BioScaffolder 3D Bioprinter

A unique, advanced, configurable system from GeSiM GmbH

The BioScaffolder is a **modular, multi-headed 3D bioprinter** equipped with multiple dispensing tools including **unique core/shell tools** for simultaneous dispensing of different materials.

Far from an ordinary bioprinter, the BioScaffolder has a **unique temperature controlled piezoelectric micro-pipetting option** for high performance printing at very low volumes (ideal for rare or expensive materials). It is highly versatile and adaptable for application specific configurations, making it the ideal advanced bioprinting platform.

Available Modules

- ✓ Up to 4 individual lowering Z-axes for different tools
 - Combine different sized syringes and needles for high quality printing of different materials
- Single and twin-tip piezo dispenser for mixing of droplets in flight, with control camera
 - Pico- and nano-litre dispensing capability
 - Print onto scaffold structures at well-defined locations
- ✓ Melt electro-spinning printing option for printing of tiny thermoplastic structures
- ✓ Unique core / shell tools:
 - Print composed strands of different materials in a co-axial manner soft cell core material and hard shell material
- ✓ High-temperature, high-power piston extruder for high viscoelastic polymers
- ✓ **Peltier chiller** for printing of hydrogels at low temperatures

Key Benefits

- Versatile, modular system
- Low volume piezoelectric pipetting capabilities
- Unique dispensing options
- Easy scaffold design



Key Applications

- Production of 3D scaffolds
- Printing of live cells either embedded in scaffold material or seeding scaffolds by piezo spotting
- Bio-ink & paste printing at high and low temperatures
- Dispensing & UV curing of photosensitive materials













BioScaffolder 3D Bioprinter Series

BioScaffolder Prime

An affordable, **high-performance 3D bioprinter** which offers precision German engineering in a configurable platform.

- 2x pneumatic plus 1x mechanical piston dispenser tools
- ✓ Compatible with bio-safety cabinets

13 optional system tools including the unique GeSim core/shell tool.





BioScaffolder Advanced

The world's most **advanced 3D bioprinting system** equipped with multiple dispensing tools and unique core/shell tools.

Unique options

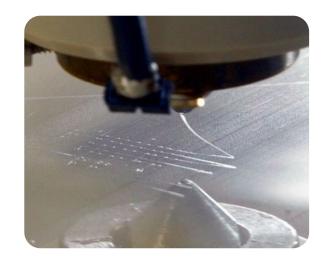
- ✓ (Heatable) piezo pipettes, solenoid valve dispenser and twin-tip adapter
- ✓ Melt electrospinning writing
- ✓ Fused deposition modelling filament extruder
- ✓ Plasma pen

BioScaffolder High Volume

A **high volume 3D bioprinter** will all the functionality of the GeSiM platform and high-performance motors for 24/7 operation.

Unique options

- ✓ Double high temperature extruder & mixer
- \checkmark Safety enclosure with sliding door
- ✓ High volume throughput



Interested in the BioScaffolder 3D bioprinter series? Call us on **+44 (0)1954 232 776** or email info@analytik.co.uk to discuss your requirements with a product specialist.