

The Rapidia metal printer is similar to the standard FDM plastic filament printer. The print heads are fed with a water-based metal, ceramic or support material paste. Water-based metal paste is the safest and most environmentally friendly method of handling materials for 3D printing as it allows a debinding-free, solvent-free 3D printing workflow with no requirement for polymer disposal. No fumes or odors are created in the printer during printing, as the only material that evaporates is water. The printer uses an interface identical to a plastic filament FDM printer. Our system includes our proprietary software with a perpetual license and free updates.

Print technology:	Extrusion of water-based paste (metals, ceramics, support material)
Number of print heads:	Two independent heads
Build plate:	Heated, magnetic top surface
Print sheet:	Flexible stainless steel, reusable
Support technology:	<ol style="list-style-type: none">1. Disappearing polymer supports. This material also acts as a separation layer for metal supports if needed.2. Metal supports (hand removable)3. Support elimination by water bonding of simple parts into complex parts
Resolution:	Coarse (0.6 mm nozzle) and Fine (0.4 mm nozzle). Other sizes available.
Build envelope:	X: 200 mm Y: 280 mm Z: 150 mm
Caution:	Parts approaching the full build envelope size may exhibit distortion during sintering
Printing speed:	Over 40 cc (2.4 cubic inch) per hour with coarse (0.6 mm) nozzle
Enclosure:	Full enclosure with windows on three sides
Dimensions:	78 cm wide x 70 cm deep x 157 cm tall (31" x 27.5" x 62")
Power:	110-125 VAC, 50/60 Hz, 12 A max
Weight:	100 kg, 120 kg with four full metal cartridges
Computer interface:	USB
Media Supply:	900 ml (30 fl oz) paste cartridges. Each cartridge is about 7 cm in diameter and 35 cm long. Each metal paste cartridge contains 4-5 kg of metal (exact weight is metal-dependent). Cartridges are refillable.
Cartridge selection:	One to four cartridges can be loaded into the printer. Selection is manual.