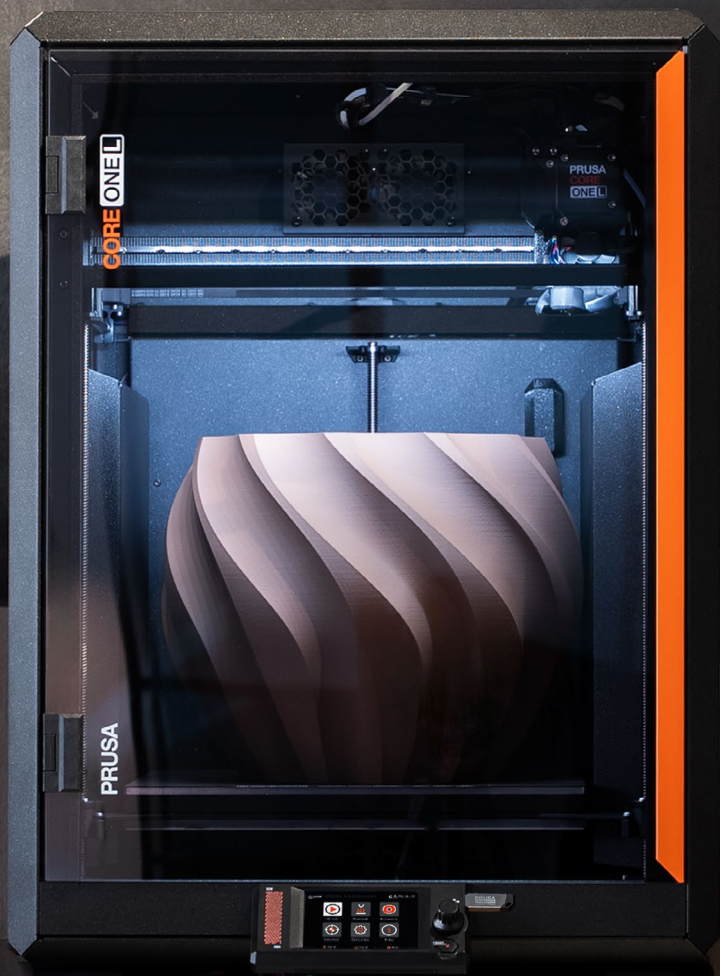


PRUSA CORE ONE L



REVIEW GUIDE





PRUSA CORE ONE L

THINK BIG. PRINT BIGGER.

The Prusa CORE One L is our **new large-format enclosed 3D printer**. It is the larger sibling of the proven Prusa CORE One, which quickly found its way to workshops and businesses in the entire world. Thanks to its future-proofed design, the CORE One became not just a reliable tool but also a foundation.

This new addition to the family is designed to live alongside the CORE One. It delivers **200% of the print volume with only a 10% larger footprint**, and offers high print precision and the robustness you expect from a Prusa printer. Thanks to its enhanced chamber temperature management and, crucially, **a brand new convection AC heatbed**, it handles large-scale prints from any material with consistent quality and the highest degree of reliability.

The CORE One L is for every engineer who got frustrated prototyping large parts in pieces, every prop maker who wants to print a helmet in one go, and pretty much every creator who wants to get the most out of advanced materials. It's the perfect choice for both workshops and businesses. **Everything is pre-configured and pre-calibrated from the factory.**

Simply unpack & print!



The Prusa CORE One L was designed in Prague, Czech Republic, in the heart of the European Union. This printer is being manufactured in both Prague and Delaware, USA. It is our first printer release since we received our ISO certifications.



WHAT'S IN THE BOX?

- > Prusa CORE One L 3D printer
- > High-flow nozzle (installed)
- > Additional hardened nozzle
- > Satin print sheet
- > 1080p camera with night vision mode
- > Free Prusa Academy course: CORE One L (digital)
- > 70-page 3D printing handbook

BIGGER PRINT VOLUME, MORE VERSATILITY

The large print volume, new AC convection heatbed, heated chamber (up to 60 °C) for advanced materials, open ecosystem, robust security, and Prusa's outstanding approach to longevity, repairability, support, and 24/7 operation – this means one thing: **if you're looking for a versatile 3D printer that will work out of the box for years to come, the CORE One L ticks all the boxes.**

This machine is especially valuable for those who want to **get the most out of advanced materials** and create large wear-resistant prints able to withstand UV rays, chemicals, and more. The Prusa CORE One L easily tackles ABS, polycarbonates, flexible TPU, and even our new, groundbreaking ESD-safe filament meant for use in space. But at the same time, it's the most approachable printer we have ever made. No tinkering, no tweaking, no calibration to go through.

The CORE One L is the perfect solution for printing 24/7. For this purpose, it's equipped with a removable 1080p camera with IR light, so you can easily track your printers even at night, in complete darkness. Thanks to its compact dimensions, this machine will fit in your print farm without any issues.



PRUSA CORE ONE

THE FOUNDATION FOR THE CORE ONE L

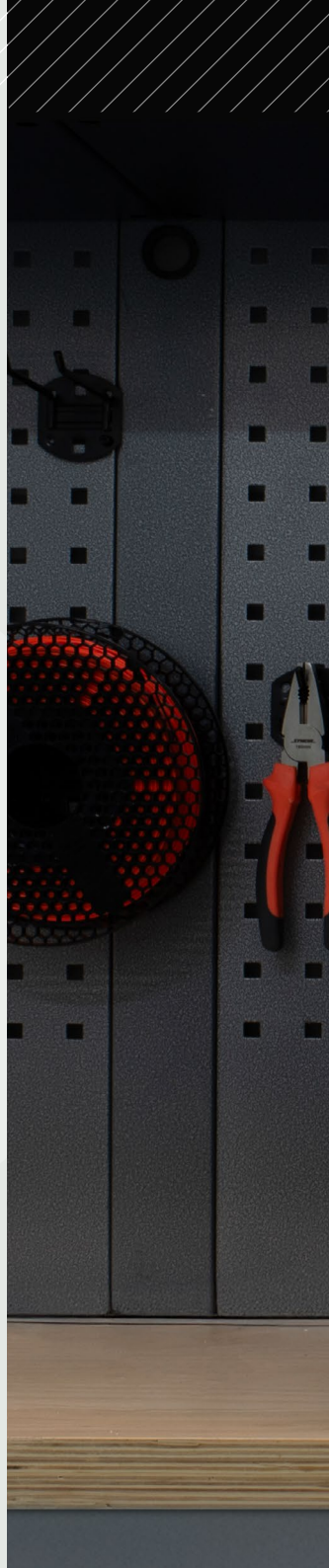
We've been working on CoreXY 3D printers for years – the Prusa Pro AFS unveiled at EXPO 2020 Dubai uses CoreXY machines. Then, of course, there is the Prusa XL, combining a large print volume with a super-fast and efficient toolchanger. The Prusa CORE One was next in line: it started shipping in January 2025 and came with a sturdy exoskeleton design and unparalleled backward compatibility, including conversion and assembly kits.

