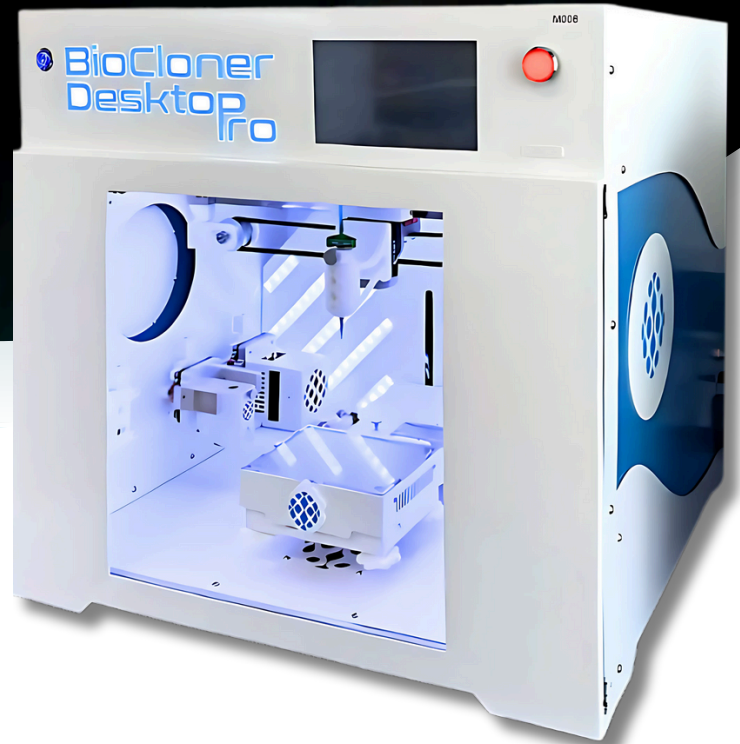


# BioCloner Desktop Pro



Created for experts from the world of science and industry.

Developed from scratch at BioCloner Health – the BioCloner Desktop Pro is your trusted partner for daily research and clinical work.



**BioCloner Desktop Pro** is a versatile 3D bioprinter we have been developing since 2016 with a focus on tissue engineering. In the coming years, we aim to significantly enhance the quality of life and health for both people and animals by introducing innovative solutions for medicine and weterinary science.

## BioCloner Software 3D

The software we created consists of several modules enabling work with a 3D bioprinter at various stages - from protocol design to production of the finished product.



User friendly

BioCloner Desktop offers ease of use with its intuitive interface.



User Interface

Our bioprinting platform allows for loading 3D models, performing operations, and ensuring precise print control.



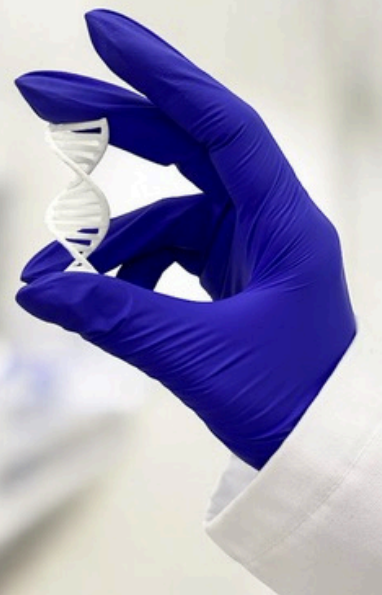
Functionality

The software interface is automatically updated from the server, ensuring the latest versions and eliminating the need for manual updates.



Protocol

The printing protocol facilitates process monitoring, allows for parameter analysis, and ensures precision and repeatability in creating complex structures.



# Get to know the individual components of BioCloner Desktop Pro

## Replaceable printheads

Name	Temperature range [°C]	Pressure extrusion	Potential materials	Applications
Calibration Printhead	×	×	×	Mapping the printbed.
Fused Filament Fabrication (FFF)	max. 210	×	PLA, PCL, PEG, PVP, PVA (form: filament)	Porous scaffolds for microbiological research, sutures, drug delivery devices, and regenerative medicine.
Pressure Printing Printhead (PPP)	×	✓	Silicones, gelatin, alginate, hyaluronic acid	In tissue engineering for dressings, as drug carriers (drug delivery systems).
Controlled - Temperature Pressure (CTP)	4 - 60	✓	Bioinks, gelma, ALMA, methylcellulose, fibrin, chitosan, pectin	In tissue engineering for bioprinting structures that mimic human tissues.
High Temperature Pressure (HTP)	max. 190	✓	PLA, PCL, PEG, PVP, PVA (form: granules)	Porous scaffolds for microbiological research, sutures, drug delivery devices, and regenerative medicine.

## Other components

### Printbed with heating and cooling function

The printbed supports materials at temperatures from 4 °C to 65 °C and comes in two variants: direct, with a glass working surface, and indirect, featuring a mounting pad for compatibility with laboratory equipment like slides, multi-well plates, and dishes. A laboratory vessel can also be placed directly on the printbed, enabling direct printing inside the vessel itself.

### Ensuring microbiological cleanliness in the chamber

The chamber ensures microbiological cleanliness through H14 HEPA filters, removing 99.995% of pollutants, and a UV-C lamp emitting 254 nm light for sterilization without ozone. Together, they create a clean, controlled environment for sensitive processes like 3D bioprinting.

### UV on the gantry

The UV device operates at 365nm, allowing stable curing of various materials during or after printing. Exposure can be adjusted dynamically, set after each layer or every few layers. A manual mode is also available for curing samples in Petri dishes or other lab containers without installing the printhead.

### Printhead cleaning kit

A printhead cleaning kit is a tool designed to maintain the cleanliness of the nozzle, ensuring optimal printing performance and consistent quality throughout the printing process. The cleaner can be adapted to match the type of printhead the user intends to clean.



Make an appointment for tests!

