UltiMaker Factor 4



An end-to-end application solution, UltiMaker Factor 4 is tailored for the development, production, and full-confidence deployment of process-critical tools and machine components. Factor 4 keeps operations running, simplifying processes in factories, and reducing human-triggered variabilities. It streamlines factory floor operations with its large effective build volume, direct dual material extrusion, and onboard print process reporting to achieve unrivaled predictability and minimal variance.

UltiMaker Factor 4 specifications

Printing properties	Technology	Fused deposition modeling (FDM)
	Extrusion system	Dual-extrusion, direct drive print head with unique auto-nozzle lifting system and swappable print cores
	Build volume	Single material printing: 330 x 240 x 300 mm (13 x 9.4 x 11.8 in) Dual material printing: 330 x 240 x 300 mm (13 x 9.4 x 11.8 in)
	Filament diameter	2.85 mm
	Print profiles availability	14+ UltiMaker materials 250+ UltiMaker Marketplace materials
	Dimensional accuracy	± 0.2 mm ± 0.2 % feature nominal length For detailed conditions visit ultimaker.com/factor4
Hardware properties	XYZ resolution	6.25, 7.8, 2.5 micron
	Homing sensor	Optical
	Build plate	PEI-coated flexible build plate
	Build plate temperature	Up to 120 °C (248 °F)
	Build volume temperature	Actively controlled up to 70 °C(158 °F) with nozzle plane temperature uniformity within: ± 3 °C (5.4 °F) for temperatures < 50 °C (122 °F) ± 5 °C (9 °F) for temperatures < 70 °C (158 °F)
	Extrusion flow	Closed loop flow compensation
	Max. extrusion temperature	280 °C (536 °F): Print core AA, BB, DD 300 °C (572 °F): Print core CC 340 °C (644 °F): Print core HT
	Closed loop fans	Air filtering fan, air recirculation fans, print cooling fans, print core cooling fan
	Compatible print cores	Print core AA (0.25 mm, 0.4 mm, 0.8 mm) Print core BB (0.4 mm, 0.8 mm) Print core CC (0.4 mm, 0.6 mm) Print core DD (0.4 mm) – available in selected regions Print core HT (0.6 mm)
	Material handling system capacity	6 bays with NFC recognition (max. 1 kg spool size)
	Material handling system humidity control	Average relative humidity < 15 % in all operational conditions
	Microparticulate filtration system	HEPA H13
	Emission rate (UFP & VOC)	UltiMaker filaments below limits listed in UL-2904
	Monitoring	HDR (high dynamic range) 1920 x 1080 px HD camera
	Display	7-inch touchscreen (resolution 1024 x 600 px)

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	Connectivity	Wi-Fi 2.4 & 5 GHz: IEEE 802.11a/b/g/n/ac LAN: Gigabit Ethernet USB: 2.0
	System on module	NXP i.MX8 Mini Quad (4 x 1.8 GHz), ARM Cortex-A53, 2 GB LPDDR4 16 GB eMMC
	Real time controller	i.MX RT1064, Arm Cortex-M7 600 MHz, 1 MB SRAM
	Power requirement	100 – 240 V AC, 50 – 60 Hz max., 6A
Physical dimensions	Dimensions	695 x 605 x 1287 mm (27.5 x 24 x 51 in)
	Weight	120 kg (265 lbs)
	Shipping dimensions	760 x 800 x 1587 mm (30 x 31.5 x 62.5 in)
	Shipping weight	137 kg (309 lbs)
Ambient conditions	Operating sound	< 50 dBA in operation
	Operating environment	Operating: Temperature: 18 °C – 30 °C (64 – 86 °F), humidity: 30 – 70% RH Storage: Temperature: 5 °C – 40 °C (41 – 104 °F), humidity: 20 – 90% RH
Software	Print job preparation	UltiMaker Cura 5.7.1 or newer
	Print job management	UltiMaker Digital Factory
	File types supported	UltiMaker Cura: STL, OBJ, 3MF Printable formats: G, GCODE, UFP, STEP
	System requirement	Windows 7 (64-bit) Mac OS X 10.12 OpenGL 2.1 4 GB RAM (8 GB recommended)
	Print process reporting	Supported
	Security	Active firewall PIN code settings protection
Safety and compliance	Warranty period	12 months limited warranty
	Certifications	For a detailed list of certifications visit ultimaker.com/factor4
	Safety features	Red stop button immediately stops motion and heat sources Open door sensor pauses motion and extrusion

What does our unique platform include?

3D printers that achieve fast ROI

Click and print with over 310 materials

Secure cloud software for easy remote printing

Global access to expert support and learning

UltiMaker