

Solarwell

Calibrator of pyranometers

Solarwell is a solar calibrator developed and manufactured by MicroStep-MIS, intended for calibrating pyranometers. Solarwell is always ready to deliver the highest accuracy.



Highly integrated pressure calibrator

Solarwell includes everything you need for precise calibration of solar radiation sensors in a single compact unit. There is no need for external light sources—everything is already built in, quiet, and easy to operate.

Stable light source

An integrated regulated light source provides a constant and homogeneous irradiance throughout the calibration process. High stability ensures repeatable and reliable results.

Reference sensor

The pyranometer calibration system is equipped with a reference pyranometer according to customer requirements.

Color touchscreen display

The 5-inch LCD display allows for easy operation and status checking. It also allows you to set communication parameters and other calibrator settings.

Automatic calibration and adjustment

The calibration and adjustment process (calculation of sensitivity coefficient) can be fully automated using the IMS4 CalibLab software. Solarwell and IMS4 Caliblab support a wide range of pyranometer models as standard. With IMS4 CalibLab, the process of calibration and adjustment of sensors can be fully automated.



Connectivity

Solarwell has ethernet and RS-232 ports as a standard. These enable remote control of the device If necessary, support can be added based on technical feasibility.

To support a specific sensor, please contact: info@microstep-mis.com.



General specification

Illumination area	(25x25) mm
Technology of light	LED
Number of position	2
Working distance	70 mm
Irradiance range	(0 to 930) W/m2
Short – term temporal stability	0,1% and lower (for 1Hz sampling over 100 second)
Long – term temporal stability	2% and lower (for 3000 hours at 1 sample/day)
Solar spectrum	AM1.5G (can be changed upon request)
Optics	Directed
Class	AAA (IEC 60904-9:2020)
Supply voltage	100 to 240 V AC
Remote communication	Ethernet, RS-232

Mechanical

Dimensions	500 x 530 x 450 mm
Weight	36 kg (approximately)

Environmental

Operating temperature	5 to 40 ℃
Operating relative humidity	< 80 %RH