

ORIGINAL PRUSA XL

CORE XY 3D PRINTER WITH A 5-HEAD TOOLCHANGER



PRUSA
RESEARCH
by JOSEF PRUSA



5-HEAD TOOLCHANGER

The XL can be upgraded up to 5 individual print heads, each driven by its own electronics board. The internally developed toolchanger uses a reliable wear-resistant system and automated tool alignment calibration ensuring millions of trouble-free tool swaps.



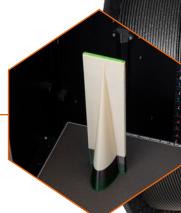
BRAND NEW NEXTRUDER

A completely redesigned extruder with a planetary gearbox and large no-slip drive gear comes with hot-swappable nozzles and a Load Cell-based system for fully automatic first-layer calibration.



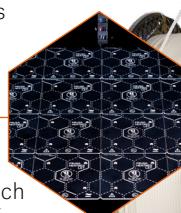
RIGID CORE XY BUILD

A sturdy aluminum extrusion frame, which makes the XL stable and rigid.



LOW-WASTE MULTI-MATERIAL PRINTING

Changing of the toolheads is extremely fast and waste material is kept to a bare minimum (when changing colours). The pressure in the nozzle is stabilized using a light and compact purge tower, so there is no waste around the printer.



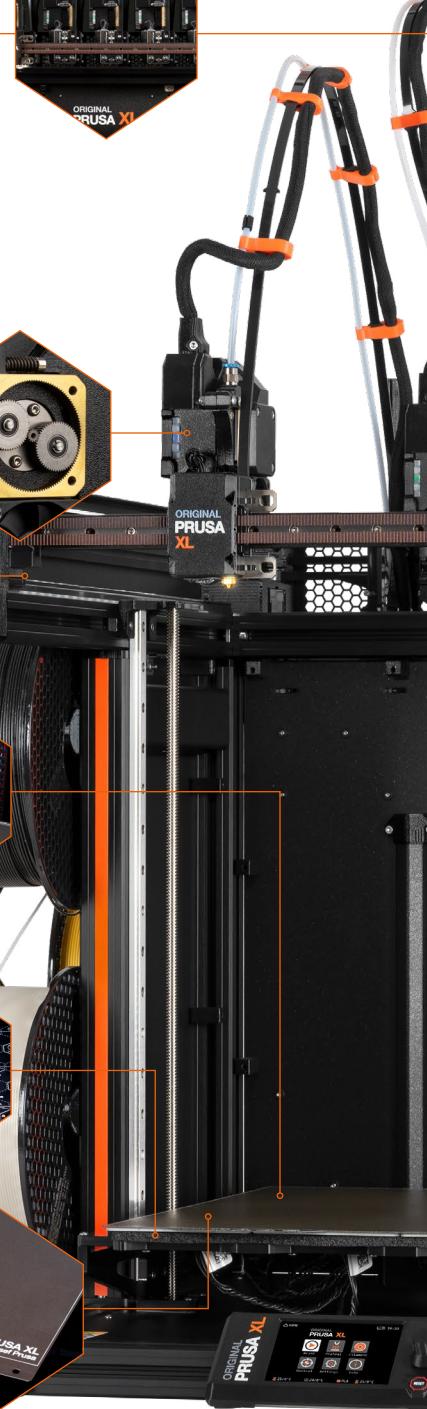
MODULAR BED SYSTEM

Instead of using a single large heatbed, which is prone to warping, the XL uses an array of smaller, individually-controlled segments. Only the necessary part of the heatbed is activated when printing smaller objects, making the XL energy-efficient and reliable.



REMOVABLE DOUBLE-SIDED SPRING STEEL SHEETS

Allow for easy maintenance and effortless print removal.



SUITABLE FOR

CONCEPT MODELS
& ARCHITECTURE



INDUSTRIAL
APPLICATIONS



RAPID
PROTOTYPING



MEDICAL
APPLICATIONS



ORIGINAL PRUSA XL TECHNICAL PARAMETERS

Printer design	Core XY
Build volume	360×360×360 mm (14.17×14.17×14.17 in)
Printer dimensions	800×800×900 mm* (31.49×31.49×35.43 in)** including side spoolholders and room for cables above the printer
Filament diameter	1.75 mm, wide range of thermoplastics supported (including, but not limited to PLA, PETG, ASA, ABS...)
Extruder	Planetary 1:10 gearbox with no-slip drive gear, Load Cell sensor
Tool Changer	with up to 5 tool heads (optional upgrade via built-in expansion port)
Bed	Segmented heatbed with 16 individually controlled segments
Print surface	Removable magnetic steel sheets with different surface finishes
Electronics	32-bit custom-made board with an expansion slot, single-cable communication with tool heads, network features, one-click printing
Mesh Bed Levelling	Load Cell-based fully automatic first layer calibration with no Live Z adjustment
Power panic	Hardware-based, single G-Code line accuracy
Ethernet connection	built-in

*Dimensions might change **Draft shield is not included

ORIGINAL PRUSA XL ENCLOSURE

The XL Enclosure is an optional accessory that encloses your Original Prusa XL 3D printer and provides a stable printing environment with increased temperatures. This makes printing from advanced materials, such as PCCF, Nylon, PP, ASA, and many others, easier as it eliminates drafts and prevents the warping of printed objects. The Enclosure also lowers printer noise and covers every moving part of your printer, increasing its safety.



Original Prusa XL Enclosure is equipped with the Advanced Filtration System (HEPA filter, 99.9% efficiency), which helps to reduce odors from certain materials and prevents the spread of ultra-fine particles (UFPS) into the air. The Enclosure comes with an additional LED strip, synchronized with your XL printer, which also serves as the printer status indication light.

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. This small start-up grew quickly and there are over 1,000 people working for Prusa Research right now. 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.

**DOWNLOAD E-BOOK:
BASICS OF
3D PRINTING**
with Josef Prusa

