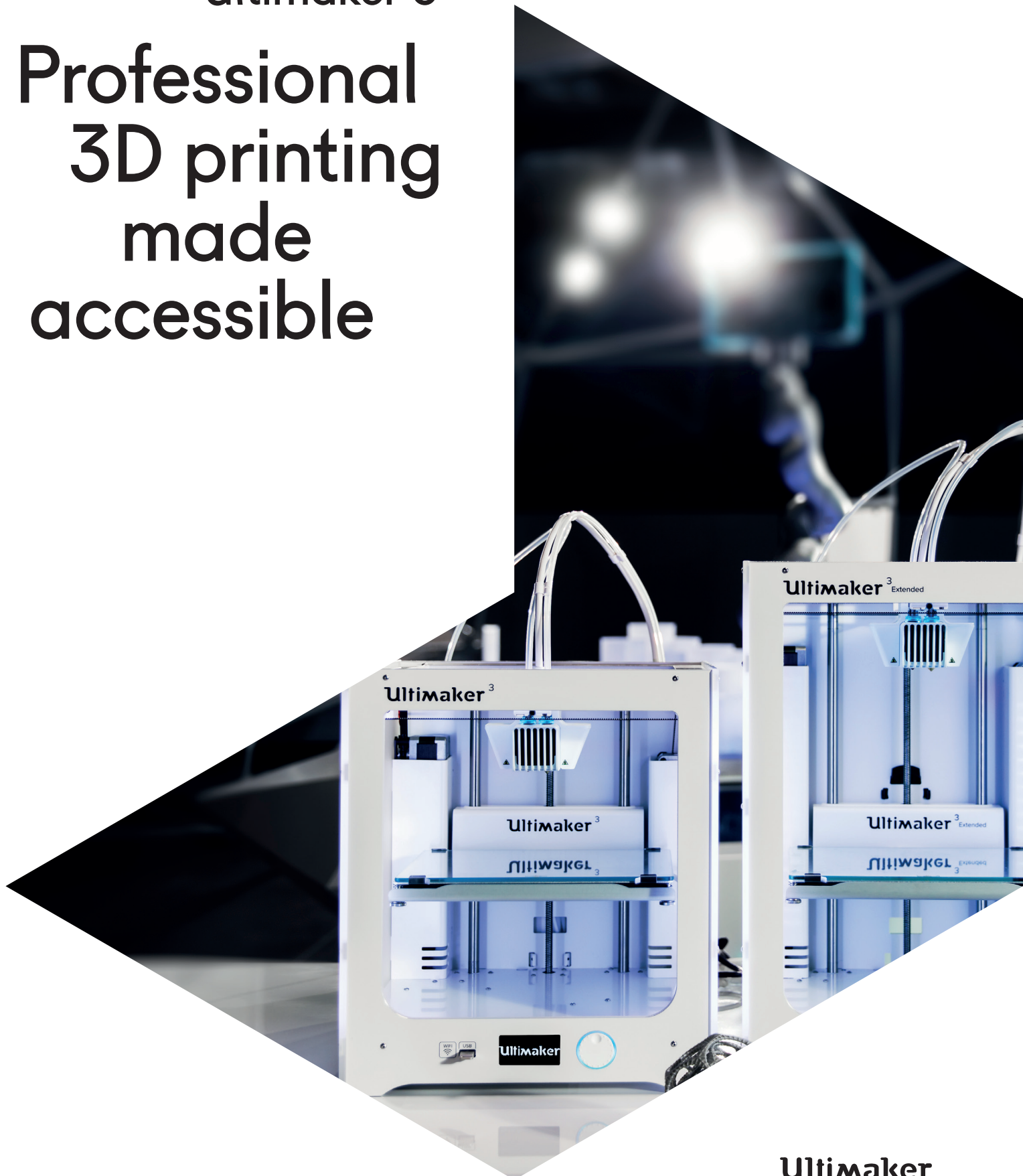


Ultimaker 3
Professional
3D printing
made
accessible



Ultimaker

Ultimaker 3

Delivering accuracy and consistency

Achieve astonishingly complex geometries and intricate designs with the Ultimaker 3 and Ultimaker 3 Extended. With a fully integrated system of hardware, software and materials, it's the most reliable, innovative dual-extrusion 3D printer on the market. Additive manufacturing has never been more accessible.



