

Description

The Steep Tilt RoboRocker™ is a programmable rocker, ideal for 3D cell and organoid culturing in plates that can be used in CO₂ incubators. Programming the speed, tilt angles, pause times and overall operation is simple with intuitive controls on a large graphics touch screen. This rocker facilitates gravity driven perfusion to occur at the desired flow rate and duration in several culture plates simultaneously. Steep tilt angles allow for rapid fluid displacement and increased shear forces. This is particularly useful for culturing and studying shear-sensitive cell types or simulating physiological stress conditions.

The RoboRocker has more flexibility in tilting, speeds, and pauses, to better mimic in vivo conditions than any other rocker on the market! You can program it to do most anything.

Features

- CO₂ incubator safe.
- Thin power cord easily passes through incubator door gasket.
- Continuous operation of a programmable cycle which includes:
 - Up to 4 programmable tilt angles, per program.
 - Programmable speed to each tilt angle.
 - Programmable hold can be set or bypassed for each angle, from 1 second to 90 minutes.
 - Store up to 6 programs.
- Tilt range: ± 45 degrees.
- Hold times: no hold, or from 1 second to 1-1/2 hours.
- Speed range:
 - maximum speed of 30.3 degs/sec. (e.g. -15° to $+15^{\circ}$ in 1 second or about 60 rocks per minute on a classical style rocker).
 - Minimum speed (in regular mode) of 0.1 deg/sec. (e.g. -15° to $+15^{\circ}$ in 5 minutes, not achievable even at the slowest settings on most classical rockers).
 - Slowest speed (in ultra slow mode) is 300 mins/deg. (e.g. 50 hours to travel 10 degrees).
- Large graphics touch screen with simple and intuitive interface.
- No mechanical adjustments/tools needed for setup – internal sensor ensures accurate tilt angle positioning.
- Compact design saves space in an incubator.
- Platforms have a removable high grip rubber mat and a positioning bar for placing 6 culture plates to rock along either axis. There is clearance for stacking additional plates.
- Racks – an alternative to platforms, securely retain culture plates in individual docks; and provide consistent growth conditions and allow easy access to every plate, in comparison to directly stacked plates.
- Plate Capacity:
 - Platform – up to 6 plates, without stacking. Additional plates can be stacked.



A RoboRocker with culture plates on the platform. The platform can hold up to 6 culture plates, tilting them to a precise angle so that the culture medium flows past the cells at the desired rate.



One- and two-level racks are available, with capacities to securely hold 3 and 6 culture plates, respectively. These racks provide more uniform growth conditions, in contrast to stacking plates directly on top of each other, which can lead to uneven exposure and variability.

- 1-Level Rack – 3 plates.
- 2-Level Rack – 6 plates.
- Made in USA.

Model

- **Advanced – 244:** program scheduling to change perfusion conditions over time, store up to 6 programs.

Several Platform/Rack Options

- **Platform:** 11.5 X 11.5 inches (29 x 29 cm).
 - Comes with a removable high grip rubber mat.
 - Comes with a docking bar to position 6 culture plates on a single platform. Additional plates can be stacked.
 - With docking bar removed, platform can hold petri dishes, other vessels and cartridges, etc.
- **Rack:** 1 level – 3 culture plates; 2 level – 6 culture plates. Racks securely retain culture plates with a light spring force. Racks enable more consistent growth conditions than directly stacked plates. Racks can be forward-facing or side-facing.

Specifications

Power: 24V DC, 60-Watt UL/CE external power supply.

Weight: 8.5 lb. (4 kg).

Load Capacity: 2 lb. (1 kg).

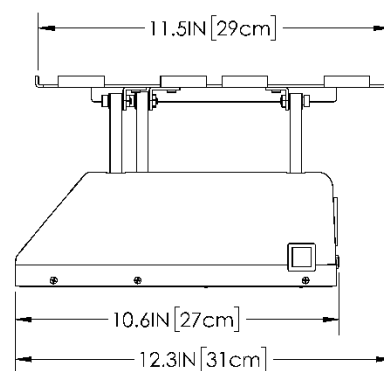
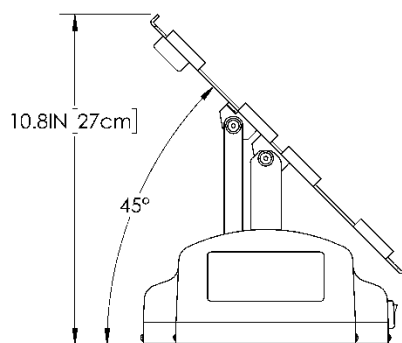
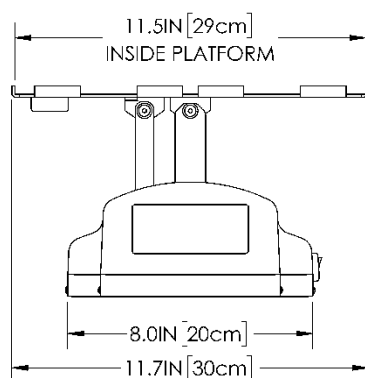
Operating Environment: +4°C to +40°C, up to 10% CO₂, up to 90% RH, non-condensing.

