

THE PRUSA CORE ONE IS THE NEWEST EVOLUTION STAGE OF OUR AWARD-WINNING 3D PRINTERS

Prusa 3D printers have a long and proven track record. Our machines are built using only the highest-quality components, and use open-source firmware and software for unparalleled flexibility and customization. This is also one of the reasons why there is such a huge, active community of 3D printing enthusiasts around our printers. Plus, with over 600 machines operating 24/7 in our printing farm, our printers are put through continuous, rigorous real-world testing all the time.

There’s so much to do with your 3D printer – buying it is just the beginning. Check out [Printables.com](#), Facebook groups and our YouTube videos to learn more!

PREMIUM COMPONENTS, EXCEPTIONAL RELIABILITY, BEST TECH SUPPORT

We have shipped over 500,000 3D printers to the entire world and won four consecutive “3D Printer of the Year” awards (and countless others). Even with over half a million of our printers already out in the wild, fewer than 50 units a month are sent back for hands-on maintenance. Prusa CORE One is here to carry on this legacy.



PRUSA RESEARCH

Prusa Research is a 3D printing developer and manufacturer based in Prague, Czech Republic. The company was established by Josef Prusa in 2012. What started as a small startup has expanded into a company with over 1,000 people. The Prusa i3 design quickly became the no. 1 in the world (according to 3D Hubs) and every month, Prusa Research ships over 10,000 3D printers to over 160 countries worldwide.

PRUSA CORE ONE TECHNICAL PARAMETERS	
Printer size	415×444×555 mm
Build volume	250×220×270 mm
Layer height	0.05–0.30 mm
Print surface	Magnetic heatbed with removable steel sheets
Supported materials	PLA, PETG, ABS, ASA, PC, FLEX (TPU, TPE), PA (Nylon), PP, CPE, PVB, and more
Nozzle	0.4 mm high-flow nozzle
Max. hotend temperature	290 °C
Max. chamber temperature	55 °C
Safety features	Filament sensors, Power panic, 5 high-precision thermistors, fan speed monitoring, door sensor
Advanced features	Precise stepper motors (400 step), Nexttruder with a custom breakout board, touchscreen, aluminum heatsink, all-metal hotend, advanced 360° cooling system, powered USB-C for accessories, LED lighting
Calibration	Fully automatic first-layer calibration, always-perfect first layer without any user input, fastest Mesh Bed Leveling
Connectivity	USB drive, LAN, detachable Wi-Fi (setup with an NFC tap)
Printing management system	Remote print management via Prusa Connect and Prusa App for iOS and Android. Fully unrestricted offline mode with printing from a USB drive
Additional accessories	Multi Material Upgrade 3, Chamber Camera, GPIO Board, Advanced Filtration System, Accelerometer

TRANSFORM YOUR MK4S INTO THE CORE ONE

It may sound impossible, but we did it and now so can you! Original Prusa MK4S 3D printers can be transformed into a Prusa CORE One using a Conversion Kit! The kit will be available in April 2025. Follow us on social media or visit our website at [prusa3d.com](#) for updates.



<<< MK4S CONVERSION KIT

PRUSA
RESEARCH
by JOSEF PRUSA

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PRUSA CORE ONE
Precise. Fast. Reliable.



PLUG AND PRINT

Get set up in 10 minutes! Simply unpack the printer, plug it in, run the one-time automated calibration and start printing!

ROBUST STEEL EXOSKELETON

The CORE One is not just a printer placed inside a box. In this case, the enclosure serves as an integral part of the machine, making it exceptionally sturdy thanks to premium-quality materials used.

EFFORTLESS PRINTING

Featuring the most precise sensor for the first layer calibration and smart features like One-Click Printing, the CORE One handles every step automatically. Simply upload your file and let it print.

COMPACT PRINTER, LARGE VOLUME

The compact chamber features two smart recesses that lower its volume, making the heating even faster. Despite the printer’s small footprint, it still offers a large print volume of 250×220×270 mm!

ACTIVE CHAMBER TEMPERATURE CONTROL

Print advanced materials without warping thanks to the heated chamber (up to 55 °C). At the same time, the active chamber temperature management enables flawless printing of PLA – even with the door closed!

