

Ultimaker 2+

Reliable 3D printing - tailored to your needs

Ultimaker 2+ is designed to perform. Reliable, consistent, and user-friendly, it's suitable for a limitless variety of applications, from functional prototypes to customized tools. It supports a wide range of materials and delivers powerful, first-class results with every print.



Choice of materials

Ultimaker 2+ supports a wealth of different materials, including PLA, ABS, CPE, CPE+, PC, Nylon, and TPU 95A – opening up limitless printing possibilities. In addition, Ultimaker's open filament system allows for greater innovation and more freedom to try and test other types of filaments to match your specific requirements.

Consistency and quality

Designed by experts and enriched by our global community, Ultimaker 2+ performs even complex 3D printing tasks with ease. It's particularly effective for printing bridging, overhangs, and accurate details, enabling users to create high-quality, consistent results, tailored to their business.

Worldwide recognition

Ultimaker 2+ has been lauded by publishers and marketplaces alike; including 3D Hubs, Tested, Make: Magazine, and Digital Trends. Engineering.com described it as "a reliable, high-resolution prototyping machine fit for engineers, designers, educators and students."

Swappable nozzles

Ultimaker 2+ comes with a Nozzle Kit, which features four nozzle sizes (0.25, 0.6, and 0.8mm, with the 0.4 pre-installed). The smaller nozzles allow for greater detail, and larger nozzles mean faster prints. They're quick and easy to change.



Engineered to perform

Heated glass build plate

Ultimaker 2+ features a stiff glass build plate, designed to produce superior results. It's heated, enabling users to print with a wider range of materials, and is removable, for easy print access.

Geared feeder

The geared feeder places more pressure on the filament, whilst reducing heat exposure from the motor.

This improves grip and boosts torque (which eliminates filament skipping in the extruder motor), and filament can be easily removed or inserted by using the grip-release button.

Efficient cooling

Powerful fans create optimized airflow for efficient cooling. Fancaps aim the air directly below the nozzle and equally from both sides, resulting in high-quality bridging, smooth surfaces, and fast prints.

Unrivaled results

With a powerful print head, large build volume and up to 20 micron layer resolution, Ultimaker 2+ delivers outstanding results, whilst remaining compact enough to fit on your desktop.





Professional results with industrial-grade materials

Ultimaker's materials have been specially selected to deliver remarkable results. When combined with Cura's preconfigured material profiles for Ultimaker 2+, even complex mechanical parts, tools, and fixtures can be printed with ease.



NylonDurable and abrasion-resistant

Nylon (polyamide) is strong, abrasion-resistant, durable, and engineered for flexibility and low moisture sensitivity. It can handle temperatures up to 80 °C.



PLA Safe, fast, reliable 3D printing

Experience a no-hassle 3D print experience with Ultimaker's reliable PLA (polylactic acid) filament. It's safe, easy to use, and ideal for a range of applications.



ABS
Tough and durable

ABS (acrylonitrile butadiene styrene) is dimensionally stable and impact-resistant. It can also handle temperatures up to 85 °C, making it well-suited for mechanical parts.



CPE and CPE+
Chemical-resistant and tough

Suitable for the most demanding print jobs, CPE (co-polyester) materials are chemical-resistant, tough, and dimensionally stable. CPE+ handles temperatures up to 100 °C, whilst CPE handles up to 70 °C.



Heat-resistant and strong

PC (polycarbonate) offers a temperature resistance of up to 110 °C, plus excellent mechanical strength and toughness. It is a perfect filament for printing molds, tools, functional prototypes, and parts for short-run manufacturing.



TPU 95A Semi-flexible and wear-resistant

Ultimaker TPU (thermoplastic polyurethane) has a Shore-A hardness of 95 and an elongation of up to 580% at break. It's durable, chemical-resistant, and semi-flexible. It can handle temperatures up to 100 °C.

Advanced 3D Printing Kit

Ultimaker's Advanced 3D Printing Kit is designed to help users printing materials like ABS, CPE+, or PC achieve remarkable results, by improving bed adhesion and ensuring a controlled temperature environment.

Boost the performance of your Ultimaker 2+

The door is ideal for filaments that print at higher temperatures (and which may have problems with layer bonding), improving surface quality and reducing delamination. Adhesion sheets are recommended for CPE+ and PC, as they require a bed temperature of 110°C and may have issues adhering to the build plate.







