PRUSA PRO HT90 TECHNICAL PARAMETERS

Print area (cylinder)	**Ø 300×400 mm**
Max nozzle temperature	**300 °C / 500 °C**
Extruder	**Swappable direct-drive print heads, quick-swap Revo nozzles 0.25 to 0.8 mm diameter, 1.75 mm filament compatible**
Cooling	**Servo-operated high-speed flap for immediate airflow changes, high-pressure turbine**
Max bed temperature	**155 °C**
Max chamber temperature	**Active heating up to 90 °C, air circulation, HEPA and carbon filters**
Maximum speed	**600 mm/s**
Maximum print speed	**250 mm/s**
Acceleration	**20,000 mm/s²**
Print surface	**Textured PEI steel sheet, PA steel sheet optionally available**
Maximum filament flow	**40 mm³/s (ABS and 0.8 mm nozzle)**
Power supply	**110V 15A / 230V 10A 50/60Hz**
Calibration	**Always-perfect first layer with Loadcell sensor, fully automatic calibration**
Electronics	**32-bit Duet control board**
Software	**Klipper control system, Input Shaper, Pressure Advance**
Connectivity	**Ethernet (RJ45), detachable Wi-Fi module, offline operation available**
Surveillance	**Built-in integrated camera and chamber lighting**
Supported materials (High Flow Print head)	**PLA, ASA, PETG, FLEX (TPU, TPE), ABS, PA, PC, PCCF, and more**
Supported materials (High Temp Print head)	**PEI (Ultem), PEEK, PEKK, PPSU, PSU, PPS, PES and more**
Additional accessories	**DryBox, industrial filament dryer**

LEARN MORE

Set up an online meeting with our team or ask for a price quote. Reach us at prusa.io/Pro-HT90 to discuss your specific needs and use cases.

PRUSA PRO

Prusa Pro is the professional division of Prusa Research, a 3D printing manufacturer based in Prague, Czech Republic. Prusa Pro develops and manufactures industrial-grade 3D printers, accessories, and software designed for a wide range of demanding applications.

PRUSA PRO HT90

ULTRA-FAST INDUSTRIAL 3D PRINTER WITH AN ACTIVELY HEATED CHAMBER

Actively heated chamber, air circulating through a HEPA filter.

Innovative rapid cooling system.

Easy setup, fully featured offline mode with an optional online management system.

Ultra-fast delivery of top-quality prints.

Quick-swap print heads, temperatures up to 500 °C.

Cylindrical print area, Ø 300 mm × 400 mm (Z height).

PRUSA RESEARCH by JOSEF PRUSA

MADE IN EU

SWAPPABLE PRINT HEADS

The print head is held in place by magnets – simply detach it from the arms and disconnect the cables from the top of the printer and replace it with a different model.

HIGH FLOW PRINT HEAD

This print head is capable of reaching 300 °C and features a 0.4 mm quick-swap Revo High Flow nozzle. The perfect choice for rapid prototyping where speed matters.

HIGH TEMP PRINT HEAD

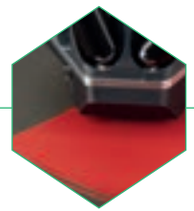
Designed for temperatures up to 500 °C and equipped with a quick-swap, abrasive-resistant, high-temperature Revo nozzle, this print head is compatible with the most demanding materials.

ACTIVELY HEATED CHAMBER

Capable of reaching up to 90 °C, the actively heated chamber of the HT90 enables printing with even the most demanding materials.

UNIQUE RAPID COOLING SYSTEM

The HT90 features an innovative servo flap that can redirect airflow to precise areas of the model within milliseconds, enabling flawless overhangs with minimal supports. At the same time, it prevents overcooling of the rest of the model, preserving the polymer's optimal mechanical properties and superior performance.



ALWAYS-PERFECT FIRST LAYER

The HT90 uses high-precision Loadcell sensors that measure the distance between the nozzle and the print sheet with exceptional accuracy. This enables the printer to automatically achieve an absolutely pristine first layer, no matter which print surface you choose.

THE ONLY 3D PRINTER AN ENGINEER NEEDS

THE MOST AFFORDABLE 3D PRINTER FOR HIGH-PERFORMANCE MATERIALS

The HT90 is designed to get the most from materials like ABS, ASA, PA and PCCF. It provides unparalleled layer adhesion and print quality, preventing warping and delamination even in large objects. It also handles high-performance materials such as PEEK, PEKK, PPS, PSU, PES, and PEI (Ultem) for small to medium-sized objects.

VERSATILE SOLUTION FOR EVEN THE MOST DEMANDING INDUSTRIES

Thanks to its support for advanced materials and high speed, the HT90 is the perfect solution for industrial applications, from automotive to aerospace to biomedical. It can easily deliver anything from quick PLA prototypes to small-to-mid-sized PEI (Ultem) 3D prints, a material extensively used in the aerospace industry.

ULTRA-FAST PRINTING MEETS DELTA KINEMATICS PRECISION

The HT90 delivers smooth, dimensionally precise prints. The direct-drive extruder's movement is precisely controlled by three coordinated arms, while printed objects remain stationary on the heated bed. Equipped with Klipper firmware and Input Shaper technology, the HT90 achieves ultra-fast speeds while maintaining top print quality across the entire cylindrical print area.

DESIGNED FOR MAXIMUM SECURITY IN ONLINE AND OFFLINE MODES

The HT90 operates in multiple modes, from full offline mode to secure cloud-based remote management. Prusa Research never collects data without consent, and all communication is SSL-encrypted and authorized to ensure the safety of your designs. The Wi-Fi module can be disconnected, and the printer remains fully operational in offline mode.