

FDM/FFF 3D Printer

Phoenix



WATCH OUR PROMO!

Why Phoenix?

Look at Phoenix and find out that 3D printing can be made simple, fast, and smart. The printer is based on the FFF/FDM (Fused Deposition Modelling) technology, which is accessible and popular due to its almost unlimited possibilities for creating prototypes, spare parts, custom tools, or even final products. Phoenix works well with 25+ materials, so choose the one that is the best for your application. Its modular design allows you to exchange the worn parts easily with no risk of halting your project. Choose Phoenix - don't worry about the tool and start making things!

About Innovatica

We are Innovatica - a company with a passion for innovations based in the southern part of Poland, in Central Europe. We started in 2014 initially as a provider of CNC machining services. During the years, we've expanded our activity into the 3d printing industry, also developing our own 3D printers. Years of experience, passion, and our own machine shop allows us to offer you versatile solutions for your business. Print your own 3D parts for prototyping or manufacturing - right on your desktop.

Main features

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.

Magnetic build plate

Replacing the print bed takes just a few seconds because it's held down by the magnets. Bed pads made out of spring steel make it easy to detach the finished print - bend the surface a little, and the model will pop into your hands.

25+ Compatible materials

There are 25+ compatible materials from which you can choose PLA or ABS for fast and cost-effective prototypes, Nylon for stiff, wear-resistant parts, composite materials for imitation of wood or metal, and many more. The possibilities are endless.

Interchangeable 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 or carbon-filled PET-G using one printer. Utilize double printing nozzles combined with water-soluble supports to print complicated geometries.

Enclosed print chamber

Enclosed print chamber provides stable conditions for printing, thus reducing shrinkage and deformation of printed models. The integrated HEPA and activated carbon filters reduce the level of harmful particles and unpleasant smells.

Filament monitoring system

Our printer saves the filament data onto 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.

Other features

- Modular design**
Exchange the worn parts easily and get back to work in a few minutes thanks to the Phoenix'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**
Aluminum 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 - every time!
- 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 print-heads.
- Connectivity**
Wi-Fi connection allows you to control the printer or send files from a computer or 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.
- Safety of use**
Built-in safety relay mechanically cuts off heaters' power when failure of such elements occur.

Print heads

Low temperature head

This is the basic head bundled with the Phoenix printer for printing with temperature up to 245 °C. It is optimized for printing mostly with PLA-based filaments. You can also use it with many filaments which imitate wood, stone or metal.

Medium temperature head

This head expands the range of materials that can be printed on Phoenix, allowing the use of temperature up to 300 °C. It lets you create prints resistant to weather conditions with ASA or watertight and transparent models with PET-G. Reinforced nozzle allows printing with abrasive materials e.g. with the addition of carbon fiber.

FCM head (Food Grade - Medical)

This module is made entirely of stainless steel, which makes it suitable for printing objects intended to be in contact with food or to be used in medicine. You can print with antibacterial materials that inhibit bacterial growth on the surface of the printed model. The maximum print temperature is 300 °C.

Service level agreement

In Innovatica, we believe that the printer you can rely on really makes a difference in your business. That's why Phoenix has many 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!

Accessories

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 installed in the socket at the top of the printer.

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 of 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 used for the filament reel allows to identify type and measure the amount of the filament - they can be used with reels of any producer. 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	3 types
Print head	Air-cooled, dual-extrusion with lifting nozzles
Build Volume	Ø300 x 300mm 21.2L
Filament diameter	1.75 mm
Nozzle temperature (max)	300°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 up to 250mm/s
Print speed	Magnetic system BuildTak/FlexPlate
Build plate type	BuildTak, BuildTak PEI
Build plate surfaces	120°C
Build plate temperature (max)	Automatic, nozzle probe
Build plate leveling	20 - 60°C - 50 seconds
Build plate heat up time	20 - 100°C - 2 min 15 seconds
Supported materials	30
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, passively heated
Print chamber temperature (max)	40°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	60 kg
Shipping Weight	95 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)	930W
Operating power (average)	550W
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!