We poured all our knowledge and experience into the CORE One. No part of it is just for design – everything has its purpose. The majority of materials used are easily recyclable indefinitely, and they will last a lifetime. Laser-cut steel profiles, incredibly precise manufacturing method (with <0.1 mm tolerances), and the CoreXY gantry made from a single piece of solid steel are the key components of its robust exoskeleton.

Outstanding print quality, reliability, easy maintenance, active chamber temperature management, 360° cooling, and focus on security paved the way for the CORE One to not only workshops but also businesses around the world – including Volkswagen, NASA, and many others.



reddot winner 2025



*Back then, we said: "There is also another great advantage of the design, it is easily scalable – allowing us to be incredibly nimble in future projects."
And the CORE One L is the perfect proof.*



5 BEST THINGS ABOUT THE CORE ONE L

1. ONLY 10% LARGER, TWICE THE PRINT VOLUME! **FITS ON A TABLE, BUILD VOLUME ~30 LITERS / 1 CU FT**

The print volume of the CORE One L is 300×300×330 mm. That's 200% of the volume of the original CORE One (29,700 cm³ versus 14,850 cm³). However, the CORE One L is just 10% larger, so it offers the perfect ratio of a compact external footprint to a massive space for your prints. And despite its size, it's lighter than the CORE One.

2. INTRODUCING OUR NEW AC HEATBED **WITH <2 °C VARIANCE ACROSS 99% OF THE SURFACE**

Our brand new AC convection heatbed, precision-milled from a thick block of aluminum and equipped with a dual-loop heating element, achieves a temperature variance of less than ± 2 °C across 99% of the surface. This design virtually eliminates the corner warping that plagues large-format prints, so you don't have to worry about correct model placement – there are no unevenly heated spots or cold corners!

3. SMART TEMPERATURE MANAGEMENT **60 °C CHAMBER, OPTIONAL HVAC AND FILTRATION**

This printer intelligently manages the chamber temperature to suit any material, all while the door remains closed for consistency. When printing with low-temp materials, the top vent automatically opens and rear fans circulate air to keep things cool. Switch to advanced materials, and the vent seals shut while two fans under the heatbed quickly bring the chamber to the perfect temperature for optimal results.



4. QUALITY HIGH SPEED PRINTING WITH YOUR MATERIALS, NOT JUST OURS

The print head includes an integrated accelerometer, allowing for additional calibrations like Phase Stepping, which makes the printer quiet even at high speeds. Input Shaper is calibrated for maximum print quality. And with our new PrusaSlicer release featuring the “Consistent Surface” option, your prints will look better than ever– no more VFAs!

5. PRE-CALIBRATED, READY TO PRINT THE BEST SETUP IS NO SETUP

The CORE One L is built on a zero-setup philosophy. Every machine is fully calibrated at our factory and is ready to print the moment you take it out of the box. Just snap the display in place, plug it in, and you can be watching your first model print in a matter of minutes. No need to go through any calibrations.

DETAILS THAT MATTER

1. **The top vent grille automatically opens or closes** using a lever on the extruder, eliminating the need for manual adjustment when changing materials.
2. **The 1080p Buddy3D camera with night vision** is included by default, allowing you to watch your model materialize layer by layer.
3. **Everything is pre-calibrated from the factory** (including Phase Stepping for quiet printing and Input Shaper). The accelerometer is now conveniently embedded in the extruder.
4. **An abrasive-resistant (hardened) nozzle is included in the box**, allowing you to print with advanced materials – not just polycarbonates, but also filled filaments or glow-in-the-dark materials.
5. **A true high-flow nozzle is installed by default** – compatible with every filament on the market, not just specialized high-flow variants.
6. **A new light strip under the heatbed**, featuring 20 programmable LEDs, allows you to see the current print status from a distance.
7. **Offline-first, connectivity optional** - you are never forced into registrations, apps, or cloud services. You don't need to connect the printer to the internet, not even once. You can even disconnect the Wi-Fi module. Our rich ecosystem is open and fully optional.



2.

1.



7.



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4.





Left to right: Prusa CORE One, Prusa CORE One L, Original Prusa MK4S

TRULY LARGE PRINTS

The CORE One L's print volume is 300×300×330 mm, and the chamber reaches up to 60 °C. You have everything you need to print large functional parts from advanced materials in a single piece. Create architectural models for work, durable props, jigs, fixtures, or produce large sections of cosplay, like helmets or bigger pieces of armor.

But to give you a clearer idea of what double the print volume really means compared to the CORE One, you can check the photo at the top of the page – a side-by-side comparison of the same model printed on three of our machines. From left to right: CORE One, CORE One L, MK4S.



MORE THAN A SCALED-UP VERSION

Our goal was straightforward on paper: deliver a massive increase in print volume without building a monster that needs its own room and a forklift to move. The engineering challenge is that scaling things up almost always makes them heavier – a compromise we weren't willing to make. The CORE One's solid, laser-cut steel exoskeleton was non-negotiable, so with that locked in, we started a hunt for every single gram we could shave off elsewhere without sacrificing its sturdy design.

By switching to lightweight aluminum side panels and completely redesigning the bottom section, the CORE One L is only 10% larger than its predecessor, yet half a kilogram lighter. The large 300×300 heatbed fills the chamber perfectly with no space to spare, and the printer is still an absolute tank, built to survive the chaos of a busy workshop running 24/7 without breaking a sweat. And it will still look great on an engineer's workdesk.



THE HEAT IS ON!

