

## ProJet<sup>®</sup> 3500 SD & HD Professional 3D Printers Series







# Hard **Plastic** parts







#### Most productive, highest capacity ProJet<sup>®</sup> 3500 Professional Printers Series

#### ProJet<sup>®</sup> 3510 SD

The affordable ProJet<sup>®</sup> 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<sup>®</sup> 3510 HDPlus

The ProJet<sup>®</sup> 3510 HDPlus offers the flexibility to choose between 3 resolution modes to print concept models, verification prototypes and patterns for pre-production and digital manufacturing. Just connect to the printer to print extremely finely featured plastic parts with a greater output.

RESOLUTION Plus • PARTS SIZE Plus • FLEXIBILITY Plus





#### ProJet<sup>®</sup> 3510 HD

The ProJet<sup>®</sup> 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<sup>®</sup> 3500 HDMax

The high capacity ProJet<sup>®</sup> 3500 HD*Max* offers greater productivity, including with the High Speed printing mode, and larger high definition prints, for the production of functional plastic parts for product design and manufacturing applications. Benefit of the increased throughput and part size with feature detail and quality only possible with ProJet printers.

Max THROUGHPUT • Max DEFINITION • Max VOLUME





Widest Applications Range

### VisiJet<sup>®</sup> Materials for ProJet<sup>®</sup> SD & HD Printers

The VisiJet<sup>®</sup> line of plastic materials offers numerous capabilities to meet a variety of commercial applications. Using the Multi-Jet-Modeling (MJM) Technology, 3D Systems' ProJet<sup>®</sup> 3500 3D Printers use VisiJet<sup>®</sup> Materials to build accurate, high-definition models and prototypes for proof of concept, functional testing, master patterns for moldmaking, direct investment casting, for transportation, energy, consumer products, recreation, healthcare, education and other vertical markets. Toughness, high temperature resistance, durability, stability, watertightness, biocompatibility, castability are a few of the key attributs you will find within the VisiJet 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® X          | VisiJet®<br>Crystal              | VisiJet®<br>Proplast | VisiJet®<br>Navy | VisiJet®<br>Techplast | VisiJet®<br>Procast | VisiJet®<br>S300   |
|---|----------------------------|---------------------|----------------------------------|----------------------|------------------|-----------------------|---------------------|--|
| Composition                                 | UV Curable Acrylic Plastic |                     |                                  |                      |                  |                       |                     | Wax Support Material   |
| Color                                       |                            | White               | Natural                          | Natural              | Blue             | Gray                  | Dark Blue           | White  |
| Bottle Quantity (kg)                        |                            | 2                   | 2                                | 2                    | 2                | 2                     | 2                   | 2  |
| Density @ 80 °C (liquid), g/cm <sup>3</sup> | ASTM D4164                 | 1.04                | 1.02                             | 1.02                 | 1.02             | 1.02                  | 1.02                | N/A  |
| Tensile Strength, MPa                       | ASTM D638                  | 49                  | 42.4                             | 26.2                 | 20.5             | 22.1                  | 32                  | N/A  |
| Tensile Modulus, MPa                        | ASTM D638                  | 2168                | 1463                             | 1108                 | 735              | 866                   | 1724                | N/A  |
| Elongation at Break, %                      | ASTM D638                  | 8.3                 | 6.83                             | 8.97                 | 8                | 6.1                   | 12.3                | N/A  |
| Flexural Strength, MPa                      | ASTM D638                  | 65                  | 49                               | 26.6                 | 28.1             | 28.1                  | 45                  | N/A  |
| Heat Distortion Temperature, °C             | D648 @ 0.45MPa             | 88                  | 56                               | 46                   | 46               | 46                    | N/A                 | N/A  |
| Ash Content, %                              |                            | N/A                 | N/A                              | 0.01                 | 0.01             | 0.01                  | 0.01                | N/A  |
| Melting Point, °C                           |                            | N/A                 | N/A                              | N/A                  | N/A              | N/A                   | N/A                 | 60   |
| Softening Point, °C                         |                            | N/A                 | N/A                              | N/A                  | N/A              | N/A                   | N/A                 | 40   |
| USP Class VI Certified*                     |                            | No                  | Yes                              | No                   | No               | No                    | No                  | N/A  |
| ProJet Compatibility                        |                            | SD, HD              | SD, HD                           | SD, HD               | SD, HD           | SD, HD                | HD                  | SD, HD   |
| Description                                 |                            | ABS-like<br>Plastic | Tough<br>Plastic,<br>Translucent | Plastic,<br>Natural  | Plastic,<br>Blue | Plastic,<br>Gray      | Castable<br>Plastic | Non-toxic wax material<br>for hands-free<br>melt-away supports |

