

Centauri Carbon

Easy Prints, All Ways



Body

Build Volume: 256 × 256 × 256 mm
Printing Platform Size: 260 × 262 mm
Product Size: 398 × 404 × 490 mm
Package Size: 475 × 480 × 560 mm
Net Weight: 17.5 kg
Gross Weight: 21 kg

Temperature

Ambient Temperature: 5-40 °C
Max. Heated Bed Temperature: 110 °C
Max. Nozzle Temperature: 320 °C

Sensors

Camera: Yes
Filament Run-out Sensor: Yes
Power-Loss Recovery: Yes

Software

Slicing Software: ELEGOO Slicer (Recommended)
Supported File Formats: STL, OBJ, 3MF, STP
Printing File Format: Gcode

Speed

Printing Speed: ≤ 500 mm/s
Acceleration: 20000 mm/s²

Cooling

High Speed Model Cooling Fan: Closed Loop Control
Auxiliary Part Cooling Fan: Closed Loop Control
Control Board Fan: Closed Loop Control
Chamber Temperature Regulator Fan: Closed Loop Control
Air Filter: Nano-Mineral Crystal Filters

Tool Head

Nozzle: 1
Nozzle Diameter: 0.4 mm (default)
Printing Accuracy: ± 0.1 mm
Layer Thickness: 0.1-0.4 mm (Recommended 0.2 mm)
Extruder Type: Hardened Steel Dual-Gear Extruder
Reduction Ratio: 5.2

Heated Bed

Build Plate: Double-Sided Flexible Magnetic Plate
Leveling Method: 4-Strain Gauge Automatic Leveling
Leveling Points: 121

Supported Filament

Recommended: PLA, PETG, TPU, ABS, ASA, PLA-CF
Compatible: PETG-CF, ABS-CF, ASA-CF, PET-CF, PA-CF, PET, PC, PA
Filament Diameter: 1.75 mm
Filament Cutter: Yes

Electronics

Connectivity: USB, Wi-Fi
Display: 4.3-inch Full-color Capacitive Touch Screen
Motherboard: Dual-core High-speed Silent Motherboard

Electrical Requirement

Power: 1100 W@220 V, 350 W@110 V
Voltage: 100-240 V, 50/60 Hz

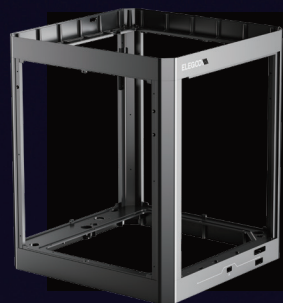
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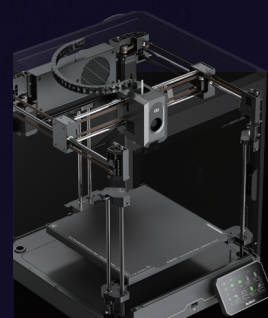
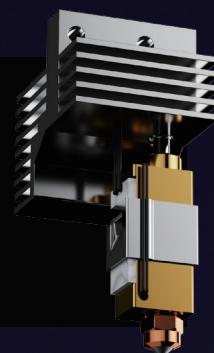


Solid Foundation For High-Speed Printing

Featuring a top frame and chassis crafted with integrated die-casting, along with four reinforced aluminum alloy pillars and stainless steel side panels.

Wide Material Capability

With the heated chamber, max 320 °C hardened steel nozzle tip, and hardened steel dual-gear extruder, the enclosed chamber enhances insulation for precise temperature control, and reduces internal stress, while improving the quality and strength of the prints.



CoreXY Kinematics

Crafted with CoreXY Kinematics, Centauri Carbon greatly enhances printing speed, accuracy, and positioning precision.

Camera For Time-Lapse

Enable the time-lapse feature before printing to capture the entire process, watch live, and record every step of your print.



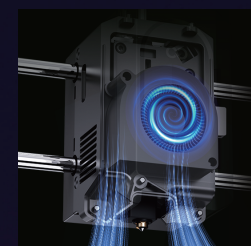
Hardened Extruder Features Filament Cutter

The hardened extruder gears enhance durability and ensure stable filament extrusion, featuring an integrated filament cutter for automatic cutting and retraction of filament.



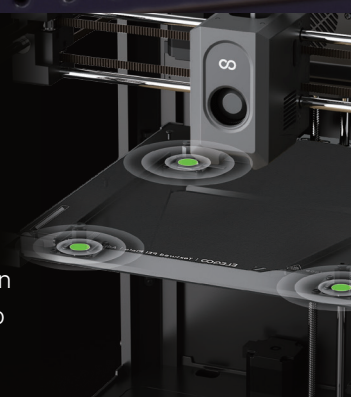
Cooling System

Equipped with high speed model cooling fan, auxiliary part cooling fan, and external enclosure cooling fan, Centauri Carbon effectively regulates chamber and model temperature to ensure details presented.



Auto-Leveling & Auto Z-Axis Compensation

Featuring 4 pressure sensors, a proprietary algorithm and automatic Z-axis compensation during printing, the design simplifies leveling to a single click.



Applications

