

# ProJet® 3500 CP & CPX

Professional 3D Printers Series

## Precision Productivity Direct Casting











### Most productive, highest capacity ProJet® 3500 Professional Printers Series

#### ProJet® 3510 CP

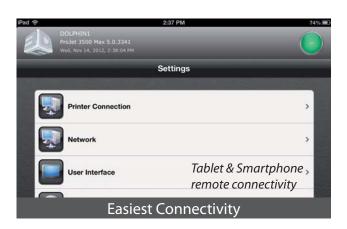
The ProJet® 3510 CP is transforming the use of 3D printing for the rapid production of direct investment casting patterns for virtually any geometry. This 3D printer produces 100% RealWax™ superior quality patterns, that are ideal for general foundry casting applications such as medium-sized to large mechanical parts for engines, pneumatics, aerospace, energy, custom manufacturing equipment, restorations and other heavy equipment.

HIGH QUALITY • PRODUCTIVITY • RAPID FOUNDRY

#### ProJet® 3510 CPXPlus

The ProJet® 3510 CPXPlus offers the flexibility to choose between 4 resolution modes to mass produce 100% RealWax™ casting patterns, supporting unlimited applications capabilities. Casting yields mirror standard casting waxes. Just connect to the printer to produce extremely finely featured patterns with a greater output.

PATTERNS Plus • RESOLUTION Plus • FLEXIBILITY Plus





#### ProJet® 3510 CPX

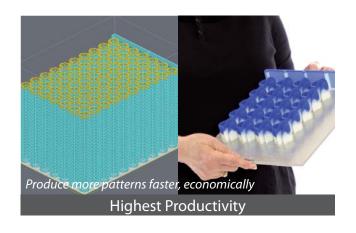
Mass produce 100% wax micro-detail patterns with smooth surface quality, extreme fine detail and exceptional precision to enable rapid workflow, mass customisation and improved casting room efficiencies and productivity. RealWax™ ProJet® CPX patterns are ideal for casting jewellery, apparel, microdetail medical devices, medical implants, electrical components, figurines, replicas, collectables and more.

PRECISION • HIGH DEFINITION • INVESTMENT CASTING

#### Pro let<sup>®</sup> 3500 CPXMax

The high capacity ProJet® 3500 CPXMax offers larger high definition prints and greater productivity. The RealWax™ pattern performance rivals injected wax patterns in existing lost-wax casting processes and equipment. Benefit of the increased throughput and part size with feature detail and surface quality only possible with ProJet® printers.

Max THROUGHPUT • Max DEFINITION • Max VOLUME





#### VisiJet<sup>®</sup> Materials for ProJet<sup>®</sup> CP & CPX Printers

The VisiJet® line of RealWax™ materials offers numerous capabilities to meet a variety of casting applications. Using the Multi-Jet-Modelling (MJM) Technology, 3D Systems' ProJet® 3D Printers use VisiJet® Materials to build accurate, high-definition wax patterns for direct investment casting, for transportation, energy, consumer products, recreation, healthcare, education and other vertical markets.

Properties	Condition	VisiJet® Prowax	VisiJet® Hi-Cast	VisiJet® S400
Composition		100% Wax	100% Wax	Wax Support Material
Colour		Light Blue	Navy Blue	White
Bottle Quantity (kg)		1.75	1.75	1.75
Density @ 80 °C (liquid), g/cm <sup>3</sup>	ASTM D4164	0.81	0.81	0.87
Melting Point, °C		70	70	55-65
Softening Point, °C		52-62	52-62	N/A
Volumetric Shrinkage, from 40 °C to RT, %		2.24	2.24	N/A
Linear Shrinkage, from 40 °C to RT, %		0.75	0.75	N/A
ProJet Compatibility		СР	СРХ	CP, CPX
Description		General Foundry Casting	High Resolution Micro-Casting	Non-toxic wax support material with dissolvable hands-free removal



VisiJet® Hi-Cast

#### VISIJET® REALWAX™ MATERIALS BENEFITS

- Address a wide range of casting applications
- Produce high definition parts with crisp details and smooth surface finish
- Castable in a wide range of casting processes
- Support material offers easy post processing and preserves delicate features