Warranty: 1 year.

Certifications: CE.

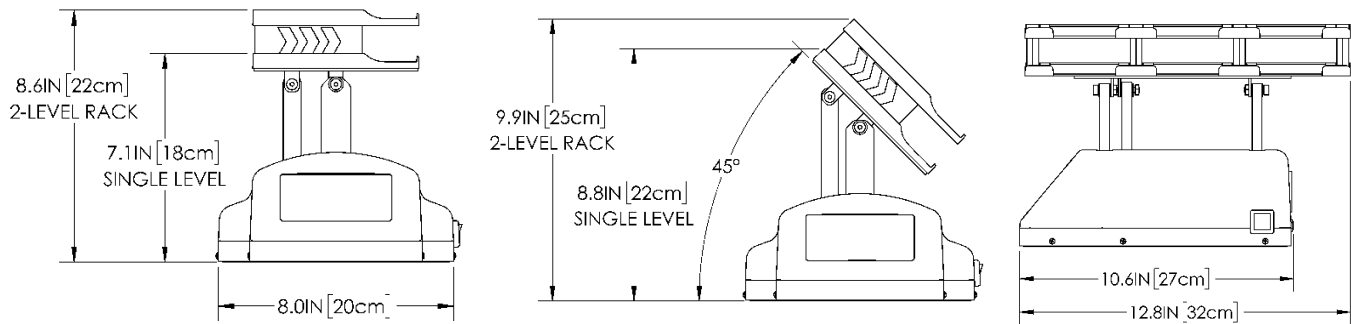
Instrument Dimensions:

- Single platform dimensions:

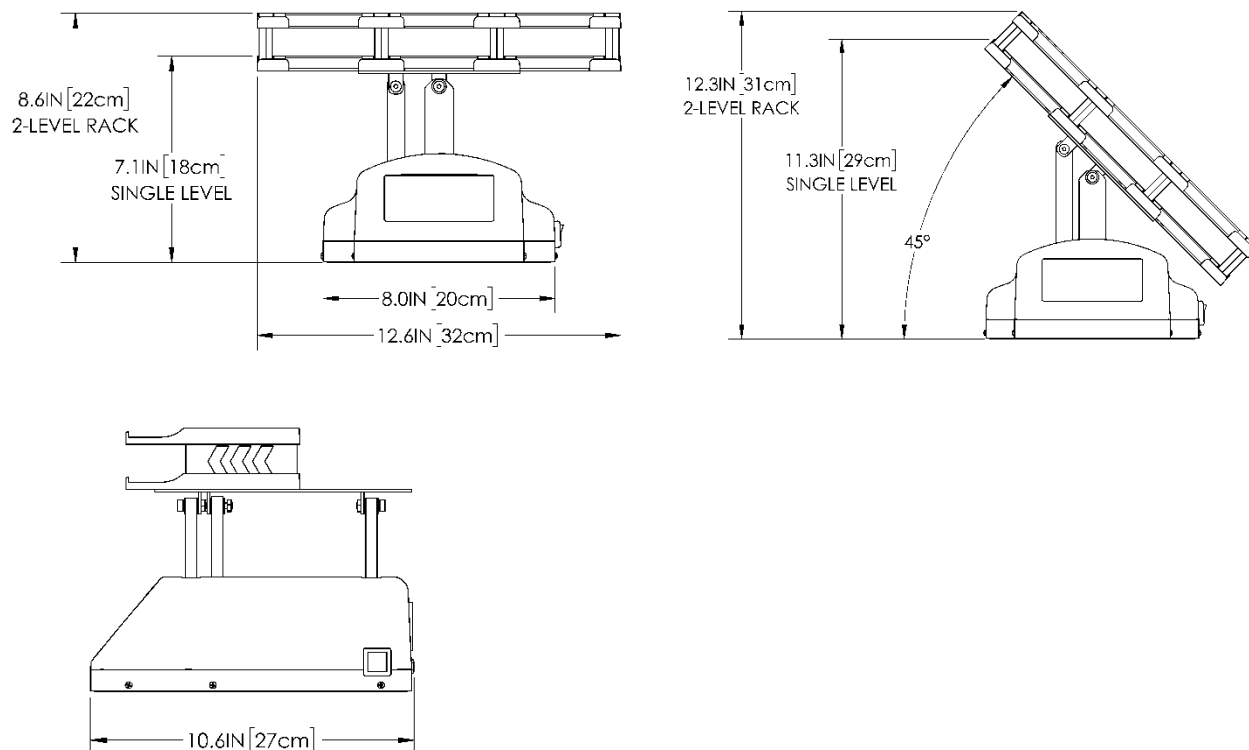


MK19-1302A

- Side-facing rack dimensions:



- Forward-facing rack dimensions:



MK19-1302A