

Technical Data VP75 Additive Manufacturing System

General / Dimensions / Weights

Housing	Sheet metal bent parts White powder-coating Adjustable machine feet
Door	Sheet metal frame with acrylic glass cover Magnetic closure Safety switch (optional)
Additional features	integrated LED lighting
Length	800 mm
Width	800 mm
Height	2,200 mm
Weight	250 kg (empty)
Positioning System	3-axis delta Automatic three-point leveling
Manufacturing Technology	Fused Filament Fabrication (FFF)
Compressed Air	6-8 bar, dry, oil-free
Connection cable	1 m 230 V AC Schuko plug IEC 60320 16A connector
Network	Ethernet 10/100, RJ45

Temperatures

Extrusion Temperature	max. +500°C
Build Plate Temperature	max. +150°C
Build Chamber Temperature	max. +80°C

Building Capacities

Build Volume	75 liter Height: 600 mm Build plate diameter: 400 mm
Extruder head	Encapsulated high-temperature single nozzle
Build Plate	Exchangeable continuous-use PEI sheet (Ø476 mm) on vacuum table
Filament diameter	1.75±0.1mm
Minimum layer resolution	0.1mm
Positioning accuracy	±0.1mm
Approx. Tolerance	±0.2mm

Power and Electronics

Power consumption (total)	3600 W max.
Power supply unit	3600 W, 100 ... 230 V(AC) input with power plug and main switch 16 A 50/60Hz

Drives	3x 2 A stepper motor (XYZ positioning drives)
	1x 1.2 A stepper motor (extruder drive)
Hot end	24 V, 80 W integrated heating element
Build plate heating	1000 W wired silicone heating pad
Chamber heating	2000 W heating resistor
Chamber lighting	2x 4 W LED array, 6.500K
Stand-alone operating module	integrated capacitive 10" touchscreen controller
Integrated computer	Quad core 1GHz CPU

Sensors

Limit switch axes vertical position	inductive proximity endstops
Temperature sensors	800 °C thermocouple

Compressed Air Supply

Throughput	80 l/min
Condition	6-8 bar, dry, oil-free

Ambient conditions

Operating temperature	+18°C ... +27°C
Storage temperature	+5°C ... +35°C
Rel. air humidity	max. 70%
Setup site	no excessive formation of dust (e.g. near woodworks, CNC machining centers)