Dual extrusion with water-soluble support – for complete design freedom

Enjoy more design freedom than ever before, with the most reliable dual-extrusion system available. Create intricate mechanical parts with water-soluble support materials, and quality prints with a unique automatic nozzle lifting system. With the Ultimaker 3, you can print with a huge range of materials: Nylon, PLA, ABS, CPE, and PVA – with more to come.

Live camera and WI-FI connectivity – for remote 3D printing and control

Send prints quickly and easily to your Ultimaker 3 via Wi-Fi, LAN or our Ultimaker 3 app, then monitor progress via the live camera. Integrated Wi-Fi lets multiple users control and monitor prints, and LAN and USB connection ensures uninterrupted printing around the clock.

Material-matching swappable print cores – for higher uptime, faster changeovers

The Ultimaker 3 is designed for speedy changeovers, increased uptime, and consistent, high-quality results. Swap print cores in seconds and quickly switch between different material combinations for a more time-efficient workflow. The custom inner nozzle geometry per material type means more reliable 3D printing experience.

Integrated 3D printing solution – for unmatched 3D printing experience

The Ultimaker 3 features a cohesive system, seamlessly blending hardware, software, and materials. This improves the workflow efficiency and print quality. The NFC scanner lets the printer know which materials are loaded. Via the network, Cura is aware of the print cores and materials being used, and since Cura comes with optimized printing profiles for each combination, it delivers impressive results with minimal hassle.

Engineered for first-time-right setup and reliability

Active leveling

The print head's capacitive sensor measures distances between the nozzle and the build plate, then the tilt angle is compensated by adjusting the z height in the first layers. This ensures improved build plate adhesion and reliable remote 3D printing experience.

Heated glass plate

Ultimaker 3's build plate is stiffer and lighter, reducing vibrations and resulting in a better-quality print. The glass plate is removable for easy print access, and it's also heated, which means you can print with a wider range of materials.

Automatic nozzle lifting system

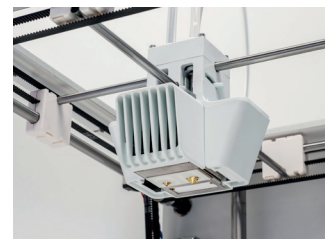
Ultimaker 3's unique auto-nozzle lifting system ensures a smooth, professional finish with every print.

Dual geared feeders

Geared feeders mean more force on the filament, and no heat exposure from the motors. Change materials easily, then choose the correct pressure in an instant, using the lever to manually insert or remove a filament. This improved control means more reliable, successful results.