HIGH SPEED MEETS QUALITY

Your models will turn out exactly the way they were designed, with perfect dimensional accuracy. Print super fast with factory-tuned print profiles for 200+ filaments.

FULLY ENCLOSED CORE XY 3D PRINTER WITH ACTIVE CHAMBER TEMPERATURE MANAGEMENT

FROM PLA TO ASA TO PA11 NYLON

The chamber is as compact as possible to accelerate the warm-up times and provide the ideal environment for both basic and advanced materials. This is achieved through active temperature management. No matter which filament you choose, the chamber will always provide the best possible conditions for it, so your prints can be beautiful, solid and durable.

NEXTRUDER FOR TOP QUALITY PRINTS

The CORE One uses our proven Nextruder design with a planetary gearbox and a large no-slip drive gear for precise filament control. With quick-swap hotends, a high-flow nozzle and high-performance 360° cooling, the Nextruder enables you to print super fast even with the filaments you already have and use – no need to limit your projects to a small selection of special high-speed filaments.

NATIVE MOBILE APP + IMPROVED PRUSA CONNECT

The new native iOS/Android Prusa mobile app enables you to manage your printer from anywhere. Get an overview of your 3D printers; start, pause, and stop print jobs, get push notifications, or even start printing directly from [Printables.com](https://www.printables.com)! Or, use the vastly improved Prusa Connect with fast network transfers on your desktop!



App Store



Google Play



MAKE IT YOUR OWN!

The printer is open to mods, customizations and can be expanded with official add-ons, such as an optional camera or the GPIO "hackerboard" to control external devices. And, of course, Prusa CORE One is ready for MMU3 integration for printing with up to five filaments at the same time.

SEAMLESS WORKFLOW

Choose one of the almost a million 3D models from [Printables.com](https://www.printables.com), import it automatically into PrusaSlicer and have a print-ready file in less than a minute. Then, send the file to the printer over network and start a print remotely while you monitor everything with an optional camera inside the enclosure.

IT WILL FIT RIGHT IN!

The compact footprint of the CORE One makes it the best choice when you need to save space or build a massive print farm for the rapid production of hundreds of finished products. You can place the printers next to each other, the door opens to full 180° and you can even flip the hinges. We already use the CORE One on our own 600+ 3D printer farm!

MADE TO LAST

The CORE One requires only basic maintenance from time to time. And if a component eventually wears out, you can easily replace it using just a standard screwdriver. This also makes adding accessories or customizations a breeze!

WHAT WE ARE PROUD OF:

Getting started with 3D printing has never been easier. Whether you're a hobbyist or a professional, with the CORE One, you will start printing within 10 minutes from taking the printer out of the box. Run a one-time calibration, load a filament and print your first object with a single click!

EXCEPTIONAL PRINT QUALITY AND RELIABILITY

The enclosed chamber makes the CORE One the perfect choice for advanced materials, as it eliminates warping and improves layer adhesion for even more durable prints. You can print the popular PLA with the door closed thanks to active temperature management.

MANUFACTURED IN EU & USA

Designed and built in Prague, Czech Republic, the CORE One uses as many locally sourced parts as possible. And in the USA, our dedicated team at Printed Solid manufactures both our printers and Prusament filaments with the same love and attention to detail, and they also operate a dedicated repair center!

LONG TERM SUPPORT AND UPDATES

We publish new upgrades for our printers for years after release, bringing new, often major features that transform the way you print. When a new model arrives, it's not the end of the line for the old one – we offer comprehensive upgrade packages so you can transform your old printer into a brand new one! Yes, you can even convert the MK4S to CORE One!

100% SECURE AND OPEN-SOURCE

The Original Prusa 3D printers were born from open-source roots, and we are still faithful to this heritage. Plus, you don't have to connect the CORE One to the network – not even once, and you can still enjoy the full experience without any drawbacks. The printer can be configured and operated offline, including slicing and installation of firmware updates. The Wi-Fi module can be easily unplugged for environments with the highest level of security. We have published a comprehensive overview of all our open-source efforts at prusa.io/open-source.

INDUSTRY-LEADING 24/7 SUPPORT IN 7 LANGUAGES

Our tech support is often praised for its speed and quality. We offer 24/7 support in seven languages. You can also check the extensive Knowledge Base full of useful information, watch tutorial videos and read blog articles covering all aspects of 3D printing.