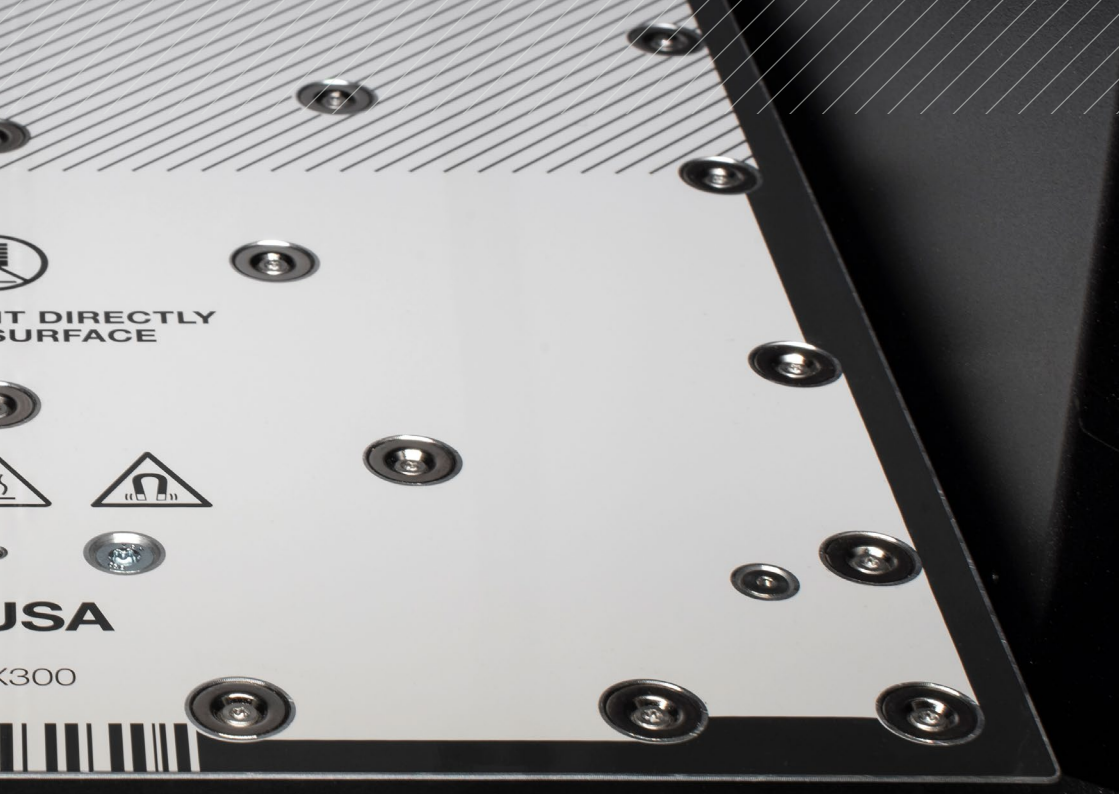
One thing we could not scale was our proven 24V heatbed. When we decided to go bigger, we had to develop a brand-new heatbed, one of the most critical innovations in the CORE One L. And it has a couple of tricks up its sleeve.

ENGINEERED FOR EDGE-TO-EDGE PRINTING

We designed it to solve one of the biggest problems in large-format printing: uneven heating and cold corners. When it comes to perfect heat distribution, nothing can beat a solid chunk of aluminum – and this is exactly what we used.

It's a thick block of cast metal with a dual-loop heater, delivering uniform heat across the entire surface. No colder spots causing parts of your models to warp and lift, no need to look for the best placement of your models – anywhere is perfect. Plus, it heats up 25% faster.

With the CORE One L, you can actually print from edge to edge.



CONVECTION HEATING

But we didn't stop there. For the first time on a Prusa printer, we're also using the underside of the heatbed for active chamber heating. We've mounted a pair of fans for forced convection; they draw air from the chamber and push it across the massive, hot surface of the heatbed's underside. Two specially designed air deflectors then redirect this concentrated stream of hot air, bringing the entire chamber up to a stable 60 °C quickly and efficiently.

This stable, heated environment is the key to printing high-performance materials like ABS, ASA, Nylon, and Polycarbonate with total confidence, which is why we include a hardened nozzle right in the box. And to make it even smarter, the printer automatically opens and closes the top ventilation grille – one more process we've automated so you don't have to think about it.

FULL HEATBED POWER, NO 110V COMPROMISE

The CORE One L's heatbed is a work of technological art, and nothing proves this better than its solution for handling the different voltages found around the world. Typically, manufacturers produce different components for 110V and 230V regions, leading to inconsistent heat-up times and performance.

Our heatbed eliminates this compromise. It's our first 230V design, but it's engineered to be just as powerful at 110V. A dedicated control unit automatically tests the mains voltage and instantly reconfigures its two internal heating elements – running them in series for 230V or parallel for 110V.

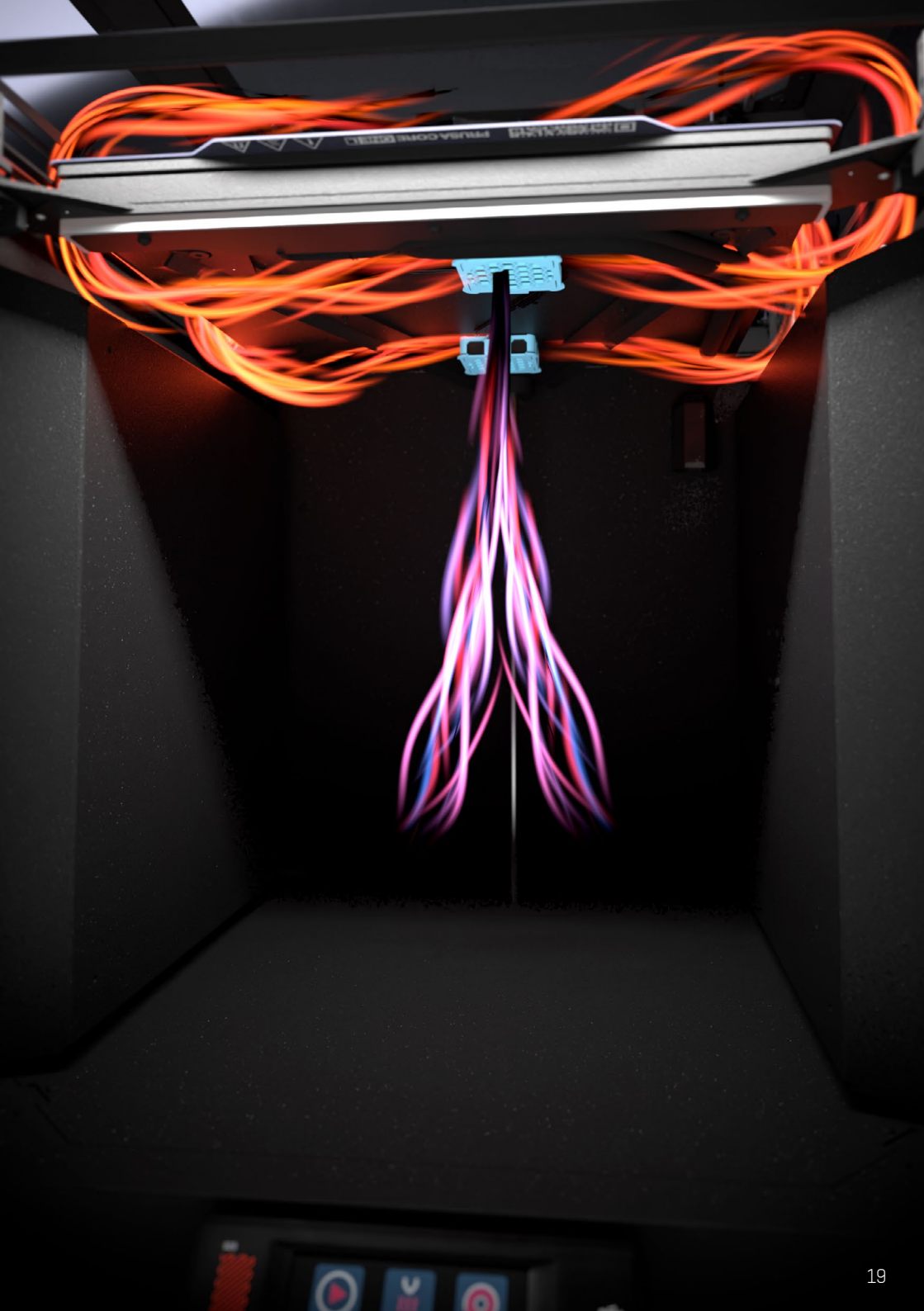
It's an elegant solution at the component level, guaranteeing every user gets the exact same fast, powerful, and consistent heatbed performance, no matter where they plug it in.

