## 👭 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.



| rinning                | reennoiogy                  |   |
|------------------------|-----------------------------|---|
| properties             | Extrusion system            | Dual-extrusion, direct drive print head with unique auto-nozzle<br>lifting system and swappable print cores                                     |
|                        | Build volume                | Single material printing: 330x240x300mm (13x9.4x11.8in)<br>Dual material printing: 330x240x300mm (13x9.4x11.8in)                                |
|                        | Filament diameter           | 2.85 mm   |
|                        | Print profiles availability | 14+ UltiMaker materials<br>250+ UltiMaker Marketplace materials   |
|                        | Dimensional accuracy        | ±0.2 mm ±0.2 % feature nominal length<br>For detailed conditions visit ultimaker.com/factor4  |
| Hardware<br>properties | XYZ resolution              | 6.25, 7.8, 2.5 micron (Stepper motors)  |
|                        | 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 temper<br>uniformity within:<br>$\pm 3$ °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              | 280 °C (536 °F): Print core AA, BB, DD  |

## **UltiMaker Factor 4 specifications**

Technology

Printing

|         |  | 250+ Oltimaker Marketplace materials   |
|---------|--|--|
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| perties | Homing sensor                                | Optical  |
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|         | Extrusion flow                               | Closed loop flow compensation  |
|         | Max. extrusion<br>temperature                | 280°C (536°F): Print core AA, BB, DD<br>300°C (572°F): Print core CC<br>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 (0.25mm, 0.4mm, 0.8mm)<br>Print core BB (0.4mm, 0.8mm)<br>Print core CC (0.4mm, 0.6mm)<br>Print core DD (0.4mm) – available in selected regions<br>Print core HT (0.6mm)       |
|         | Material handling<br>system capacity         | 6 bays with NFC recognition (max. 1 kg spool size)   |
|         | Material handling system<br>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 1024x600px)   |
|         |  |  |
|         |  |  |

Fused deposition modeling (FDM)

## **UltiMaker Factor 4 specifications**

|                       | Connectivity            | Wi-Fi 2.4&5GHz: IEEE 802.11a/b/g/n/ac<br>LAN: Gigabit Ethernet<br>USB: 2.0   |
|-----------------------|-------------------------|--|
|                       | System on module        | NXP i.MX8 Mini Quad (4 x 1.8 GHz), ARM Cortex-A53, 2 GB LPDDR 4<br>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              | 695 x 605 x 1287 mm (27.5 x 24 x 51 in)  |
| dimensions            | 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<br>conditions | Operating sound         | < 50 dBA in operation  |
|                       | Operating environment   | Operating: Temperature: 18°C–30°C (64–86°F), humidity: 30–70% RH<br>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<br>Printable formats: G, GCODE, UFP, STEP  |
|                       | System requirement      | Windows 7 (64-bit)<br>Mac OS X 10.12<br>OpenGL 2.1<br>4GB RAM (8GB recommended)  |
|                       | Print process reporting | Supported  |
|                       | Security                | Active firewall<br>PIN code settings protection  |
| Safety &              | Warranty period         | 12 months limited warranty   |
| compliance            | Certifications          | For a detailed list of certifications visit ultimaker.com/factor4  |
|                       | Safety features         | Red stop button immediately stops motion and heat sources<br>Open door sensor pauses motion and extrusion                            |

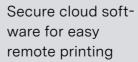
## What does our unique platform include?

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3D printers that achieve fast ROI

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