

Technical specs

Built Volume

Ø 400mm x 1000mm

Machine Dimensions

880mm x 1140mm x 2400mm

Custom build plate

up to 130 C

Heated Chamber

up to 80 C

Z layer resolution

50 - 600 micron

Remote software control

Fully automated system



Key Innovations

MAP™ technology parallel, simultaneous printing from multiple directions on the same object

Automated mid-section system allows the automatic removal of mid-plate to allow the bottom extruder to access the object and enable parallel printing from top and bottom at the same time

Proprietary DUPLEX software to handle unique MAP™ slicing needs The DUPLEX processing software is a powerful, software tool for 2-way part slicing.

Auto check system advanced part error recognition algorithm

Mesh auto calibration mesh plate calibration for perfect part operation

Auto cooling mechanism automated heating and cooling of the build chamber

Remote access WIFI connected to the network for monitoring and control

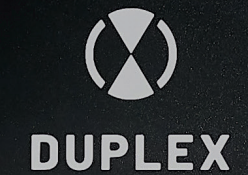
Remote intervention Maintenance routines are carried out over the air by our DUPLEX technicians.



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The new generation of FDM printers

DUPLEX F2 is developed based on the patented MAP™ technology, enabling the printing of an object from two different directions at the same time.

› Less or no support needed for most geometries

› Up to 5x faster without decrease in resolution

› Designed to build large sized objects

› Proprietary DUPLEX slicing software

› Fully automated system

› Applicable for PLA PRO, PETG, ASA, TPU, ABS, PA, PC

Powered by:



In collaboration with:



DUPLEX F2 - the first two-way printing FDM printer

DUPLEX F2 is developed based on the patented MAP™ technology, enabling the printing of an object from two different directions at the same time.

The new DUPLEX F2 printer is designed for heavy, industrial application, built from quality parts and assembled with precision to assure the long lasting quality and reliability this new technology truly deserves.

Thanks to the multi-directional part growing, the DUPLEX F2 is up to 5-times faster than similar FDM printers due to the combination of its unique features: two extruders working simultaneously on the same object; no, or minimal need of support printing; reduced time of post-processing.



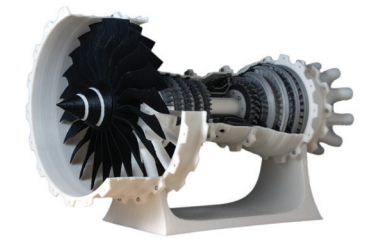
Industries



Technical Sports



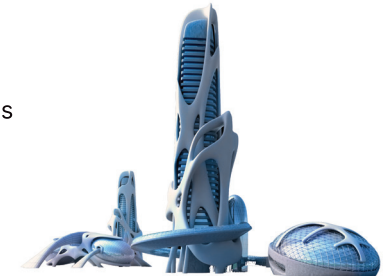
Medical / Prosthetics



Engineering / Prototyping



Retail / Signage



Design / Architecture

The birth of MAP™ technology

3D printing technologies have not fundamentally improved since their inception in the early nineties. Productivity of 3D production systems are far too low to be able to live up to the promise of 3D printing disrupting the image of how we perceive traditional manufacturing.

MAP™ technology addresses the long-unchanged process of building three dimensional objects layer by layer, one on top of the other, resulting in an utterly slow process.

What is the patented MAP™ technology?

MAP™ technology introduces a completely new way of creating physical 3D objects, establishing a new standard in additive manufacturing resulting in higher productivity and ROI.

Using multiple build directions MAP™ technology can achieve unparalleled print speeds without any limitations on the 3D geometry being built.

It is a completely new approach, enabling extremely fast printing speed. It can be applied to various additive manufacturing technologies (e.g. FDM, SLS, SLA, DLMS) and it's core principles allow printing with different types of materials including solid and liquid.

Although MAP™ is not restricted to filament based 3D printing, the first 3D printer utilizing MAP™ is an FDM, named DUPLEX F2

Makes it possible to print organic geometries!

Spheres and multi-curved organic shapes are almost impossible to be efficiently built by traditional one-directional 3D printing. The two-directional part growing starting from the middle and moving outwards allows the easy and high-quality printing of these shapes, without the need of complex and time-consuming „supporting“ process.

Modern design processes often include generative modelling. The resulting geometries predominantly are only printable with SLS technologies, that are either very costly or limited in size. DUPLEX F2's MAP™ technology powered two-directional printing transforms most overhangs into easily printable surfaces, resulting in real-size functional prototypes.