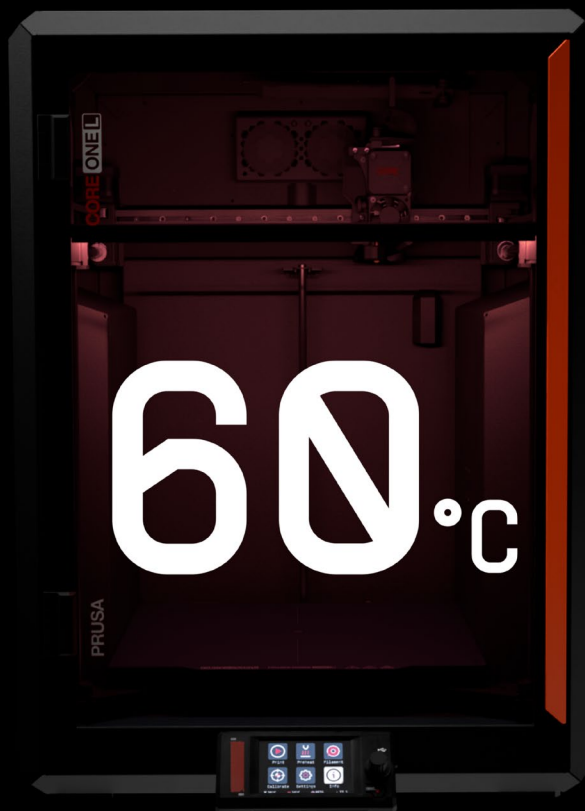
SAFETY MATTERS

We've implemented a multi-layered AC safety architecture, central to the printer's design. The system actively monitors for fault currents – similar to a residential RCD – and will immediately cut power if a leak is detected. This is backed by a redundant switching design using both a relay and a TRIAC. If one switching component fails, the other provides a hardware fail-safe to disconnect the circuit. This in-depth approach is physically reinforced by a shielded cable for the AC heatbed, providing an additional layer of robust protection.

Our power management is now significantly more intelligent. Instead of a simple binary check, it provides comprehensive power monitoring by analyzing the full voltage waveform in real-time. This allows the printer to automatically distinguish between 110V and 230V grids and intelligently configure the heatbed for consistent performance. This detailed analysis also enables the printer to filter out minor grid fluctuations, virtually eliminating false power-loss triggers and boosting print reliability.

This entire electrical system is built on a modern, robust foundation. The entire AC power section is designed as a modular, field-replaceable unit, simplifying diagnostics and maintenance for the system's most critical components.





CREATING THE BEST PRINT ENVIRONMENT FOR YOUR PRINTS

The CORE One L is a versatile work tool compatible with hundreds of different filaments. From rapid prototypes in PLA, to functional components in PETG, all the way to durable products made from PC, ASA, Nylon, or TPU. Furthermore, a physical switch near the filament insertion point allows for easier loading of flexible materials without the risk of jamming.



AUTOMATED VENTILATION GRILLE

The larger printer dimensions gave us enough headroom not only for larger prints, but also to integrate a very convenient feature: based on the material you use for your print, the Nextruder automatically opens or closes the top vent grille for optimal performance. Closed vent for high-temp materials, open vent for printing PLA and PETG with the front door closed.

HEATBED FANS

The new high-performance heatbed serves as an active heating element – it has plenty of power! So we placed two fans on its underside to help distribute heat evenly throughout the chamber, which heats up to 60 °C easily. You can print durable objects from advanced materials with total confidence.



