

	OBSIDIAN XL
Max Build Volume	310 x 310 x 340 mm 12.2 x 12.2 x 13.39 In
Max Workspace Volume	358 x 360 x 350 mm 14.1 x 14.17 x 13.78 In
Layer Height (Default 0.60mm Nozzle)	0.15 – 0.45 mm
Max Travel Speed	500 mm/s @ 5000 mm/s ²
Max HeatBed Temp.	110 °C (230 °F)
Max Ambient Operating Temp.	65 °C (149 °F)
Print Surface	Magnetic PEI Textured Spring Steel Sheet
Display	7-Inch Full Color Capacitive Touchscreen
Number of Materials (simultaneously)	Up to 4
Supported Materials	Any thermoplastic including abrasives*
Filament Sensor	Yes (Mechanical Switch)
Power Recovery	Yes (Voltage Threshold Detection)
Top Enclosure	Available as additional add-on
Connectivity	WiFi 2.4Ghz, Access Point Mode & CAN-FD
Sensors	7 thermistors incl. ambient, dock sensor & voltage sensor
Special Features	<ul style="list-style-type: none"> • Semi-enclosed design • Easy to use calibration suite • Precision stainless steel guide rails • Geared direct drive extruders • High current silent trinanamic drivers • Fan RPM sensing • Cold-swappable nozzle • PWM cooling fan • Vibration compensation / Input-shaping • Responsive fully-featured browser interface
Calibration	<ul style="list-style-type: none"> • Automatic Adaptive Mesh • Skew axes compensation • Camera assisted XY calibration • Assisted tool height calibration
MSRP	2 STD-Tools, RM 14,800 (Fully Assembled)
Additional Addons	<ul style="list-style-type: none"> • STD-Tool, RM 2200 • HT-Tool, RM 2800 • HF-Tool, RM 2800 • Top Enclosure, RM 1800
Warranty	12 Months with (24 Months Support)

	STD-TOOL	HT-TOOL	HF-TOOL
Nozzle Type	Standard V6	Custom Insert V6 Type	CHT V6
Nozzle Material	Brass	Plated Copper & DLC Hardened Steel	Brass & Copper
Heater Block Material	Aluminium	Plated Copper	Brass
Heater Power	40W	60W	60W
Fan Size	40x10mm Blower style	40x10mm Blower style	40x20mm Blower style
Fan Type	4-Pin (PWM)	4-Pin (PWM)	4-Pin (PWM)
Fan RPM	~9500	~9500	~9000
Thermistor	Semitec 104GT-2	Dyze Design High-Temp	Semitec 104GT-2
Max Temp.	300 °C	420 °C	300 °C
Max Volumetric Flow	18 mm ³ /s	16 mm ³ /s	40 mm ³ /s
Material Compatibility	General & Support	High-Temperature & Abrasive	High-Flow Variant
Extruder	Geared 3:1 Dual Drive	Geared 3:1 Dual Drive	Geared 3:1 Dual Drive
Tool Driver	TMC2209	TMC2209	TMC2209
Tool Board	48MHz ARM Cortex M0+	48MHz ARM Cortex M0+	48MHz ARM Cortex M0+