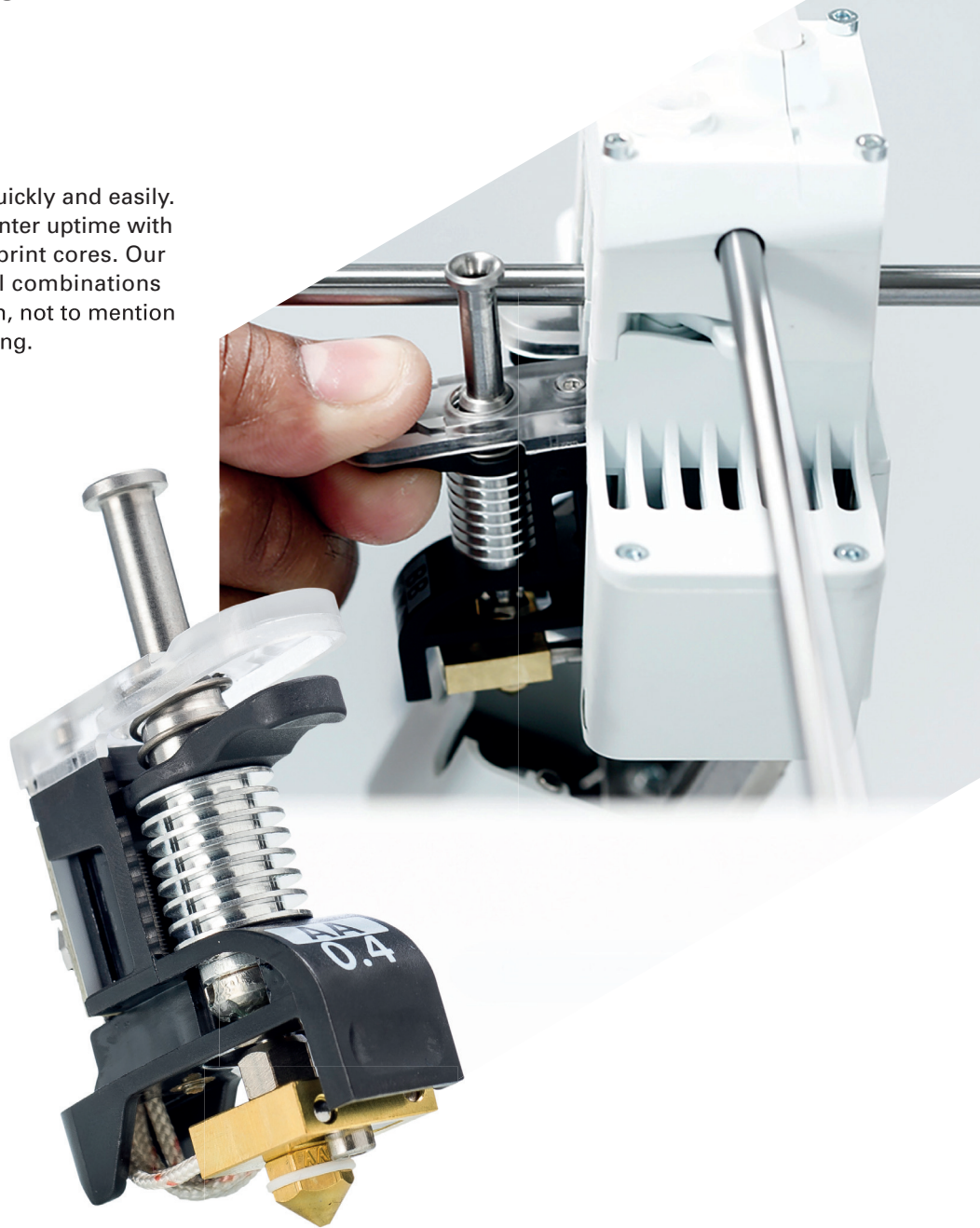
Powerful print head cooling system

Ultimaker's triple fan system, with two new radial fans and fan shrouds, creates more pressure and better airflow. The result? Efficient cooling, higher-quality bridging, smoother surfaces and faster print runs.



Market-leading dual extrusion with Ultimaker 3 print cores

Achieve high-quality results – quickly and easily. Boost print performance and printer uptime with material-matching, swappable print cores. Our reliable build / support material combinations allow for greater design freedom, not to mention visually striking dual-color printing.



- **Material-matching.** Customized nozzle geometry means superior results, whether it's engineering build material or water-soluble support.
- **Quick-to-change.** Quickly swap print cores and switch between different material combinations for a more time-efficient workflow.
- **Wide range of materials.** Choose from a huge selection of materials: Nylon, ABS, PVA, PLA and CPE; with CPE+, PC, and TPU 95A coming soon.
- **Accurate temperature reading.** Accurate automatic temperature readings ensure the perfect temperature for an even better print quality.
- **Reliable and strong.** Better 3D printing results, with new silicone cover to protect the extruder.

Cohesive 3D printing solution for superior 3D printing experience

Ultimaker 3's integrated system of hardware, software and materials is designed to ensure unrivaled quality. Our open source slicing software (Cura) features extensively tested preconfigured profiles, automatically adjusting the settings for your materials and print cores. It also recognizes the print core used, ensuring easier setup and smoother, quicker print results.