What's included?

- 2 x replacement 0.4mm nozzles
- 2 x replacementTFM couplers
- 25 x adhesion sheets
- 1 x door

Cura – market-leading 3D printing software



Globally recognized, award-winning performance

"The prints are what you expect from an Ultimaker: crisp, clean and incredibly impressive... Most printers have that default layer height at about .2mm, but Ultimaker printers halve that at .1mm, resulting in prints that automatically look better than their competitors."

Make:

"The Ultimaker 2+ is a high-end 3D printer that's a great match for anyone looking for reliability and print quality."



"Superior build quality, precision engineering and a great support team, not to mention huge community are only some of the things that make the Ultimaker series of printers amazing."



"The entire experience showed how smoothly an Ultimaker 2+ would translate for use in prototyping and other business applications. Spending an extended time with this review unit provided me with hands down the smoothest experience I have personally had using a desktop 3D printer."



"Easy setup and operation. Very good overall print quality. Includes several nozzles in various sizes. Relatively quiet."



"Easy to operate, very reliable printing and designed with the user in mind, the Ultimaker 2 has a cutting-edge .4mm extruder capable of producing some very detailed 20 micron layer resolution. Tech heads, listen up; the Ultimaker 2 is the one you should buy because it is the best 3D printer currently out on the market."



"The Ultimaker 2+ is one of the best desktop 3D printers, based on the FFF technology, at this price tag."



Engineering

Cost-effective, customized functional prototypes

ABB Robotics is a global leader in the field of power and automation technologies, creating industrial robots for the automotive, electronics, and manufacturing industries. By using 3D printing technology, ABB Robotics experienced dramatic improvements. Engineering was reduced to 1-4 hours per finger (with an average cost of €400), and productivity was boosted. The company can now use previously designed fingers, or design and print new ones in the same day. ABB Robotics estimate they've saved €100,000 by purchasing just one Ultimaker 2+.





Architecture

Producing complex architectural models in a matter of hours

MATT Architecture, a well-regarded firm in Central London, focuses on producing innovative designs. They were looking for a way to create more detailed, high-impact models, and to communicate key concepts to clients in a more effective way. With their Ultimaker 2+, the models take hours to print, not days, and have improved communication with clients, not to mention given the company more freedom and flexibility than ever before.





Medical

Changing lives with custom-made prosthetic limbs

Open Bionics creates the next generation of prosthetic limbs, focusing on designing products that are both functional and aesthetically pleasing. Bionic hands are expensive to make, costing anything from \$35,000 to \$120,000. Using 3D print technology, Open Bionics has developed a fully articulated robotic hand with five degrees of freedom at **under \$1,200**.





Education

Empowering the innovators of the future

Duke University is a world-leader when it comes to providing students with access to 3D printing. Thanks to the popularity of their 3D printing program, they now have over 35 printers over 250 students with the freedom to explore the possibilities that 3D printing offers. They are able to theorize, test, and modify solutions through cost-effective experimentation – and develop understanding of key skills required for their future careers.





Ultimaker service and support

Ultimaker values quality above all else. As a result, all our 3D printers and software come with lifetime technical support and customer service, regardless of where you are or when you need us.

Our dedicated service partners are fully trained and certified, ensuring they have the right level of expertise and knowledge to support you. Whenever you get in contact, you can be sure you're talking to someone with the right credentials to help, in your own time zone and language.

- We care. We're always striving to ensure you get the best from your Ultimaker experience.
- We train. We invest time and money into making sure our service partners are fully trained and certified.
- We collaborate. We're continually working with our partners to improve and perfect our services.
- We educate. Our knowledge base is always being updated with useful print resources, tips, and informative guides.

- Expert support in your language and time zone
- ✓ Spare parts and materials always in stock
- ✓ Local warranty ensuring you're well protected





Ultimaker 2+ specifications

Ultimaker 2+ performs even the most complex 3D printing tasks with ease. Thanks to its swappable nozzles and support of a wide range of materials, it's suitable for a huge variety of applications, from detailed prototypes to customized tools.