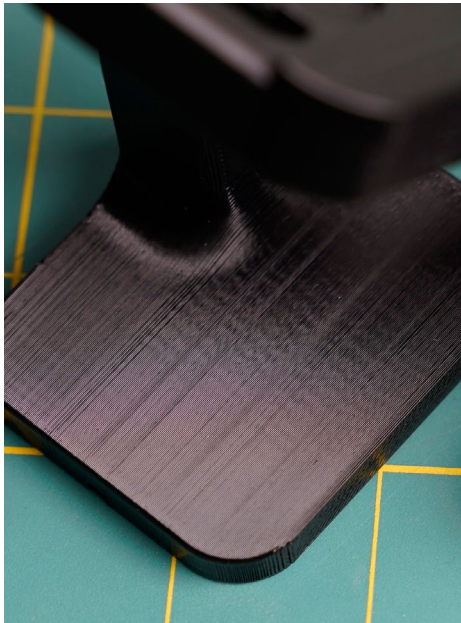
UNCOMPROMISING PRECISION AND QUALITY

WHAT YOU DESIGN IS WHAT YOU GET

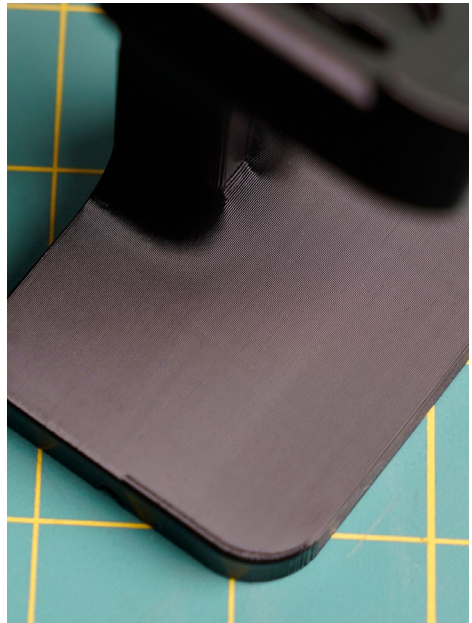
Thanks to its robust CoreXY kinematics and an extruder with 360° cooling, the CORE One L can handle extreme 75° overhangs, which simplifies work and saves filament that would otherwise be required for printing supports. Its dimensional accuracy, in turn, guarantees that the prints will match the original digital models and fit with any other components and parts.

QUALITY FIRST

Our printers were always focused on delivering high-quality, precise prints. But in the past couple of months, we have been really obsessed with print quality. We published extensive insights into our fight against VFAs (Vertical Fine Artifacts), and we achieved convincing results through several innovations. We have virtually eliminated VFAs and increased print quality noticeably on our machines. And we poured all of this research into the CORE One L.



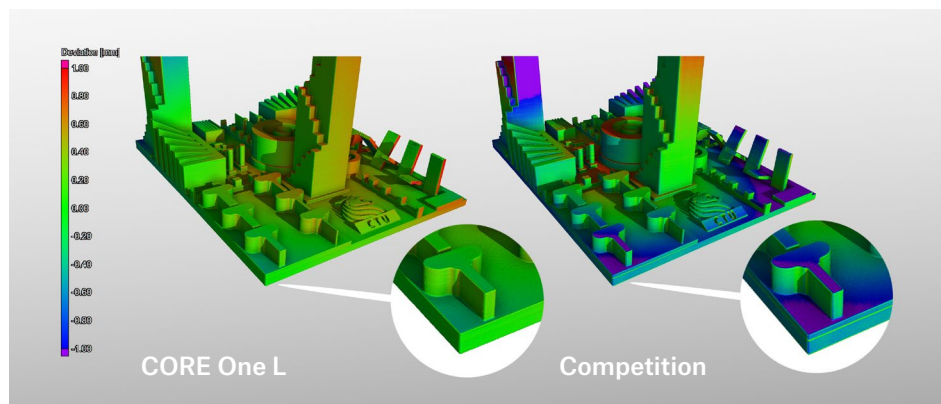
Consistent Surface OFF



Consistent Surface ON

ACHIEVE PRODUCTION-QUALITY SURFACE FINISH

The new PrusaSlicer feature called “Consistent Surfaces” delivers exactly what it promises. With optimized path planning, adjusted speeds, and more improvements, our printers now deliver unparalleled surface quality. Your printed objects will look so good, you can easily use them as final products and skip the lengthy and expensive injection molding process.



PERFECT DIMENSIONAL ACCURACY

Every engineer, every maker, or simply everyone who ever needed to create something consisting of multiple parts understands how crucial dimensional accuracy is. We have proved it over and over using state-of-the-art CT scans that our machines deliver the perfect dimensional accuracy – your models will turn out just the way you designed them!



HIGHLY OPTIMIZED ORGANIC SUPPORTS

Supports are annoying. It's an extra material that goes to waste, and sometimes supports can be a real pain to remove. The CORE One L can print even 75° overhangs, so you can use fewer supports. And for those crucial places, you can use our highly effective organic supports: reliable, material-efficient, and, above all, super easy to remove. Soluble supports are great, but this is the next best thing.



SOLID, DURABLE PRINTS AT HIGH SPEED

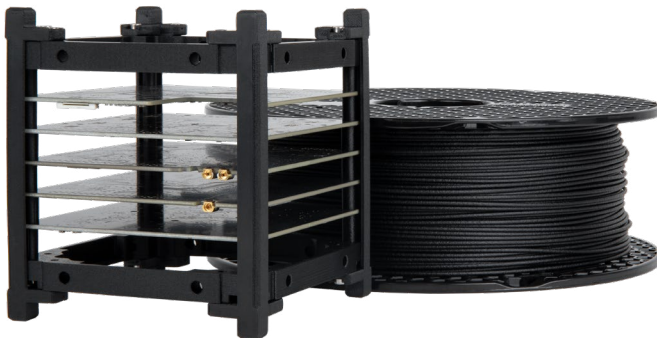
We will happily sacrifice a few minutes of extra printing time to deliver a result that is solid, sturdy and ready to use. There is no use in chasing pointless records if the print barely holds together. The 60 °C print chamber and internally-tuned print profiles ensure that every model will have the best layer adhesion – and the best structural integrity.

