



# UltiMaker S8

Product data sheet



## Up to 4x productivity and improved quality, powered by our new motion planner

UltiMaker S8 achieves up to 4x the productivity of its predecessor. While also improving print quality. Made possible with our new motion planner UltiMaker Cheetah, new high flow print cores, and an improved feeder. Combining industry-leading dual extrusion printing with our open material platform, allows you to create complex multi-material parts in a fraction of the time.

- ✓ **Up to 4x the productivity:** UltiMaker S8 delivers blazing productivity. With a new revolutionary motion planner and many other improvements, it allows you to create parts up to 4x faster than UltiMaker S7.
- ✓ **Industry-leading multi-material printing:** Create complex, multi-material parts with UltiMaker S8 with blazing speed. Its advanced printing technology allows you to combine different materials and properties in a single print.
- ✓ **Backed by years of experience:** Enjoy the peace of mind that comes with the UltiMaker S8. Reliability is rooted with over 10 years of experience in 3D printing. Ensuring reliable performance and industry-defining success rates.

- ✓ **The largest open system in the world:** UltiMaker S8 is part of the largest open 3D printing system, giving you the freedom to choose from a wide range of materials, software, and tools, all working out of the box with your new printer.
- ✓ **Seamless connectivity:** UltiMaker S8's vertically integrated ecosystem ensures optimal performance, with every component working together to provide a seamless 3D printing experience tailored for professionals.
- ✓ **European-built with advanced security:** Designed and built in Europe, the UltiMaker S8 incorporates state-of-the-art security features, ensuring safe and secure operation for professional environments.
- ✓ **Get projects done faster:** Boost your productivity with UltiMaker S8, achieving up to 4x faster production speeds for your most demanding projects.

## The UltiMaker ecosystem offering



**3D printers that simply work**  
Our award-winning 3D printers are robust, reliable, and easy to use. They deliver quality parts time and again. Designed and tested to run 24/7, they allow you to achieve the results you need more quickly and easily.



**Software for Industry 4.0**  
Trusted by millions of users across 14 languages, UltiMaker Cura integrates with any workflow through UltiMaker Marketplace plugins. Scale production and digital distribution with UltiMaker Digital Factory.



**Massive material selection**  
UltiMaker S series offers the widest material choice on the market. Through our Material Alliance, choose the perfect filament for your application – from advanced polymers to carbon fiber composites.



**Success-oriented support**  
Wherever you are in the world, UltiMaker support is close by. Our global network of service partners offer professional installation, training, and maintenance in your language and time zone.

## UltiMaker S8 specifications

Printer and printing properties	Technology	Fused deposition modeling (FDM)
	Print head	Dual-extrusion print head with a unique auto nozzle-lifting system, flood detection and inductive probing
	Feeder type	Dual gripper feeder with tension adjustment, release functionality and filament feed-rate control
	Motion planner	UltiMaker Cheetah, world's first and only jerk limited 3D printer motion planner, with third order continuous, smooth motion, and corner blending algorithm
	Filament diameter	2.85 mm
	Compatible print cores	AA+ 0.4, CC+ 0.4 print cores (included), BB 0.4 and DD 0.4 (sold separately) <i>*Legacy 0.25, 0.4, 0.6, 0.8 print cores can be used in combination with pre-sliced print jobs.</i>
	Nozzle temperature	Up to 340 °C (644 °F)
	Dimensional accuracy	±0.15 mm ±0.15% feature nominal length* <i>*Typical accuracy based on selected geometries, materials, and randomly selected machines</i>
	Build plate	Heated flexible PEI build plate. Up to 120 °C (248 °F)
	Build volume (XYZ)	330x240x300 mm (~13x9.4x11.8 in)
	Build volume temperature	Enclosed build volume < 50 °C (122 °F) open-loop temperature control
	Layer resolution	60 - 300 microns (depending on the print core nozzle size and print profile)
	Extrusion flow	Up to 35 mm <sup>3</sup> /s
	XY speed, acceleration, jerk	Up to 500 mm/s, up to 50 000 mm/s <sup>2</sup> , up to 100 000 000 mm/s <sup>3</sup>
	Air manager	Removes up to 95% of UFPs
	Material handling	Dual spool holder with NFC recognition
	Operating sound	< 50 dBA
	Display	Fast responsive color touchscreen
	Monitoring	Full HD HDR camera
	System on module	ARM cortex quadcore at 1.8 GHz
Real-time controller	600 MHz Arm-cortex M7	
Connectivity	Wi-Fi 2.4 & 5 GHz: IEEE 802.11a/b/g/n/ac LAN: Gigabit Ethernet USB: 2.0	
Physical dimensions	Dimensions	495 x 585 x 800.5 mm (~19.5 x 23 x 31.5 in) (inc. spool holder)
	Net weight	30 kg (66 lbs)
Ambient conditions	Operating temperature	15 - 32 °C (59 - 90 °F), 10 - 90% RH non-condensing
	Non-operating temperature	0 - 32 °C (32 - 90 °F), 10 - 90% RH non-condensing
Software	Print preparation	UltiMaker Cura 5.10 or newer
	Printer management	UltiMaker Digital Factory
	Supported OS	Windows, MacOS, Linux
Warranty	Warranty period	12 months

## Compatible accessories



**AA+ and CC+ print cores**  
Quick-swappable nozzles that enable higher flow rate.



**Material Station**  
Simplified and automated material handling.

## Compatible materials

### Easy to print

- UltiMaker PLA
- UltiMaker Tough PLA
- UltiMaker PETG

### Mechanical strength

- UltiMaker ABS
- UltiMaker CPE

### Flexibility

- UltiMaker TPU 95A
- Forward AM TPU 85A

### Reinforced composites

- UltiMaker PET-CF
- UltiMaker Nylon CF Slide
- LUVOCOM 3F PAHT CF 9742 BK
- Polymaker Polymide PA 12 CF

### Heat resistance

- UltiMaker CPE+
- UltiMaker PC
- Luvocom PAHT 9825 NT