Optimized Cura profiles

- Cura features a number of thoroughly-tested, preconfigured material profiles. It automatically recognizes the material used, making the necessary setting adjustments to ensure a consistent, high-quality print.

NFC material scanner

- The Ultimaker 3 detects and identifies your chosen material, then checks the corresponding filament and print core type being used. This ensures your printer is primed and ready for action.

EEPROM print core chip

- The print core's EEPROM chip memorizes the size and type of your nozzle, alerting you in the event of misuse. This means less errors and greater printing success.

Remote 3D printing and control

Ultimaker 3 app

The Ultimaker 3 app for iOS and Android lets you commence printing and monitor your prints via your smartphone or tablet. The integrated camera makes print monitoring simple, and our online slicing service means models can be sliced with ease.

- Connect to your local Ultimaker 3 printer
- Create prints with profiles for Nylon, PLA, ABS, CPE, PVA and more
- Slice models with our online slicing service
- Monitor progress via your printer's integrated camera
- Remotely control your Ultimaker 3 via your phone or tablet

Better controls and connectivity

- Print without network connection using a USB stick (16GB included).
- Send your print project quickly and easily to your Ultimaker 3 by connecting to your Ultimaker 3 Wi-Fi or via LAN.
- Monitor your 3D print through the live camera and enjoy more accountability and control than ever before.



Ultimaker 3

Start and monitor prints within the local network using your iPhone

Connect to your Ultimaker 3

Learn more at ultimaker.com

Industrial-grade materials

With the Ultimaker 3, you can choose from a huge range of materials. For advanced dual-color printing, simply combine two build materials, or achieve astonishing complexity with build / water-soluble support material combinations (such as Nylon and PVA or PLA and PVA). Through a seamless blend of hardware, software, and materials, you can enjoy remarkable results, and a simpler, more enjoyable printing experience. Our open filament system makes it possible to test existing or custom-formulated materials with ease.

Ultimaker materials

- Ultimaker 3's wide range of materials include PLA, Nylon, CPE, ABS and PVA. In the future, this will be extended to include CPE+, PC, TPU 95A, and other materials. Achieve unrivaled complexity with build and water-soluble support material combinations, or create dual-color prints with two build materials of your choice.

Auto-material recognition

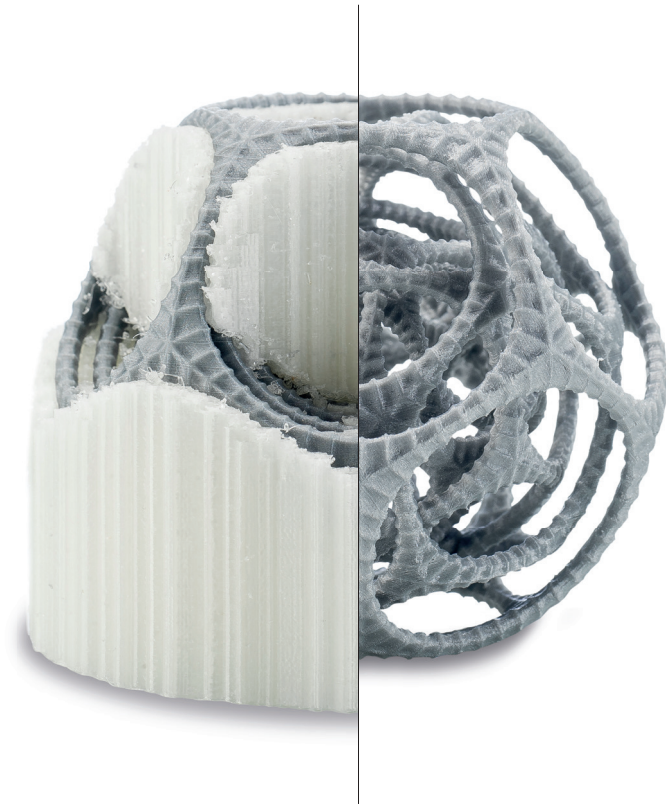
- Your printer's NFC scanner identifies the Ultimaker material being used, then Cura auto-optimizes the settings based on the filament and print core.