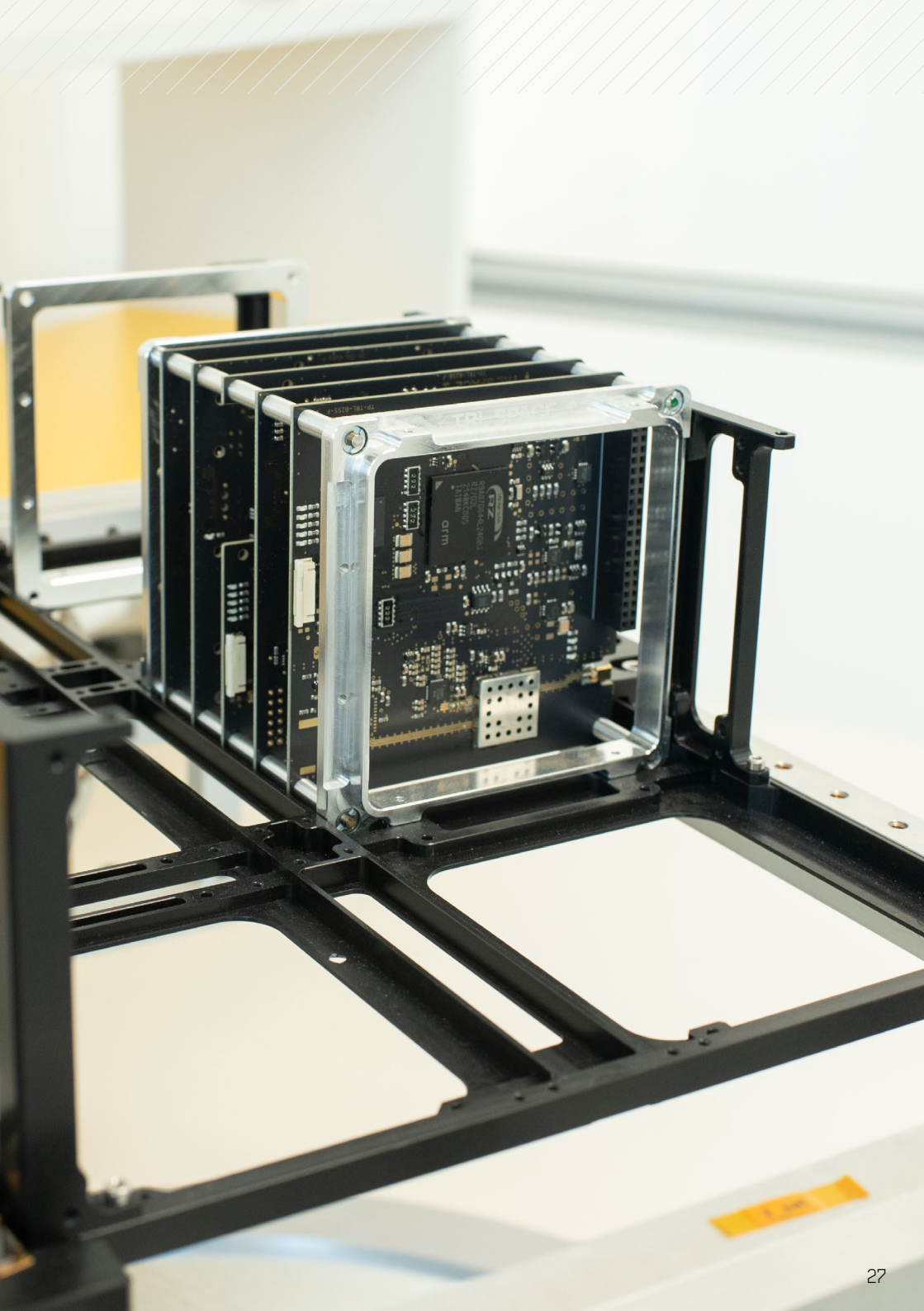
With the CORE One L, you don't have to limit your projects by sticking to a small selection of specialized "high-speed" filaments. Use any PLA, PETG, or any of the advanced materials. Thanks to its robust CoreXY kinematics, high-flow nozzle, Input Shaper, and factory-tuned print profiles for 200+ filaments, the CORE One L is just as fast as the CORE One.

THE 3D PRINTER FOR YOUR NEXT PROJECT

The way the Prusa CORE One L is designed is the absolute key to delivering your prints exactly how you envisioned them. Most printers on the market require you to open the door for printing low-temp materials like PLA or PETG. This is not the case with the CORE One L. It always creates the best possible environment for your prints – all on its own. You just have to provide the print file.

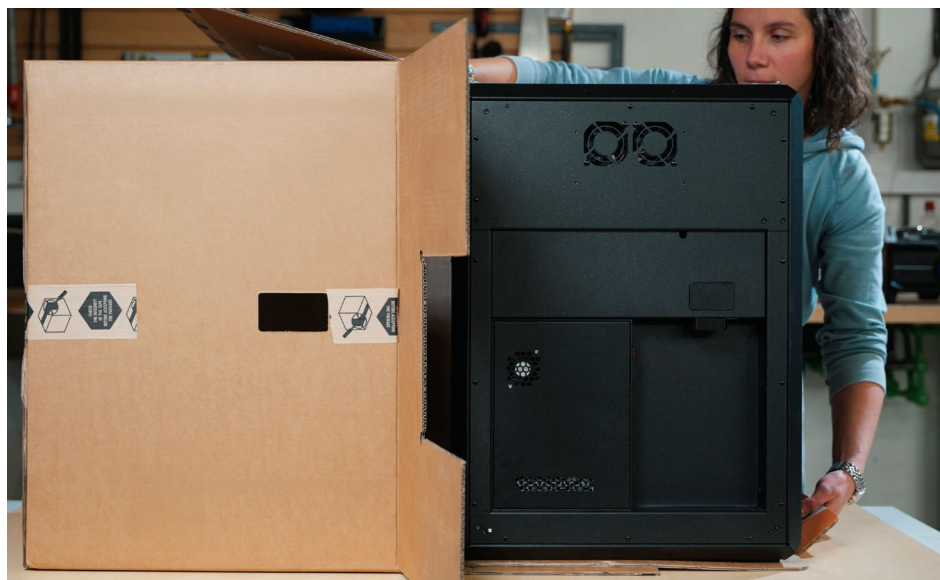
- **Parts exposed to UV and harsh sunlight from ABS or ASA.**
- **Quickly iterate jigs and fixtures from PETG.**
- **For extreme wear-resistance, print even huge parts from flexible TPU.**
- **Polycarbonate filled with carbon fibers? It's so tough it even sounds like porcelain.**
- **Chemical-resistant prints. ESD safe space filament.**
- **PLA and filled filaments for prototypes and advanced hobby projects.**





3D PRINTING HAS NEVER BEEN MORE ACCESSIBLE

The CORE One L arrives at your door assembled and calibrated. This means that when you unbox it, there are only a few simple steps standing between you and printing your first model. Anyone can get the CORE One L up and running in minutes – whether you have previous experience or are just starting your 3D printing journey.



