

Fuse 1 Tech Specs

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Fuse 1

Print Engine

Selective Laser Sintering

Build Volume

165 x 165 x 320 mm

Build Speed

10 mm / hour

Layer Thickness

100 μm

Material Refresh Rate

Up to 50 %

Startup Time

60 minutes

Connectivity

Ethernet or Wi-Fi

Dimensions

677 x 668 x 1059 mm

Weight

88 kg

Power Requirements

2 kW, 120 or 240 VAC

Optical System

Galvanometers

Formlabs Custom

Scan Speed

2,000 mm/sec

Laser Type

Fiber rated to > 10,000 hrs

Laser Wavelength

1066 nm

Laser Power

10 W

Laser Spot Size (FWHM)

200 μ m

Software

Print Preparation

PreForm Desktop Software

File Type

.STL or .OBJ

Nylon 12: Material Properties

As Printed on Fuse 1

Published Value

Ultimate Tensile Strength (XY)

52 MPa

50 MPa

Ultimate Tensile Strength (Z)

50 MPa

48 MPa

Tensile Modulus (XY)

1800 MPa

1850 MPa

Tensile Modulus (Z)

1900 MPa

1800 MPa

Elongation at Break (XY)

14 %

12 %

Elongation at Break (Z)

7 %

6 %

Feature Design Guidelines

Minimum Value

Full Strength / Depth

Wall Thickness

0.75 mm

2.00 mm

Pin Diameter

1.00 mm

2.00 mm

Hole Diameter

0.60 mm

1.00 mm

Slot Width

0.75 mm

3.00 mm

Moving Part Clearance

0.25 mm

1.00 mm

Reserve Your Fuse 1 Today

Be the first in line to receive the new standard in industrial 3D printing. Make a deposit now; beta units start shipping late 2017.

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