Open filament system

- Ultimaker doesn't recognize limits. As a result, the Ultimaker 3 features an open filament system, letting you print with any material type. This allows for greater innovation to help you develop custom solutions to meet your requirements.

Water-soluble PVA:

Dual extrusion for greater design complexity



Ultimaker 3's dual-extrusion system is the most reliable on the market. Create intricate geometries and complex designs, then simply remove the supports by resting the print in water. It's custom-made for detailed structures and complex mechanical parts.

Ultimaker's PVA is fully water-soluble, making it ideal as a support material for even the most complex Nylon / PLA models. If you need support for deep internal cavities, large overhangs or complex geometries, it performs to perfection.

Learn more at ultimaker.com

Select the perfect build material

All Ultimaker materials have been specially selected to deliver top quality prints. The preconfigured Cura profiles ensure optimal material print settings, intuitively identifying which print core and material you're using.



Nylon

Flexible, strong, corrosion-resistant

Nylon (polyamide) is a fantastic all-rounder. It offers a high strength-to-weight ratio, plus excellent durability and low friction. Handling up to 80°C, it's a great choice for functional prototypes, end-use products, and tools.

Optimized for Ultimaker 3 and Ultimaker 2+ series



ABS

Durable and tough

ABS (acrylonitrile butadiene styrene) can withstand temperatures of up to 85°C. It has great mechanical properties, making it suitable for complex end-use products and functional prototypes.

Optimized for Ultimaker 3 and Ultimaker 2+ series



PLA

Safe and fast to print

PLA (polylactic acid) features good tensile strength and surface quality, which makes it ideal for creating high-resolution parts and prototypes that require aesthetic detail.

Optimized for Ultimaker 3, Ultimaker 2+, and Ultimaker 2 series



CPE

Chemical-resistant and tough

CPE (co-polyester) is chemical-resistant and offers great dimensional stability, tensile and flexural strength, and it can handle temperatures up to 70 °C. Choose CPE for functional prototypes and mechanical parts.

Optimized for Ultimaker 3 and Ultimaker 2+ series

Even more materials



CPE+

Heat-resistant and tough

With exceptional toughness, CPE+ is the preferred choice for both functional prototypes and mechanical parts, and it features a temperature resistance of up to 100 °C.

Optimized for Ultimaker 2+ series, to be optimized for Ultimaker 3 series soon



PC

Strong, tough, and heat-resistant

With PC (polycarbonate), you can print strong and tough parts that retain dimensional stability when subjected to temperatures as high as 110 °C.

Optimized for Ultimaker 2+ series, to be optimized for Ultimaker 3 series soon



TPU 95A

Semi-flexible and resistant to wear and tear

Ultimaker's TPU is durable, resistant to chemicals, and semi-flexible. It boasts a Shore-A hardness of 95 and an elongation of as much as 580% at break. It can handle up to 100 °C.