PRE-CALIBRATED

ZERO SETUP MACHINE

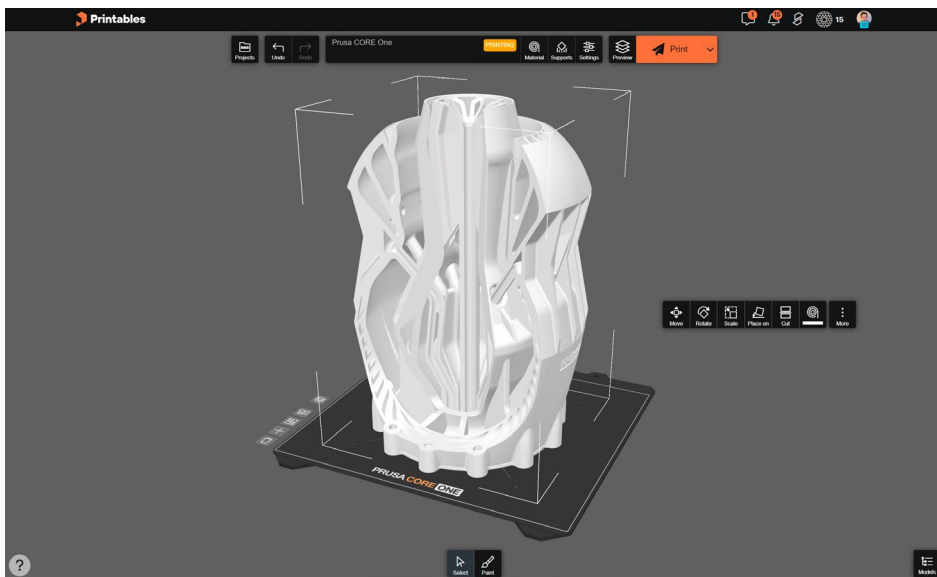
Every CORE One L leaving our factory is thoroughly tested and individually calibrated. Optimal belt tension, Phase Stepping for quiet operation, Input Shaper for top print quality at high speeds. It's all there. When you unpack your printer, you simply click the display into place, choose a language and you're ready to print. This makes setting up a print farm or onboarding new employees a breeze.

EASYPRINT

THE PERFECT SLICER ANYWHERE YOU GO

EasyPrint is our latest step in our journey to make 3D printing accessible for everyone. This is a real slicer, capable of turning 3D models into print files of your choice, not just a tool for forwarding G-codes to your printer.

Imagine this: you're on your way to work and you receive a 3D model via e-mail. You can instantly import it into EasyPrint, prepare it for printing and send it to your printer – all from your phone. When you get to the office, the printer is already half-way through the print.



PRUSA ACADEMY COURSE

GET TO KNOW YOUR PRINTER INSIDE OUT

With a print farm of over 600 3D printers and non-stop operation, we know a lot about onboarding new operators. And there are still many people who have heard about 3D printing but consider it too complex. This is why we prepared a Prusa Academy course on the Prusa CORE One L – a detailed, informative guide that will teach you everything you need to know about your new machine.



THIS IS FOR THOSE WHO MEAN BUSINESS

ACCELERATE YOUR PRODUCTION

Every aspect of the Prusa CORE One L has been designed with the same philosophy: effortless printing of anything you can think of.

No matter whether you're a company looking for new machines for your engineers, a 3D print farm owner looking to expand the operation, or an enthusiast looking for a large-format machine to return to all the shelved projects that were too big for smaller printers – the CORE One L covers all the bases. Unpack, plug in, start.

Automatic bed levelling, pre-calibrated values for optimal performance, slicing via EasyPrint, remote management and control via Prusa Connect – these are all incredibly powerful tools allowing you to start printing immediately and with absolute confidence. Plus, you can always track your running costs in Prusa Connect, enabling you to keep a close eye on the return on investment.

The path from SolidWorks, Autodesk Fusion, or Blender to an actual 3D print cannot be more straightforward. PrusaSlicer accepts a wide range of digital files, so you can print your design in no time!

PRINT FARM: ITS NATURAL HABITAT

	Space for shelf: 500 cm horizontal × 300 cm vertical		
Printer	MK4S	CORE One	CORE One L
Number of machines in total	40	36	32
Total print volume	0.46 m³	0.53 m³	0.95 m³

It's more than twice the yield of a 40-machine print farm consisting of MK4S 3D printers. In other words: 16 Prusa CORE One L 3D printers have the same volumetric output as 40 Prusa MK4S 3D printers. One of the key elements for a print farm's efficiency is minimum downtime. Every time a printer finishes, you need an operator to harvest the parts, clean the bed, and start the next job. A large print area means fewer interventions.

The table below considers 10 minutes of downtime between prints – waiting for cooldown, harvesting, surface treatment, nozzle check, and starting the next print.

	40× MK4S	36× CORE One	32× CORE One L
Parts per printer	80	80	117
Operator Actions per Farm (weekly)	200	180	96
Total Time on Operator Actions (weekly)	33 hours	30 hours	16 hours

WANT TO STAY OFFLINE? OF COURSE!

Although you can use various connectivity options and integrate your printer in our vast ecosystem, it is all completely optional and you are not forced into using any of it. Disconnect the Wi-Fi module, stay offline even during the initial setup, use any slicer and any material you want. This is your 3D printer, so you decide how to use it.

BUILT TO LAST, IN EVERY ASPECT

We build our printers with the idea that you will want to use them for many years to come, and the CORE One L is no exception. We've designed not only the exoskeleton and the quality of the individual components with this in mind, but we also extend this approach to our service, support, and your right to repair. No part of the printer is glued or permanently welded – everything can be disassembled with standard tools, and all spare parts will be available for at least 5 years.

Furthermore, our technical support is available 24/7 with real experienced technicians, not AI-driven bots. You can also be sure of long-term firmware updates and planned expansions.

SECURITY FIRST

Security is something we always took seriously. Our 32-bit embedded platform houses our internally developed open-source firmware – this gives us total control over both hardware and software. And you get the unique opportunity to inspect our code at GitHub, so you can check that our printers really do not share any data without your permission.

The same goes for the camera: it runs specialized firmware developed under our strict supervision so that your privacy is protected.

Thanks to its focus on robust security and offline use, it's the ideal tool for prototyping centers, government agencies, and critical infrastructure.

MANUFACTURED IN THE EU AND USA

Prusa Research is based in Prague, Czech Republic, in the heart of the European Union. We do our best to source our parts locally and go to great lengths to be as independent as possible.

One of the best examples is our own PCB production line – all our electronics are made directly in our Prague factory, so we have complete control of this crucial part of our printers. Plus, our firmware is open source, so you can always inspect the code.

We have opened a massive new factory for filament production – a mere 10-minute drive from our HQ in Prague, and also a brand new operation in Delaware, USA.



Production at Printed Solid

PRUSA RESEARCH – ISO CERTIFIED



ISO 9001:2015 – QUALITY MANAGEMENT SYSTEM

ISO 9001 means the company is serious about keeping you happy and delivering quality.

- > Consistent level of quality in current and future products
- > Focus on continual improvement
- > Meeting customer requirements by listening to feedback



ISO 14001:2015 (ENVIRONMENTAL MANAGEMENT SYSTEM)

ISO 14001 means you are supporting a business that is actively working to reduce its environmental footprint. This certification also signals that this is not just “greenwashing”, but an actual audited system is in place to back up the commitment.



