

SCIENCE TAXI

BIO- FORGE

Ready for post-ISS free flyers
and space crafts

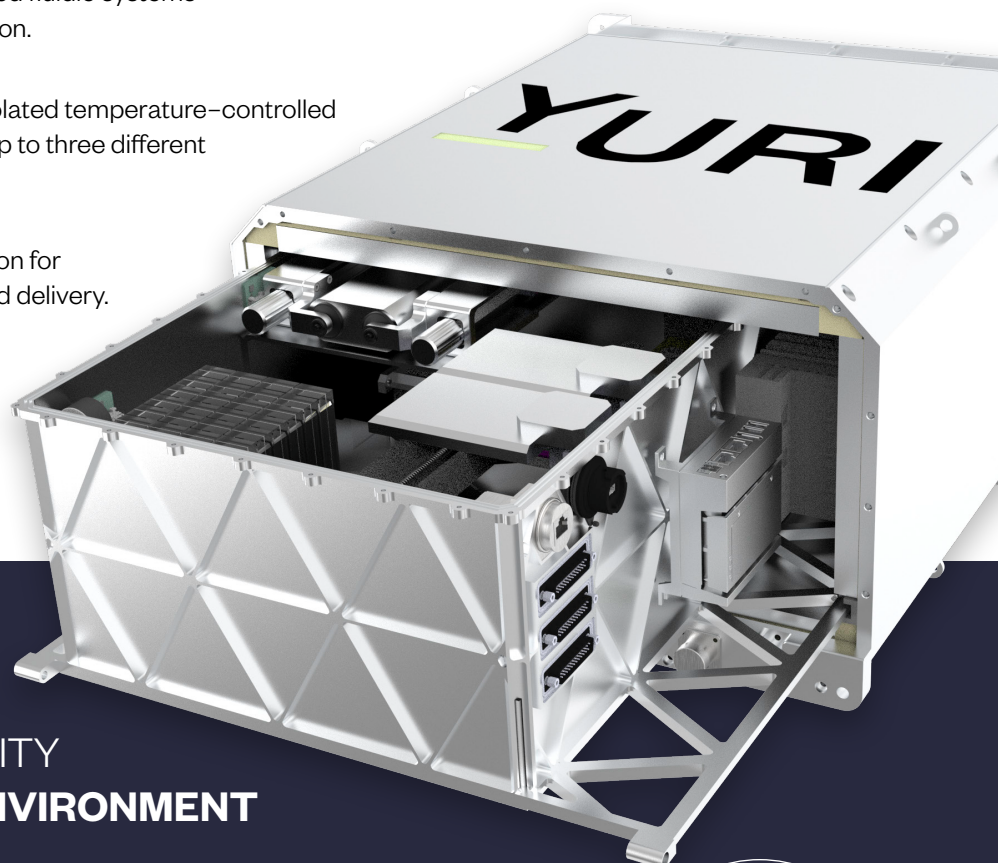
Bioprinter

HIGH-PRECISION BIOPRINTER
FOR RESEARCH IN MICROGRAVITY

Designed for cutting-edge biological research, this BioPrinter supports up to two **Biolnk** containers and customizable **well plates** with an integrated **cultivation system**. Printed samples can be securely cultivated with automated, timed **fluid exchanges** of up to three substances, ensuring optimal conditions for growth and **in-situ** analysis.

CAPABILITIES:

- Enables high-precision 3D bioprinting in two independent regions, allowing on-site analysis with integrated cameras and the YuriScope system before deciding on the second batch.
- Supports two different types of Biolinks in an isolated temperature-controlled environment.
- Includes well plates with embedded fluidic systems and isolated temperature regulation.
- Features a fluidic system in an isolated temperature-controlled environment capable of adding up to three different fluids to the printed samples.
- Allows long-term sample cultivation for several weeks with scheduled fluid delivery.



THE FIRST **EUROPEAN**
MADE BIOPRINTER
AND CULTIVATION FACILITY
FOR **MICROGRAVITY ENVIRONMENT**

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FACTS:

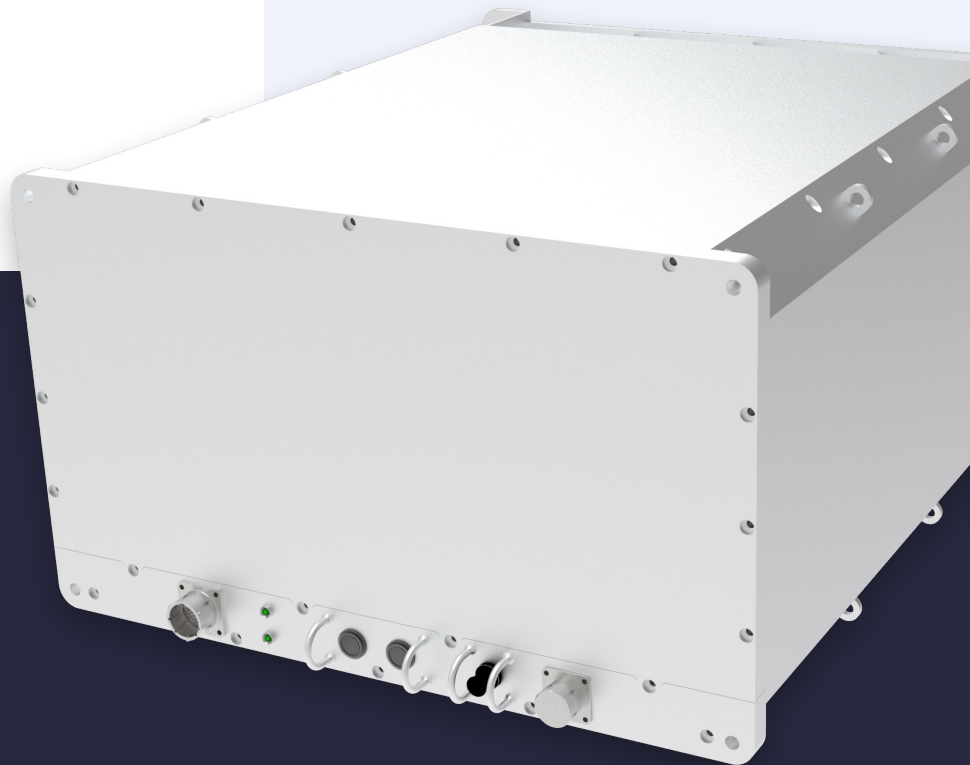
- 8 years of service lifetime
- Designed in Luxembourg and Germany
- Developed in cooperation with a leading German manufacturer of automated solutions in life science
- Maiden mission planned for 2027

USE CASES:

High throughput drug screening
e.g. preclinical toxicity tests

Tissue engineering & regenerative medicine

Basic research on tissue printing



- Custom-made well plates with up to 24 wells
- Interfaces and development based on ISS standards
- Humidity control during printing
- BioPrinting volume of 128 x 85 x 20 mm³
- Fully autonomous operations
- 32.6 Kg of total mass
- All regions with temperature control ranging from 4°C to 40°C
- Total BioInk volume of 60ml