Optimized for Ultimaker 2+ series, to be optimized for Ultimaker 3 series soon

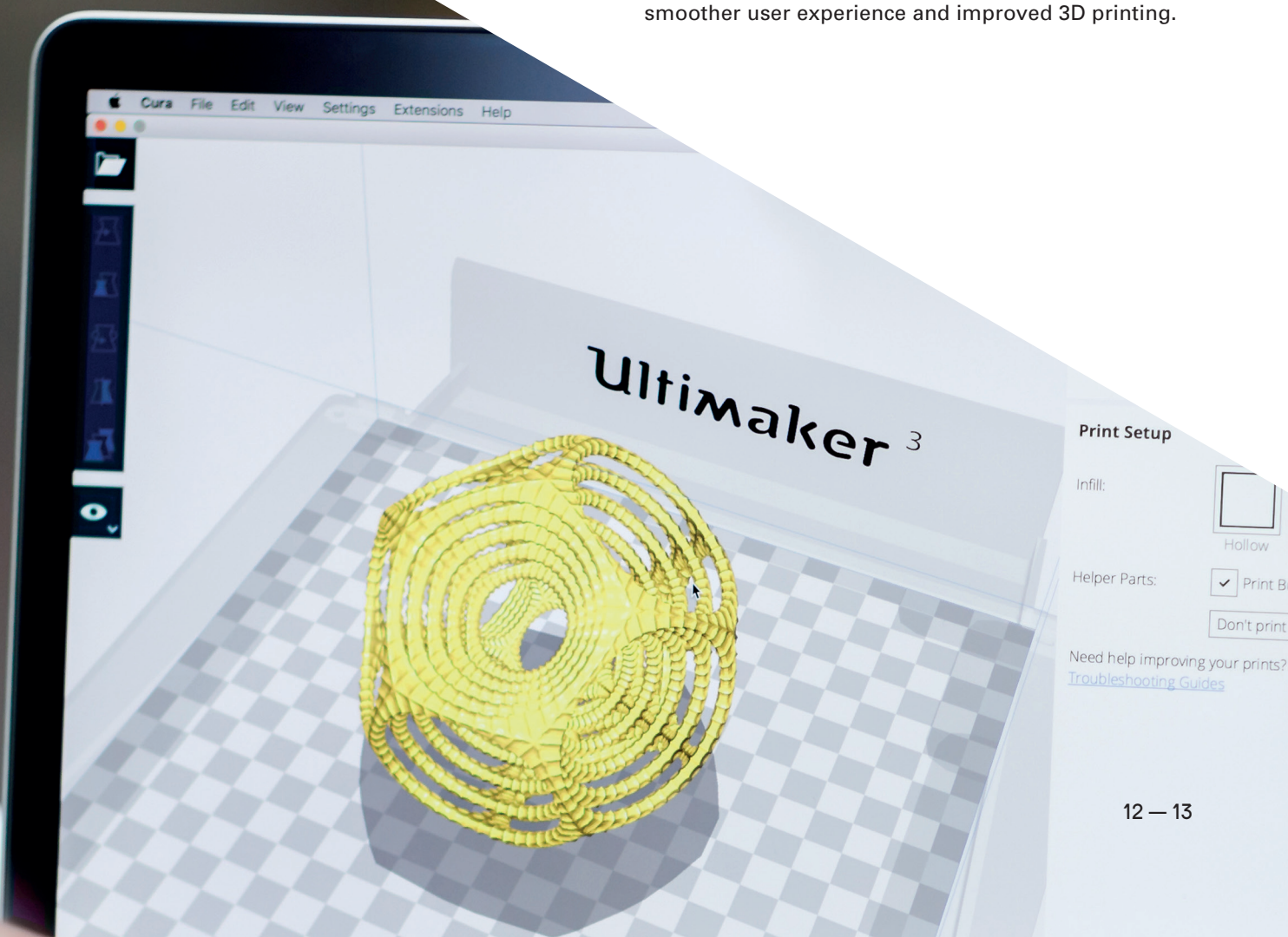
Learn more at ultimaker.com

Meet Cura

Our market-leading 3D printing software

Ultimaker's free, open source slicing software is renowned for producing impressive results. Cura's extensively tested preconfigured profiles auto-adjust settings for each material and print core, ensuring great print success. The open, flexible system lets you customize values, creating a 3D printing experience that's tailored to your needs.

- **Optimized profiles.** The optimized Cura profiles, plus dual-extrusion printing mean a more seamless, hassle-free printing experience.
- **Powerful settings.** You can print multiple objects (each with different settings) and achieve better printing results, with over 200 settings in total.
- **Free open source software.** Open source technology means the worldwide community can contribute features and improvements for other users.
- **Customize with ease.** Adjust print settings to suit your model, test the latest developments and save personalized printing profiles.
- **Dual-extrusion 3D printing.** Cura's optimized profiles intuitively adjust settings for each material and print core. Ultimaker 3's integrated system means a smoother user experience and improved 3D printing.



Our dedicated network – your global support team

Ultimaker places quality at the heart of our company. As a result, all our 3D printers and software come with lifetime technical support and customer service – wherever you are, and whenever you need it.

We select, train, and certify our service partners carefully, ensuring they have the right industry expertise and knowledge to provide you with the right level of support. You can be sure, whenever you get in contact, you'll be talking to someone with the credentials to help you, in your own language and time zone.