ISO 45001:2018 (OCCUPATIONAL HEALTH & SAFETY)

ISO 45001 means you are doing business with an ethical company that takes care of its employees, which leads to a more reliable and positive customer experience.

PRUSA CORE ONE L: CRITICAL INFRASTRUCTURE EDITION

AIR-GAPPED 3D PRINTER FOR MAXIMUM SECURITY

3D printing has evolved far beyond simple prototyping to become an indispensable tool in advanced manufacturing, vital for aerospace, defense, and critical infrastructure. Government agencies and high-tech industries now rely on additive manufacturing to produce custom tooling, rapid-response spare parts, and even end-use components for sensitive applications. This integration, however, introduces significant security vulnerabilities because many modern printers are network-dependent, relying on cloud-based services for slicing and file management.

This connectivity can create a critical attack vector. When proprietary or classified CAD files – such as designs for restricted military hardware or unique infrastructure components – are uploaded to a cloud service, control over that data is effectively ceded. Our printers always had removable radios and cameras for secure development and critical infrastructure. We already offer air-gapped XLs on request for businesses, and starting with the CORE One L, we are making such a version for critical infrastructure generally available.

It uses a custom-manufactured mainboard without the Wi-Fi connector and related circuitry.

We also offer an encrypted, certified USB drive compatible with our platform, and we provide letters of volatility.



OPEN ECOSYSTEM

Our system is completely open, and you are free to use any materials or tools you see fit. We will never force you to use a specific software or filament – there are no vendor locks or walled gardens. **You own the hardware you buy, not just a license to use it.**

If you choose to use our vast and connected ecosystem, or at least a part of it, you can make your work easier.



PRINTABLES.COM

You don't have to be a designer to use a 3D printer! Our database of hundreds of thousands of free 3D models is just a click away. [Printables.com](https://www.printables.com) is actively developed and ever-growing, so go ahead and get amazing prints by talented creators and even official printable accessories for a variety of popular products thanks to Printables Brands.



PRUSASLICER

The best slicer out there!
An open-source, feature-rich, frequently updated tool that contains everything you need to export the perfect print files for your 3D printer. All official printer and material profiles (over 200 in total) are created and tested in-house to ensure the best possible printing experience! PrusaSlicer is based on Slic3r by Alessandro Ranellucci.

PRUSA CONNECT

PRUSA CONNECT

Our internally developed, secure remote print management software is here to simplify your printing experience. It's fully integrated with PrusaSlicer and enables you to quickly send your print files to the CORE One L, schedule tasks, and monitor your machine remotely. It's an incredibly powerful tool with new features being added all the time.



PRUSA APP

The new streamlined Prusa App gives you a complete overview of your printer no matter where you are. With no ads, points or other bloatware, the app is easy to navigate and use. The app also has full Printables integration and our feature-packed online slicer – EasyPrint!



PRUSAMENT

PRUSAMENT

We were not satisfied with the quality of filaments on the market, so we started manufacturing our own! Prusament offers top-class manufacturing precision, perfect color consistency and a wide range of materials from PLA to PCCF. Every Prusament material has an in-house tested profile in PrusaSlicer.

PRUSA ACADEMY

PRUSA ACADEMY

If you want to get to know our printers inside out, you can buy them as assembly kits and build them yourself, but you can also take advantage of detailed Prusa Academy courses which will guide you through the first steps of your 3D printing journey. And then you take the next step and learn everything you need about slicing, design modelling and more!

INTRODUCING THE OPEN PRINT TAG STANDARD

Let's be honest, "smart" filament spools today are a bit of a Wild West. It feels like every manufacturer has its own proprietary, locked-down system. Many tags are just cloud-dependent IDs that stop working if your Wi-Fi is down, while others are encrypted, which feels a lot like the old 2D printer ink cartridge model. We think there's a much better way to do it.

We believe the community deserves a universal solution. As one of the world's biggest filament producers, we're proposing the Open Print Tag (OPT) standard. It's a fully open, non-proprietary method that's free for everyone to use, extend, and build upon. We're making the first move by shipping all our new Prusament spools with an OPT tag inside, aiming to set a new standard that works for everyone.

So, what makes it better? First, it's built on an offline-first principle. All the essential data (like material type, color, and key print settings) is stored directly on the tag itself. Your printer doesn't need to phone home to a cloud service just to know what filament you've loaded. It all works locally, with no vendor locks or walled gardens.

Reusability is also at the core of the idea. The OpenPrintTag is fully rewritable, so your printer can save the exact remaining filament length back to the tag after every print. No more guesswork! The circular tag reads from any orientation, is powerful enough to be read even through a 2 kg spool, and you can even scan it with your phone to pull up detailed datasheets.

More at openprinttag.org

OPTIONAL UPGRADE

OPEN PRINT TAG (OPT) SPOOLHOLDER

An OPT-enabled spoolholder will be available for the Prusa CORE One L in the near future. Simply replace the built-in spoolholder with the new optional OPT-enabled spoolholder and the printer will instantly recognize the spool you put on it. Plus, it can update the spool data in real time.

FUTURE-READY 3D PRINTER

THE ROAD AHEAD

PRINT SHEET RECOGNITION

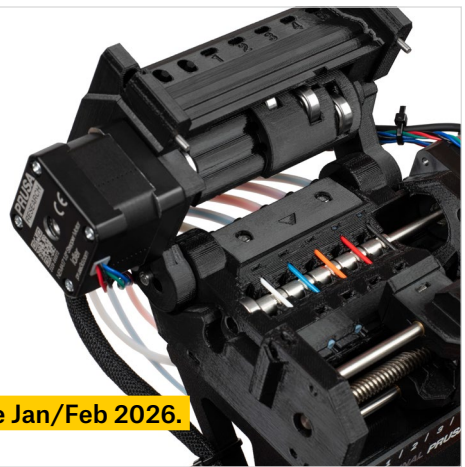
This is an upcoming feature available via a future update: each print sheet comes with a QR code, so that the camera can instantly recognize whether you are using the best print sheet for the job.

READY FOR MMU3

Print with up to 5 filaments.

Prusa CORE One L is fully compatible with the MMU3 – our fast, material-effective solution for printing with up to five filaments at the same time. Bring your dull single-color objects to life and create intricate, beautiful designs.

MMU3 for the CORE One L – available Jan/Feb 2026.



... and we always have a couple more things planned. Stay tuned!

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