Title:

4th Generation EnvisionTec Bioplotter Manufacturer Series

Sub-title:

Extrusion based 3D bio-printer able to print hydrogels, soft and advanced materials

General description:

The 4th Generation Envisiontec Bioplotter series features five interchangeable toolheads, enabling the printing of a diverse range of materials, from low-temperature options (as low as 0°C) to high-temperature thermoplastics like PEEK. This versatility allows for applications in both bioprinting (tissue structures and biomaterials) and other industrial uses. With high precision and seamless integration into laboratory workflows, it is an ideal solution for research and development across multiple fields.

Features:

- Cartesian 3D printer with magnetic actuation, with resolution up to 1 µm.
- Printing volume up to 15x15x15 cm^3
- Five interchangeable toolheads, enabling multi-material printing and UV light.
- Platform temperature ranging from -10 to 80 °C
- System open to testing a wide variety of materials in pellet form.
- Sugar and cellulose based water soluble support structures

Applications:

- Small tough components.
- Silicone surgical model with shore 20A.
- Scaffolds for bone cartilage regeneration materials (PCL, PLLA, Hydroxyapathite paste).
- Organ/ Cell printing (Agar, Gelatin, Collagen).