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

- **We care.** Your Ultimaker experience matters, and we're dedicated to ensuring it's a great one.
- **We train.** Every Ultimaker service partner is fully trained and certified, without exception.
- **We collaborate.** Ultimaker work closely with all partners, focusing on improving and perfecting our services.
- **We educate.** We constantly update our already extensive knowledge base with useful print resources, handy tips and informative guides.



Learn more at ultimaker.com

You don't have to take our word for it...

Global 3D printing community recognition

"That is not the only smart feature either, since the Ultimaker 3 includes automatic bed-leveling, for helping to prevent and correct any printing mistakes which might occur along the way. The 3D printer additionally has the ability to automatically detect the print material you chose and adjust its settings to fit."

Luke Dormehl



"The Ultimaker 3 is a class act — a very solid 3D printer that can produce excellent-quality 3D prints. It's also easy to set up and print with, supports a lot of materials and has flexible, easy-to-use software. New features, such as the dual material support and camera for monitoring prints in progress, are welcome additions that increase the usability of the printer."

Richard Baguley

tom's guide

"...the printer is capable of delivering a wider range of models made with industrial-grade materials (including dissolvable material). The impact: users can think differently and bigger about their designs when using the Ultimaker 3. They have the freedom to make their model as complex as they'd like."

Daniel O'Connor



"To be more attractive and valuable to people like engineers and designers, the Ultimaker 3 is both more powerful and automated than its predecessors, with the idea that a user can upload a design, click print and pick up a finished part without any issue."

Michael Molitch-Hou



"The guts of the machine have been upgraded ... bringing advanced geometric printing capabilities and a print bed that actively levels itself to help avoid common print errors."

Brian Heater



Ultimaker 3 specifications

Ultimaker 3's integrated system of hardware, software, and materials ensures a smooth, straightforward workflow, not to mention unparalleled results. The innovative dual-core print head features print cores for build and support materials, and the auto-nozzle lift system results in reliable, intricate dual-extrusion prints.



Printer and printing properties

Technology	Fused Deposition Modeling (FDM)	
Print head	Dual-extrusion print head with a unique auto-nozzle lifting system and swappable print cores	
Build volume	Ultimaker 3 215 x 215 x 200 mm (left or right nozzle) 197 x 215 x 200 mm (dual extrusion)	Ultimaker 3 Extended 215 x 215 x 300 mm (left or right nozzle) 197 x 215 x 300 mm (dual extrusion)
Filament diameter	2.85 mm	
Layer resolution	0.4 mm nozzle: 20 - 200 micron	
XYZ resolution	12.5, 12.5, 2.5 micron	
Print head travel speed	30 - 300 mm/s	
Build speed	0.40 nozzle: up to 16 mm ³ /s	
Build plate	Heated glass build plate	
Build plate temperature	20 - 100 °C	
Build plate leveling	Active leveling	
Supported materials	Optimized for: Nylon, PLA, ABS, CPE, PVA Future optimizations: CPE+, PC, TPU 95A	
Nozzle diameter	0.4 mm, 0.8 mm to be introduced soon	
Nozzle temperature	180 - 280 °C	
Nozzle heat up time	< 2 min	
Build plate heat up time	< 4 min (20 - > 60 °C)	
Operating sound	50 dBA	
Material recognition	Material recognition with NFC scanner	
Connectivity	Wi-Fi, LAN, USB port	
Monitoring	Live camera	

Physical dimensions

Dimensions	342 x 380 x 389 mm	342 x 380 x 489 mm
Dimensions (with bowden tube and spool holder)	342 x 505 x 588 mm	342 x 505 x 688 mm
Nett weight	10,6 kg	11,3 kg
Shipping weight	15,5 kg	16,8 kg
Shipping box dimensions	390 x 400 x 565 mm	390 x 400 x 680 mm

