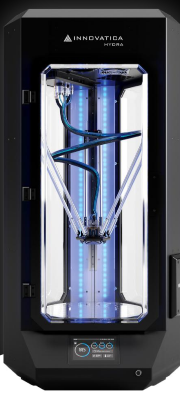
INNOVATICA

FDM/FFF 3D Printer

Hydra



WATCH OUR PROMO!

INNOVATICA

Why Hydra?

Hydra is our most advanced 3D printer that can significantly reduce your costs and production time. Print using 45+ types of materials ranging from PLA, through Nylon and PEEK up to the chemically resistant PPS. Choose from various print bed surfaces and interchangeable printheads to always provide ideal printing parameters for your material. Technical Condition Monitoring System (TCMS), combined with the components provided by the most reputable brands, ensures Hydra's effortless and trouble-free operation for years.

About Innovatica

We are Innovatica - a company with a passion for innovations based in the southern part of Poland, in Central Europe. We started developing our printers in 2014.

Years of experience, passion, and our own ma-chine shop allows us to offer you ver-satile solutions for your business. Print your 3D parts for prototyping or manu-facturing - right on your desktop.

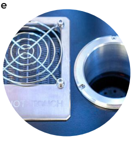
Main features

Interchangeable liquid-cooled printheads

Easily adjust your printer for your specific needs with no need of any tools. Print using basic materials like PLA and ABS, or engineering materials like Nylon and PEEK using one printer. Utilize double printing nozzles combined with water-soluble supports to print complicated geometries.

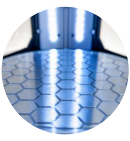
Technical Condition Monitoring System

Monitor the condition of the printer with TCMS, which provides you with wear information on parts and notifies about maintenance tasks to ensure the highest performance and quality of print. It is the perfect solution for schools and companies where the device is used by multiple users.



Heated chamber for advanced polymers

Print advanced polymers in ideal conditions ensuring the reduction of warp and deformation of printed models. Integrated HEPA and activated carbon filters reduce the level of harmful particles, gases and unpleasant smells.



Vacuum printbed

Attach any print surface easily thanks to the built-in, quiet vacuum pump. It enables you to use glass, Buildtak, or PEI, and be sure that they stay in place. There is no need for clamps or screws, just touch the button.

Filament monitoring system

Our printer saves the filament data onto the self-adhesive NFC chip so you always know exactly the amount of filament left. No more guessing, the printer will tell you. The NFC tags are supplied with the printer and can be attached to the spools of any brand.

45+ Compatible materials

There are 45+ compatible materials from which you can choose PLA or ABS for fast and cost-effective prototypes, Nylon for stiff, wear-resistant parts, PEEK for elements resistant to high heat, and many more. The possibilities are endless

Other features

Modular design

Exchange the worn parts easily and get back to work in a few minutes thanks to the Hydra's modular design.

Extruders drawer

The heat does not affect the work of the extruders as they are mounted in a drawer outside the chamber with easy access.

Durable construction

Aluminium and stainless steel ensure maximum stiffness and precision of the whole machine.

Touch screen

Capacitive 5" touch screen with a glass front allows you to easily control the device.

Advanced electronics

Duet 3 controller with a 300 MHz processor, supported by a Raspberry Pi computer ensures smooth operation.

Filament sensors

Two sensors detect the filament and inform about its absence.

Motion components

HIWIN carriages and GATES belts guarantee the precision and reliability of the printhead motion.

Automatic calibration

Automatic calibration system of a print bed ensures the perfect first layer of print - every time!

Safety of use

Built-in safety relay mechanically cuts off heaters' power when failure of such elements occur.

RGB LED 360° lighting

Variable LED colors not only let you enjoy watching the printing process but they also inform about the device status.

Advanced print cooling

Two blowers ensure enormous model cooling capacity. Thin steel cover prevents heating blocks from cooling down also keeping them clean.

Magnetic joints

Magnetic force eliminates any motion backlash while allowing for easy, toolless changing of printheads.

Connectivity

Wi-Fi connection allows you to control the printer or send files from a computer and mobile devices. You can also connect via Ethernet or use USB stick.

Dust filters

All cooling fans are equipped with magnetically mounted dust filters, which can be easily washed with water.

Lifting nozzles

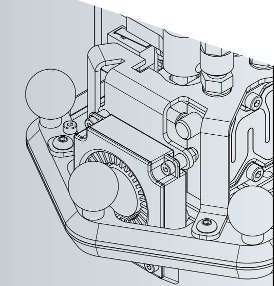
Inactive print nozzle is automatically lifted up by the printhead, which prevents contact with the model.

Gyroscope

MEMS gyroscope in the printhead detects the incorrect assembly or failed prints and automatically stops the device.

