Ultimaker 3

Professional 3D printing made accessible

The Ultimaker 3 is the most reliable dual extrusion 3D printer available. Achieve complex designs and improved 3D print performance, thanks to its unique auto-nozzle lifting system, professional build and support material combinations, and swappable print cores.

Featuring seamless hardware, software and material integration, the Ultimaker 3 and Ultimaker 3 Extended enable designers, engineers and manufacturers approach the innovation process in a completely new way. Create complex geometries and achieve remarkable design intricacy with the most reliable dual extrusion on the market.

Main featured specs

- Build volume of 215 x 215 x 200 mm for the UM3, 215 x 215 x 300mm for the UM3 Extended
- Layer resolution up to 20 micron for 0.4 mm nozzle

- Print temperature up to 280 °C
- Dual extrusion with a soluble support material
- Swappable print cores
- Heated build plate with active leveling

Hardware features

The print head

- **Dual extrusion.** Combine build and water-soluble support materials to create complex mechanical parts and intricate surfaces or choose to print with two colors. Ultimaker 3's unique auto nozzle-lifting system ensures a smooth, professional finish with every print.
- **Swappable print cores.** Faster print core changes mean higher uptime and easier maintenance. Your Ultimaker 3 comes with print cores for build (AA) and support (BB) materials. There's a customized nozzle geometry per material – ensuring lower clogging risks and a more reliable 3D printing experience.
- **New optimized cooling.** Ultimaker 3 has a powerful, low-noise fan system. Featuring two new radial fans and fan shrouds, it creates greater pressure build-up for an improved airflow. This ensures better cooling, high quality bridging, faster print runs and smooth print surfaces.
- **LED status indicators.** Print core LED lights ensure an optimized 3D printing experience by alerting if any user interaction is needed.

Superior 3D printing experience

- **Optimized Cura material profiles.** Extensively tested preconfigured Cura profiles make for a smoother, more seamless 3D printing experience by automatically adjusting the necessary settings for each material and print core. Produce consistent, quality results with every print.
- **Material recognition with NFC scanner.** Built-in material recognition system ensures your 3D printer is primed and ready for the task. Ultimaker 3 detects and identifies the material on the reel holder and checks the correspondence of a filament and print core type being used.
- **EEPROM print core chip.** The EEPROM chip in the print core memorizes the size and type of your nozzle, notifies you in case of misuse and, as a result, helps achieve higher print success rates.

Simple controls and connectivity

- **USB port.** Enjoy standalone printing using a USB stick (16GB included).
- **Wi-Fi / LAN.** Send your print project quickly and easily to your Ultimaker 3 via Cura.
- **Live camera.** Monitor every stage of your 3D printing project remotely by simply connecting to your Ultimaker 3's Wi-Fi network. The result? Optimized workflow and exceptional control.

The heated build plate

- **Active leveling.** The capacitive sensor in the print head measures distances between the print bed and the nozzle, and the tilt angle is compensated by adjusting the z height in the first layers. The result? More accurate leveling and improved build plate adhesion.
- **New refined design.** The Ultimaker 3 features a build plate that's lighter and stiffer, which reduces vibrations and helps produce an unrivalled print quality. The removable glass plate makes it easy to access your prints.

- **Heated build plate.** Thanks to the heated glass build plate, you can print using many different materials and with improved build plate adhesion.

Dual geared feeders
Geared feeders exert more force on the filament, and also eliminate heat exposure from the motor. Change your 3D printing materials with ease, select the correct pressure with a push on a button, and use the lever function to manually insert or remove a filament. More control means more successful, reliable and durable 3D print results, without compromise.

Industrial-grade materials
- **Ultimaker materials.** Print with a wide range of materials, including Nylon, PLA, ABS, CPE and PVA – with material portfolio due to be expanded with CPE+, PC and TPU 95A in the future. Combine two build materials for dual-color 3D prints or achieve state-of-the-art complexity with build and water-soluble support material combinations (Nylon/PVA and PLA/PVA).
- **NFC material scanner.** Your Ultimaker 3 identifies the material that is being loaded and checks the correspondence of the filament and print core type you are using. Coupled with our extensively tested preconfigured material profiles in Cura, the Ultimaker 3's material recognition system ensures your 3D printer is set for the highest-quality results.
- **Open filament system.** With our integrated ecosystem of reliable hardware, extensively tested materials and cutting-edge software, you are guaranteed the highest level results and optimized 3D printing experience. Yet, thanks to the Ultimaker open filament system, you have the freedom to try and test other types of existing filaments or manufacture your custom solution that would match your specific requirements.