLC	STL and SLC				
Operating Temperature Range	64-82 °F (18-28 °C)	64-82 °F (18-28 °C)	64-82 °F (18-28 °C)	64-82 °F (18-28 °C)				
Noise	< 65 dBa estimated (at medium fan setting)							
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<sup>\*</sup> Requires small external transformer supplied by 3D Systems in the provided country kit.



Certifications



Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.