Printer and printing properties

Technology Fused Deposition Modeling (FDM)

Print head Single-extrusion print head with swappable nozzles

Build volume Ultimaker 2+ Ultimaker 2 Extended+ 223 x 223 x 205 mm 223 x 223 x 305 mm

Filament diameter 2.85 mm

Layer resolution 0.25 mm nozzle: 150 to 60 micron

> 0.40 mm nozzle: 200 to 20 micron 0.60 mm nozzle: 400 to 20 micron 0.80 mm nozzle: 600 to 20 micron

XYZ accuracy 12.5, 12.5, 5 micron

Print head travel speed 30 - 300 mm/s

Build speed 0.25 mm nozzle: up to 8 mm³/s

> 0.40 mm nozzle: up to 16 mm³/s 0.60 mm nozzle: up to 23 mm³/s 0.80 mm nozzle: up to 24 mm³/s

Build plate Heated glass build plate

Build plate temperature 50 - 100 °C

Build plate leveling Assisted leveling process

Supported materials PLA, ABS, CPE, CPE+, PC, Nylon, TPU 95A Nozzle diameter 0.25, 0.4, 0.6, and 0.8 mm nozzles (included)

Nozzle temperature 180 - 260 °C ~ 1 min Nozzle heat up time Build plate heat up time < 4 minutes Operating sound 50 dBA

Standalone 3D printing from SD card (included) Connectivity

Physical dimensions

342 x 357 x 388 mm Dimensions

342 x 493 x 588 mm 342 x 493 x 688 mm Dimensions (with bowden tube and spool holder)

Nett weight 11,3 kg 12,3 kg Shipping weight 18,5 kg 19,5 kg

Shipping box dimensions 390 x 400 x 565 mm 390 x 400 x 665 mm

Power requirements

Input 100-240 V 4A, 50-60 Hz

221 W max. 24 V DC, 9.2 A Output

Ambient conditions

15 - 32 °C Operating ambient temperature

See material specifications for optimal conditions

Non-operating temperature 0 - 32 °C

Software

Supplied software Supported OS

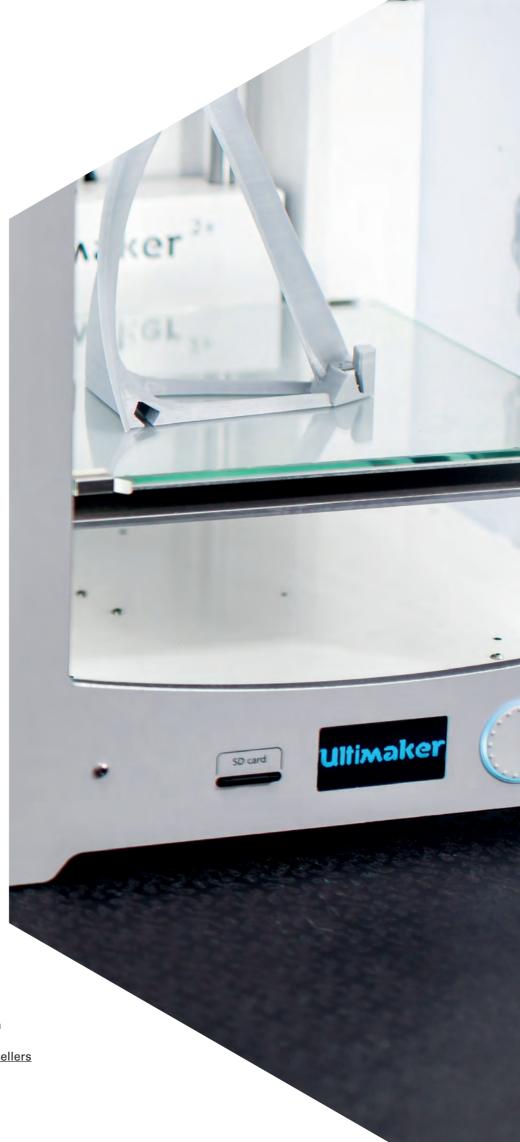
File types

Cura, our free print preparation software

macOS, Windows, and Linux

STL, OBJ, and 3MF

342 x 357 x 488 mm



Ultimaker

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Find a local reseller: ultimaker.com/resellers

More info at: <u>ultimaker.com</u>