Drying of filaments

The heated chamber can be used to dry the moist filament spools, which is useful particularly for support materials.



Print heads

Low temperature head

The module is intended for printing materials with a print temperature up to 245 °C. It is optimized to work mostly with PLA-based materials. You can use it with many filaments which imitate wood, stone or metal.

Medium temperature head

This is the basic head supplied with the printer. This module is the most versatile solution that allows printing with a wide range of materials up to 300 °C. Thanks to the reinforced nozzle, it is possible to print using abrasive materials e.g. with the addition of carbon fiber.

High temperature head

The module is suitable for advanced engineering materials with print temperature up to 450 °C. This head is perfect for printing with materials such as PEEK or PEKK, also with carbon fiber or glass filling.

Service level agreement

In Innovatica, we believe that the printer you can rely on really makes a difference in your business. That's why Hydra has a lot of features that give you information about its status so you can keep it in great shape for years. If something goes wrong you can always count on our support. Service Level Agreement - SLA - guarantees that the spare parts will be shipped within 24 hours, so you won't have downtime in implementing your plans!

Accesories

Safety switch

Quickly disconnect the power in case of a fault or any other accident using the safety switch. This feature is often required to comply with health and safety regulations in schools and various workplaces. It can be easily attached to the socket on the side of the printer - with no tools needed.

Lamp indicator

Install a lamp indicator to have additional information about the actual status of the printer. This feature is often required to comply with health and safety regulations in schools and workplaces. It can be easily mounted in the socket at the top of the printer.

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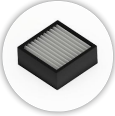
PRINTHEAD PACK

Printhead packs

Print using even more materials! Printhead packs upgrade the device to work with a broader range of polymers. A complete set contains a printing module, work pads, and all necessary accessories to start working with new materials.



Spare air filter

Spare filter cartridge for the built-in air filter. The combination of HEPA and activated carbon filter removes 99,97% of particles as well as majority of unpleasant smells. Each cartridge has an NFC tag with an individual serial number - the printer notifies you when it is time to replace it. Each filter should be replaced after 750 hours of work.

Additional external filter

The large surface of the filter provides exceptional air filtration. It is recommended particularly for use in rooms with low ventilation and while printing engineering materials - while using those polymers integrated filter may not be enough. The filter should be replaced after 2000 hours of work.

NFC tags

Additional tags which are used for the filament identification and measurement. These can be used with reels of any manufacturer. The printer set contains 50 NFC chips. It is also sold in packs of 50 or 100 pieces.

Specifications

	PRINTING SPECIFICATIONS
Technology	FDM/ FFF (Fused Filament Fabrication)
Printhead modules	4 types
Print head	Liquid-cooled, dual-extrusion with lifting nozzles,
Build Volume	Ø300 x 300mm 21.2L
Filament diameter	1.75 mm
Nozzle temperature (max)	450°C
Nozzle diameter	0.25mm 0.4mm 0.6mm 0.8mm
Resolution	0.25mm 150 - 80 micron
	0.4mm 250 - 25 micron
	0.6mm 400 - 25 micron
	0.8mm 600 - 80 micron
Print speed	up to 250mm/s
Build plate type	Vacuum system
Build plate surfaces	Glass, BuildTak, BuildTak PEI, 1mm PEI sheet
Build plate temperature (max)	200°C
Build plate leveling	Automatic, nozzle probe
Build plate heat up time	20 - 60°C - 50 seconds
	20 - 100°C - 2 min 15 seconds
Supported materials	47
Soluble support	Yes, 4 types
Extruder type	Dual-drive, geared 1:3, Bondtech
Filament amount control system	Yes, integrated NFC system with built-in filament database
Print chamber	Enclosed, actively heated
Print chamber temperature (max)	80°C
Air filtration	HEPA + Activated Carbon
Filament sensor	Yes, for both extruders
Connectivity	Wi-Fi, LAN, USB port
Display	5in 800x480px capacitive touch

	PHYSICAL DIMENSIONS
Printer incl. spool holders	640 x 530 x 1050 mm
Shipping package	850 x 850 x 1500 mm
Printer weight	65 kg
Shipping Weight	100 kg

	AMBIENT CONDITIONS
Operating temperature	15-32°C 10-80RH non-condensing
Storage temperature	5-32°C

	POWER REQUIREMENTS
Input voltage	220-240V 50Hz or 110-120V 60Hz
Power (max)	1450W
Operating power (average)	970W

	SOFTWARE
Supplied software	Simplify 3D
Supported OS	Windows, MacOS and Linux

	WARRANTY
Warranty period	12 months
Service Level Agreement period	Lifetime

Reliable tool is
fundament of your success.

***WATCH** OUR TIMELAPSE!*

***BUY** NOW!*

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