

3D CLINOSTAT FOR SIMULATED MICROGRAVITY

SciSpinner Max

Benchtop simulated microgravity for cell, microbial and plant research.

The SciSpinner Max is a two-axis clinostat that continuously rotates samples to average the gravity vector toward zero. It operates inside a standard CO₂ incubator and combines precision motion control, integrated sensing and in-chamber imaging.

0.05–5 rpm per axis

Incubator compatible

Live imaging



KEY FEATURES

Incubator compatible

Fits standard CO₂ incubators (≈500 mm chamber). The touchscreen Control Module stays outside, connected by three cables. 15–40 °C, below 40 dB.

Integrated imaging and lighting

12 MP autofocus camera with 850 nm IR illumination, scheduled timelapse capture and 130 addressable LEDs for programmable light cycles.

Quantified microgravity

A 6-axis motion sensor measures time-averaged gravity at the sample position with automatic offset correction. Data and reports export in open formats.

Browser-based control

Operate from the touchscreen or any device on the instrument's local Wi-Fi. No installation or cloud account; data logs to USB.

TECHNICAL SPECIFICATIONS

Rotation	2 independent axes, 0.05–5 rpm, 0.001 rpm resolution
Sample volume	Ø 167 mm chamber, payload up to 1 kg
Sample holders	Petri dish, T-flask, tube and custom inserts
Sensors	Temperature, humidity, 6-axis motion (25 Hz)
Dimensions	465 × 450 × 475 mm, 8.2 kg
Power	12 V DC, 100–240 V AC adapter

APPLICATIONS

- Cell and tissue culture
- Microbiology
- Plant and seed biology
- Education and training

Contact us for pricing and availability

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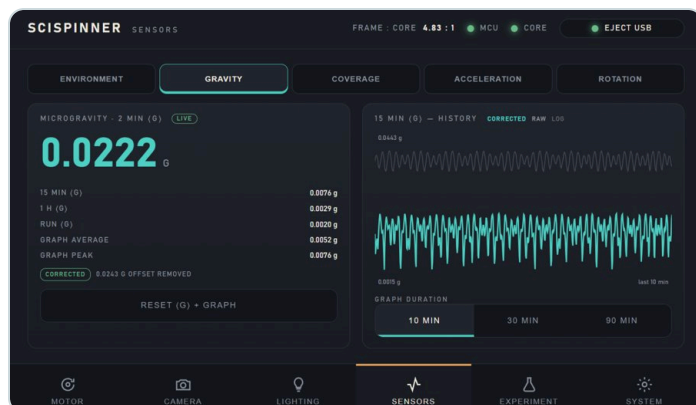
SOFTWARE AND CONTROL

Control from the touchscreen or any browser

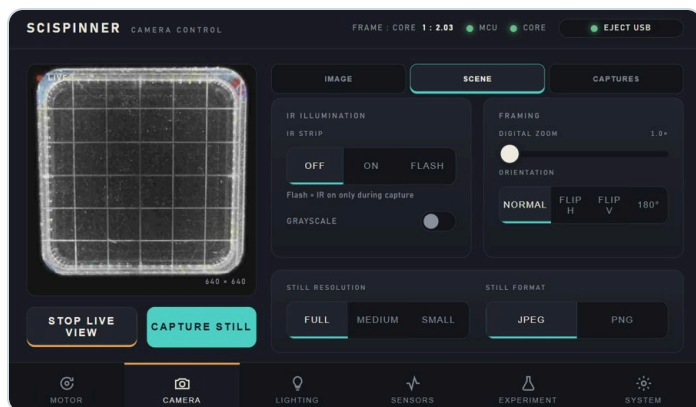
The SciSpinner web interface provides control of motion, imaging, lighting, sensing and experiment scheduling from the built-in touchscreen or any device connected to the instrument's local Wi-Fi network. No installation or cloud account is required.



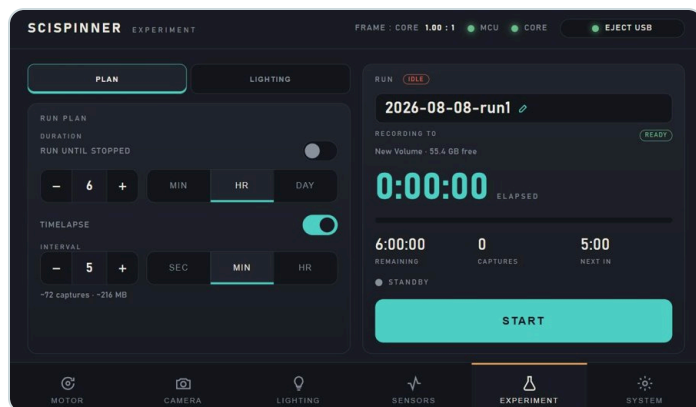
Motor control. Independent speed and direction for each axis, 0.05–5 rpm.



Sensors. Live time-averaged gravity with offset correction and history.



Camera. Live view, IR illumination, autofocus and still capture.



Experiment. Scheduled runs with timelapse interval and lighting program.

VALIDATED PERFORMANCE

Time-averaged gravity of order 10^{-3} g over one hour, measured at the sample position. Settings follow Clary et al. (2022).

STANDARD CONFIGURATION

Clinostat assembly, Control Module with touchscreen, cable set, Petri dish insert, motion sensor module and documentation.

WARRANTY AND SUPPORT

Two-year warranty, remote setup session, software updates at no charge and a user community on Slack.

Custom inserts, cores and extended cables available on request

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Specifications subject to change without notice · Software v1.4.0 · October 2026