

# FabPro<sup>™</sup> 1000 Entry-Level Industrial 3D Printer



**FabPro 1000**

<b>Build Volume (xyz)</b>	125 x 70 x 120 mm (4.92 x 2.76 x 4.72 in)*
<b>Pixel Pitch</b>	65 microns (.0025 in) (390.8 effective DPI)
<b>Wavelength</b>	405 nm
<b>Build Materials</b>	FabPro Tough BLK, FabPro Proto GRY, FabPro JewelCast GRN
<b>Operating Environment</b> Temperature Humidity (RH)	18 - 28 °C (64-82 °F) 30 - 70 %
<b>Electrical</b> Input Output	100-240v, AC, 50/60Hz 24V DC, 3.75 A; with power supply
<b>Dimensions (WxDxH)</b> 3D Printer with packaging 3D Printer without packaging	62 x 62 x 101 cm (24.5 x 24.5 x 39.75 in) 43 x 43 x 61.2 cm (16.9 x 16.9 x 24.1 in)
<b>Weight</b> 3D Printer with packaging 3D Printer without packaging	55 kg (121 lbs) 37.5 kg (82.67 lbs)
<b>3D Sprint<sup>™</sup> Software</b>	Easy build job set-up, submission and job queue management; Automatic part placement and build optimization tools; Part nesting capability; part editing tools; Automatic support generation; Job statistics
<b>Connectivity</b>	Network ready with 10/100/1000 BaseT Ethernet interface USB (direct printing)
<b>Client Operating Systems</b>	Windows <sup>®</sup> 7, Windows 8 or Windows 8.1 (Service Pack), Windows 10 (64-bit OS supported)
<b>Input Data File Formats Supported</b>	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, X_T
<b>Post-Processing</b>	Includes part finishing tools accessory kit; requires optional 3D Systems LC-3DPrint Box UV post-curing unit or other UV-curing unit
<b>Certifications</b>	FCC, CE, EMC
<b>Accessories</b>	LC-3DPrint Box UV post-curing unit, LC-3DMixer

\* Maximum part size is dependent on geometry, among other factors.

# FabPro™ Materials

For prototyping, engineering and jewelry applications



	FabPro Tough BLK	FabPro Proto GRY	FabPro JewelCast GRN
Description	Tough production plastic	Fast, general purpose	Master patterns for gypsum investment casting
Color	Black	Gray	Green
Bottle Volume	1 kg	1 kg	1 kg
Layer Thickness	0.050 mm   0.002 in	0.050 mm   0.002 in	0.030 mm   0.001 in
Vertical Build Speed	14 mm/hr   0.55 in/hr	21 mm/hr   0.83 in/hr	5.3 mm/hr   0.21 in/hr
Liquid Density	1.05 g/cm <sup>3</sup>	1.04 g/cm <sup>3</sup>	1.10 g/cm <sup>3</sup>

Cured Part Properties*		FabPro Tough BLK		FabPro Proto GRY		FabPro JewelCast GRN	
		Metric	U.S.	Metric	U.S.	Metric	U.S.
Solid Density		1.12 g/cm <sup>3</sup>	0.040 lb/in <sup>3</sup>	1.13 g/cm <sup>3</sup>	0.041 lb/in <sup>3</sup>	1.18 g/cm <sup>3</sup>	0.043 lb/in <sup>3</sup>
Tensile Strength	ASTM D638	44 MPa	64 psi	67 MPa	9700 psi	14 MPa	2000 psi
Tensile Modulus	ASTM D638	1860 MPa	270 ksi	2800 MPa	410 ksi	355 MPa	51.5 ksi
Elongation at Break	ASTM D638	44 %	44 %	7 %	7 %	10 %	10 %
Flexural Modulus	ASTM D790	2020 MPa	290 ksi	2840 MPa	410 ksi	577 MPa	84 ksi
Flexural Strength	ASTM D790	64 MPa	9700 psi	100 MPa	14500 psi	14 MPa	2030 psi
Izod Notched Impact	ASTM D256	36 J/m	0.7 ft-lb/in	23 J/m	0.4 ft-lb/in		
Izod Unnotched Impact	ASTM D256	568 J/m	11 ft-lb/in	123 J/m	2.3 ft-lb/in		
Water Absorption (24 hours)	ASTM D570	0.3 %	0.3 %	0.25 %	0.25 %		
Tg	DMA, E''	57 °C	134 °F	82 °C	180 °F	-1 °C	31 °F
Heat Deflection Temperature @0.46 MPa   66 psi @1.82 MPa   264 psi	ASTM D648	48 °C 42 °C	119 °F 107 °F	79 °C 66 °C	175 °F 151 °F		
CTE >Tg CTE <Tg	ASTM E831	130 ppm/°C 161 ppm/°C	72 ppm/°F 89 ppm/°F	107 ppm/°C 111 ppm/°C	59 ppm/°F 62 ppm/°F	185 ppm/°C 169 ppm/°C	102 ppm/°F 94 ppm/°F
Shore Hardness	ASTM D2240	79 D	79 D	83 D	83 D	68 D	68 D

\* All properties measured on new material processed according to 3D Systems standard user recommendations

DISCLAIMER: It is the responsibility of each customer to determine that its use of any FabPro 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.

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