VisiJet® Wax Materials for ProJet® CP & CPX

#### ProJet® 3500 CP & CPX **Professional 3D Printers Series**









(749 x 1194 x 1511 mm)

CE

(749 x 1194 x 1511 mm)

CE

(749 x 1194 x 1511 mm)

CE

	ProJet® 3510 CP	ProJet® 3510 CPX	ProJet® 3510 CPX <i>Plus</i>	ProJet <sup>®</sup> 3500 CPX <i>Max</i>			
Printing Modes	HD - High Definition HDHiQ - High Definition/High Quality - -	HD - High Definition HDHiQ - High Definition/High Quality - XHD - Xtreme High Definition	HD - High Definition HDHiQ - High Definition/High Quality UHD - Ultra High Definition XHD - Xtreme High Definition	HD - High Definition HDHiQ - High Definition/High Quality UHD - Ultra High Definition XHD - Xtreme High Definition			
Net Build Volume (xyz) HD Mode HDHiQ Mode UHD Mode XHD 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) - 5 x 7 x 6" (127 x 178 x 152 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) 8 x 7 x 6" (203 x 178 x 152 mm) 8 x 7 x 6" (203 x 178 x 152 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)			
Resolution HD Mode HDHiQ Mode UHD Mode XHD Mode	375 x 375 x 775 DPI (xyz); 33μ layers 375 x 375 x 775 DPI (xyz); 33μ layers - -	375 x 375 x 775 DPI (xyz); 33μ layers 375 x 375 x 775 DPI (xyz); 33μ layers - 694 x 750 x 1600 DPI (xyz); 16μ layers	375 x 375 x 775 DPI (xyz); 33μ layers 375 x 375 x 775 DPI (xyz); 33μ layers 694 x 750 x 1300 DPI (xyz); 20μ layers 694 x 750 x 1600 DPI (xyz); 16μ layers	375 x 375 x 775 DPI (xyz); 33μ layers 375 x 375 x 775 DPI (xyz); 33μ layers 694 x 750 x 1300 DPI (xyz); 20μ layers 694 x 750 x 1600 DPI (xyz); 16μ layers			
Accuracy (typical)	0.001-0.002 inch (0.025-0.05 mm) per inch 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	Standard	Standard	Standard	Standard			
Build Materials	VisiJet® Prowax	VisiJet® Hi-Cast	VisiJet® Hi-Cast	VisiJet® Hi-Cast			
Support Material	VisiJet® S400	VisiJet® S400	VisiJet® S400	VisiJet® S400			
Material Packaging Build materials Support materials	In clean 3.86 lbs (1.75 kg) bottles (machine holds up to 2 with auto-switching) In clean 3.86 lbs (1.75 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	32.5 x 56.25 x 68.5 " (826 x 1429 x 1740 mm)	32.5 x 56.25 x 68.5 " (826 x 1429 x 1740 mm)	32.5 x 56.25 x 68.5 " (826 x 1429 x 1740 mm)	32.5 x 56.25 x 68.5 " (826 x 1429 x 1740 mm)			
3D Printer Uncrated	29.5 x 47 x 59.5 "	29.5 x 47 x 59.5 "	29.5 x 47 x 59.5 "	29.5 x 47 x 59.5 "			

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 optimisation tools; Part stacking and nesting capability (except ProJet CP); Extensive part editing tools; Automatic support generation; Job statistics reporting tools					

(749 x 1194 x 1511 mm)

Print3D App Remote monitoring and control from tablet, computers and smartphones Network ready with 10/100 Ethernet interface **Network Compatibility** Client Hardware Recommendation 1.8 GHz with 1GB RAM (OpenGL support 64 mb video RAM) or higher Windows XP Professional, Windows Vista, Windows 7 **Client Operating System** Input Data File Formats Supported STL STL and SLC STL and SLC STL and SLC 64-82 °F (18-28 °C) 64-82 °F (18-28 °C) 64-82 °F (18-28 °C) 64-82 °F (18-28 °C) **Operating Temperature Range** Noise < 65 dBa estimated (at medium fan setting)

CE



Certifications

<sup>\*</sup> Requires small external transformer supplied by 3D Systems in the provided country kit.