\* DISCLAIMER: It is the responsibility of each customer to determine that its use of any Class VI certified VisiJet<sup>®</sup> material is safe, lawful and technically suitable to the customer's intended applications. Customers should conduct their own testing to ensure that this is the case.



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#### ProJet<sup>®</sup> 3510 SD ProJet<sup>®</sup> 3510 HD ProJet<sup>®</sup> 3510 HDPlus ProJet<sup>®</sup> 3500 HDMax Printing Modes HD - High Definition HD - High Definition HD - High Definition HD - High Definition HS - High Speed UHD - Ultra High Definition UHD - Ultra High Definition UHD - Ultra High Definition XHD - Xtreme High Definition XHD - Xtreme High Definition Net Build Volume (xyz) 11.75 x 7.3 x 8" (298 x 185 x 203 mm) HD 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) HS Mode 11.75 x 7.3 x 8" (298 x 185 x 203 mm) 5 x 7 x 6" (127 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) UHD Mode XHD Mode 8 x 7 x 6" (203 x 178 x 152 mm) 11.75 x 7.3 x 8" (298 x 185 x 203 mm) Resolution 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 HD Mode 375 x 375 x 790 DPI (xyz); 32µ layers HS Mode 375 x 375 x 790 DPI (xyz); 32µ layers UHD Mode 750 x 750 x 890 DPI (xyz); 29µ layers 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 XHD Mode 750 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 Optional Standard Standard Standard **Build Materials** VisiJet® X VisiJet® X VisiJet® X VisiJet® X VisiJet® Crystal VisiJet® Crystal VisiJet<sup>®</sup> Crystal VisiJet<sup>®</sup> Crystal VisiJet® Proplast VisiJet® Proplast VisiJet<sup>®</sup> Proplast VisiJet<sup>®</sup> Proplast VisiJet® Navy VisiJet® Navy VisiJet® Navy VisiJet® Navy VisiJet<sup>®</sup> Techplast VisiJet® Techplast VisiJet® Techplast VisiJet<sup>®</sup> Techplast VisiJet<sup>®</sup> Procast VisiJet® Procast VisiJet<sup>®</sup> Procast Support Material VisiJet<sup>®</sup> 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) 100-127 VAC, 50/60 Hz, single-phase, 15A; 200-240\* VAC, 50 Hz, single-phase, 10A Flectrical Dimensions (WxDxH) **3D Printer Crated** 32.5 x 56.25 x 68.5 " 32.5 x 56.25 x 68.5 " 32.5 x 56.25 x 68.5 " 32.5 x 56.25 x 68.5" (826 x 1429 x 1740 mm) 3D Printer Uncrated 29.5 x 47 x 59.5 " (749 x 1194 x 1511 mm) Weight 955 lbs, 434 kg 955 lbs, 434 kg 955 lbs, 434 kg **3D Printer Crated** 955 lbs, 434 ka 3D Printer Uncrated 711 lbs, 323 kg 711 lbs, 323 kg 711 lbs, 323 kg 711 lbs, 323 kg ProJet<sup>®</sup> 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) Certifications CE CE CE CE

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



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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.

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