Power requirements

Input	100 - 240V 4A, 50-60Hz 221 W max.
Output	24 V DC, 9.2 A

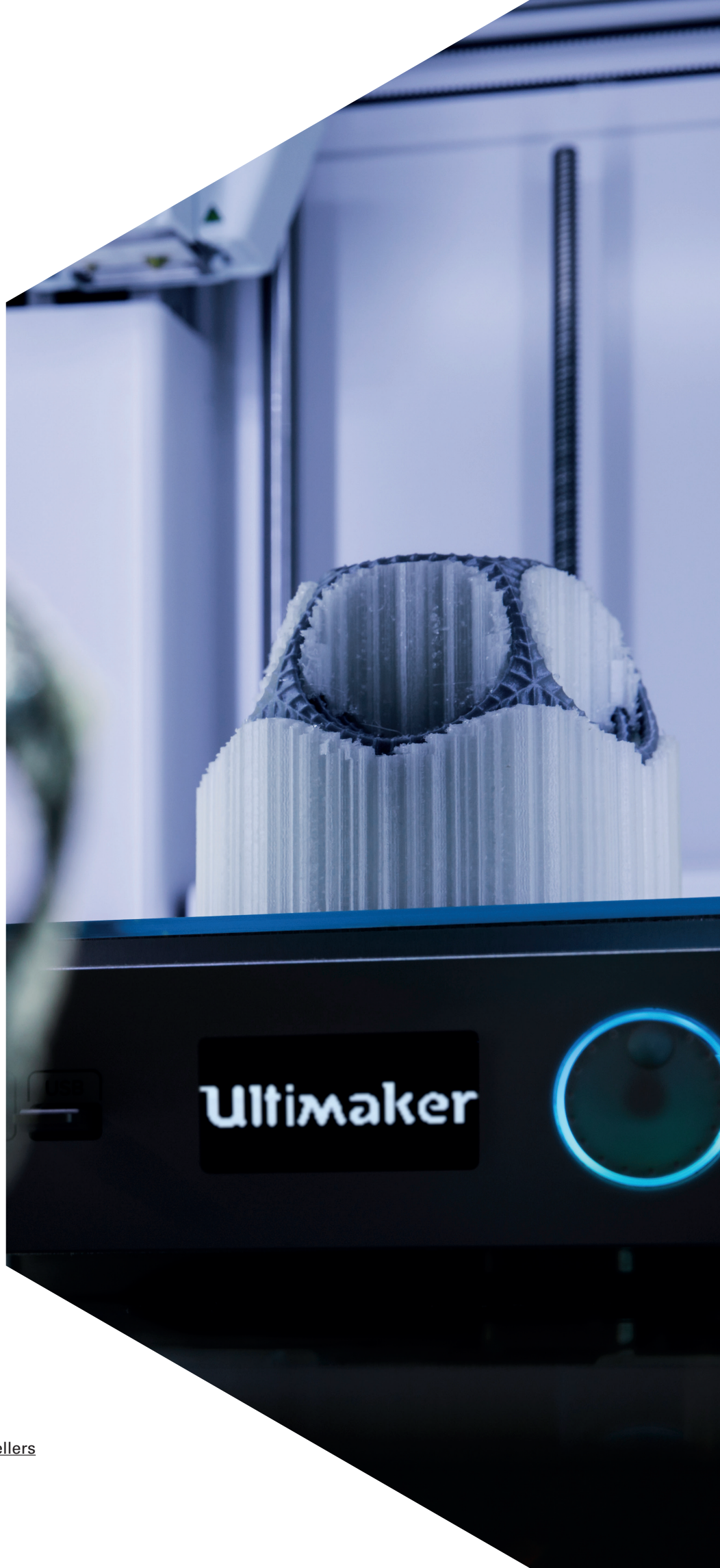
Ambient conditions

Operating ambient temperature	15 - 32 °C, 10 - 90% RH non condensing See material specifications for optimal conditions
Nonoperating temperature	0 - 32 °C

Software

Supplied software	Cura, our free print preparation software
Supported OS	macOS, Windows and Linux
File types	STL, OBJ and 3MF

Learn more at ultimaker.com



Ultimaker

General inquiries: info@ultimaker.com

Phone: +31 345 71 20 17

Find a local reseller: ultimaker.com/resellers

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