

Raise3D Pro2 Plus Technical Specifications

ITEM	Pro2 Plus	
CONSTRUCTION	Build Volume (W×D×H)	
	Single Extrusion Print	Dual Extrusion Print
	12×12×23.8 in 305×305×605 mm	11×12×23.8 in 280×305×605 mm
	Machine Size (W×D×H)	
	24.4×23.2×43.5 in / 620×590×1105 mm	
ELECTRICAL	Power Supply Input	100-240 V AC, 50/60 Hz 230 V @ 3.3 A
	Power Supply Output	24 V DC, 600 W
PRINTER	Print Technology	FFF
	Print Head	Dual-head with electronic lifting system
	Filament Diameter	1.75 mm
	XY Step Size	0.78125, 0.78125, 0.078125 micron
	Z Step Size	0.078125 micron
	Print Head Travel Speed	30 - 150 mm/s
	Build Plate	Heated aluminum build plate with magnetic holding
	Max Build Plate Temperature	110 °C
	Heated Bed Material	Silicone
	Build Plate Leveling	Pre-calibrated leveling
	Supported Materials	PLA / ABS / HIPS / PC / TPU / TPE / NYLON / PETG / ASA / PP / PVA / Glass Fiber Infused / Carbon Fiber Infused / Metal Fill / Wood Fill
	Nozzle Diameter	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Available)
	Max Nozzle Temperature	300 °C
	Connectivity	Wi-Fi, LAN, USB port, Live camera
	Noise Emission (Acoustic)	<50 dB(A) when building
	Operating Ambient Temperature	15 - 30 °C, 10 - 90 % RH non-condensing
	Storage Temperature	-25 °C to +55 °C, 10 - 90 % RH non-condensing
	Technical Certifications	CB, CE, FCC, RoHS
SOFTWARE	Slicing Software	ideaMaker
	Supported File Types	STL/ OBJ/ 3MF
	Supported OS	WINDOWS / macOS / LINUX
	Machine Code Type	GCODE
PRINTER CONTROLLER	User Interface	7-inch Touch Screen
	Network	Wi – Fi, Ethernet
	Resume Print after Power Outage	Firmware recording, no need for battery installation. Protection from any condition
	Screen Resolution	1024×600
	Motion Controller	ARM Cortex M7.400MHZ FPU
	Logic Controller	Freescale i.MX6, Quad core 1Ghz ARM processor
	Memory	1 GB
	Onboard Flash	8 GB
	OS	Embedded Linux
	Ports	USB 2.0×2, Ethernet×1



STORAGE

XSTRAND™ filaments must be stored in a dry and temperate location. The product should remain in its original packaging, preferably closed, until beginning of use.

WARNING

When melted, XSTRAND™ filament can be abrasive due to its glass reinforcement. Printing with XSTRAND™ may reduce brass nozzles and extruder driving wheels' lifetime. For a better experience, using hardened steel nozzles and extruder driving wheels is advised.

Ensure sufficient ventilation in your 3D printing space and avoid inhaling extrusion fumes.

CONTACT

For any questions related to XSTRAND™ 3D products, contact us at:

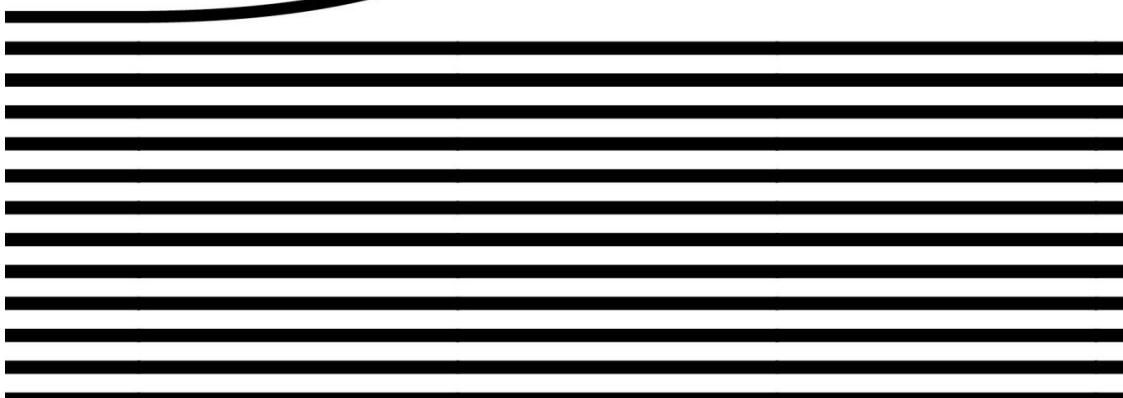
3dprinting@owenscorning.com

Material Safety Data Sheet available upon request.

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3D FILAMENT
GLASS FIBER REINFORCED POLYAMIDE 6
GF30-PA6



MATERIAL DATASHEET

Physical Properties	Metric	Imperial	Standard
Density	1,17 g/cm³	9,76 lbs/gal	ISO 1183-A
Moisture Absorption	0,58 %	0,58 %	ISO 62 23 °C / 50% RH
Water Absorption	9,62 %	9,62 %	ISO 62 23 °C / Sat

Mechanical Properties	Metric	Imperial	Standard
Tensile Modulus	7 400 MPa	1,074 ksi	ISO 527 1 mm/min (0.04 inch/min)
Tensile Strength (Yield)	102 MPa	14,800 psi	ISO 527 1 mm/min (0.04 inch/min)
Tensile Strength (Break)	102 MPa	14,800 psi	ISO 527 1 mm/min (0.04 inch/min)
Elongation (Break)	2.1 %	2.1 %	ISO 527 1 mm/min (0.04 inch/min)
Flexural Modulus	6 100 MPa	880 ksi	ISO 178 2 mm/min (0.08 inch/min)
Flexural Strength (Yield)	170 MPa	24,600 psi	ISO 178 2 mm/min (0.08 inch/min)
Flexural Strength (Break)	166 MPa	24,100 psi	ISO 178 2 mm/min (0.08 inch/min)

Thermal Properties	Metric	Imperial	Standard
Heat Deflection Temperature	124 °C	255 °F	ISO 75 Method A (1.8 MPa)
Melting Temperature	206 °C	403 °F	ISO 11357

Printer Settings	Nozzle	Bed	Recommended Bed Type
Temperature	220 °C - 280 °C	80 °C - 110 °C	1) Perforated bed 2) PEI flat plate
Printing speed	30-100 mm/s	-	3) PI (Kapton) adhesive
Nozzle diameter	> 0.4 mm	-	

PACKAGING

Thermal Properties	Metric	Imperial	Standard
Filament diameter	1,75 mm / 2,85 mm	0,069 inch / 0,112 inch	+/- 0,05 mm
Material weight	500 g / 2200 g	1.1 lbs / 4.85 lbs	Net weight
Spool (500g / 1.1lbs)	200 / 52 / 55 mm	7.9 / 2.0 / 2.2 inch	Øext / Øint / width
Spool (2200g / 4.85 lbs)	300 / 52 / 102 mm	11.8 / 2.0 / 4.0 inch	Øext / Øint / width

DESCRIPTION

Developed by Owens Corning, a world leader in composite solutions, XSTRAND™ GF30-PA6 filament for 3D printing is a reinforced material designed to be compatible with any standard Fused Filament Fabrication 3D printer (1.75 and 2.85 mm diameters available).

BENEFITS

- Very high stiffness and strength (up to +250% compare to ABS)
- Large operational temperature range (-20°C to 120°C)
- Good chemical and UV resistance
- High wear resistance
- Excellent layer adhesion
- Reduced warping effect compared to neat PA6

POTENTIAL APPLICATIONS

XSTRAND™ GF30-PA6 is designed for functional prototyping and demanding applications such as industrial tooling, transportation, electronics, small appliances, sports & leisure...