F190CR Composite Printer

stratasys

The F190™CR is a composite-ready 3D printer capable of printing engineering thermoplastics and composite carbon-filled materials. Hardened components and dedicated print heads provide the durability for extended life necessary when printing with carbon-filled plastics. The combination of composite and standard polymers offers the versatility to cover many manufacturing applications with one printer. Hands-free soluble support material enables printing complex geometries and hands-free post-processing.

The F190CR printer has multiple features designed for ease of use and high uptime.

• GrabCAD Print™ and Insight™ software provide a simple workflow and in-depth print process control

• Fully heated build chamber enables consistent print results with multiple infills from sparse to fully dense

• Material bays located in pullout drawers allow for easy accessibility and fast changes

• Built-in camera provides visual remote print monitoring

• Power is supplied by standard wall outlets

• Printers are mounted on casters for easy mobility

The F190CR, under new part number 123-70010, is GREENGUARD Certified per UL 2904 when using ABS, ASA, and QSR materials. GREENGUARD Certification validates that the printer and material combination meet low chemical emission limits.

GREENGUARD
PRODUCT CERTIFIED FOR
LOW CHEMICAL EMISSIONS
UL.COM/GG
UL 2904

F190CR Printer and Material Specifications

System Size/Weight	1626 x 864 x 711 mm (64 x 34 x 28 in.) 500 lbs (227 Kg)
Build Tray Dimensions	305 mm x 254 mm x 305 mm (12 x 10 x 12 in.)
Material Delivery	2 material spool bays, 1 for model, 1 for support located in a drawer on the front of the unit
Achievable Accuracy	Parts are produced within an accuracy of +/- .200 mm (.008 in), or +/- .002 mm/mm (.002 in/in), whichever is greater
Network Connectivity	Wired: TCP/IPv6 protocols at 100 Mbps minimum 100 base T, Ethernet protocol, RJ45 connector Wireless-ready: IEEE 802.11n, g, or b; Authentication: WPA2-PSK, 802.1x EAP Encryption: CCMP, TKIP
Operator Attendance	Limited attendance for job start and stop required
Software	GrabCAD Print software, MTConnect enabled
Operating Environment	Operating: Temperature: 15–30 ºC (59–86 ºF), Humidity: 30–70% RH Storage: Temperature: 0–35 ºC (32–95 ºF), Humidity: 20–90% RH
Power Requirements	100–132V/15A or 200–240V/7A. 50/60 Hz
Regulatory Compliance	CE (low-voltage and EMC directive), FCC, EAC, cTUVus, FCC, KC, RoHs, WEEE, Reach, RCM
Operating System	Windows 10 (64 bit only) and Window 11 with a minimum of 4GB RAM (8GB or more recommended)
Certifications[1]	GREENGUARD Certified per UL 2904 when using ABS, ASA, and QSR Support™

[1] GREENGUARD Certification is available on new F190CR systems under part number 123-70010.

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Material

Printer	Model Material
F190CR	ABS-M30, ASA, FDM® TPU 92A, ABS-CF10, FDM Nylon-CF10

Layer Thickness

Material	0.013 in. (0.330 mm)	0.010 in. (0.254 mm)	0.007 in. (0.178 mm)	0.005 in. (0.127 mm)[3]
ABS-M30	●	●	●	●
ASA	●	●	●	●
FDM TPU 92A	○	●	●	○
ABS-CF10[1]	●	●	●	●
FDM Nylon-CF10[2]	●	●	●	○

[1] Hardened print head is recommended for extended head life but will also operate using standard F123 and ABS-CF10 print heads.
[2] Dedicated FDM Nylon-CF10 hardened print head required.
[3] F123 T14H Head (123-00603-S) is the only approved head for 0.005 in. (0.127 mm) with ABS-CF10.

PRODUCT SPEC SHEET
FDM