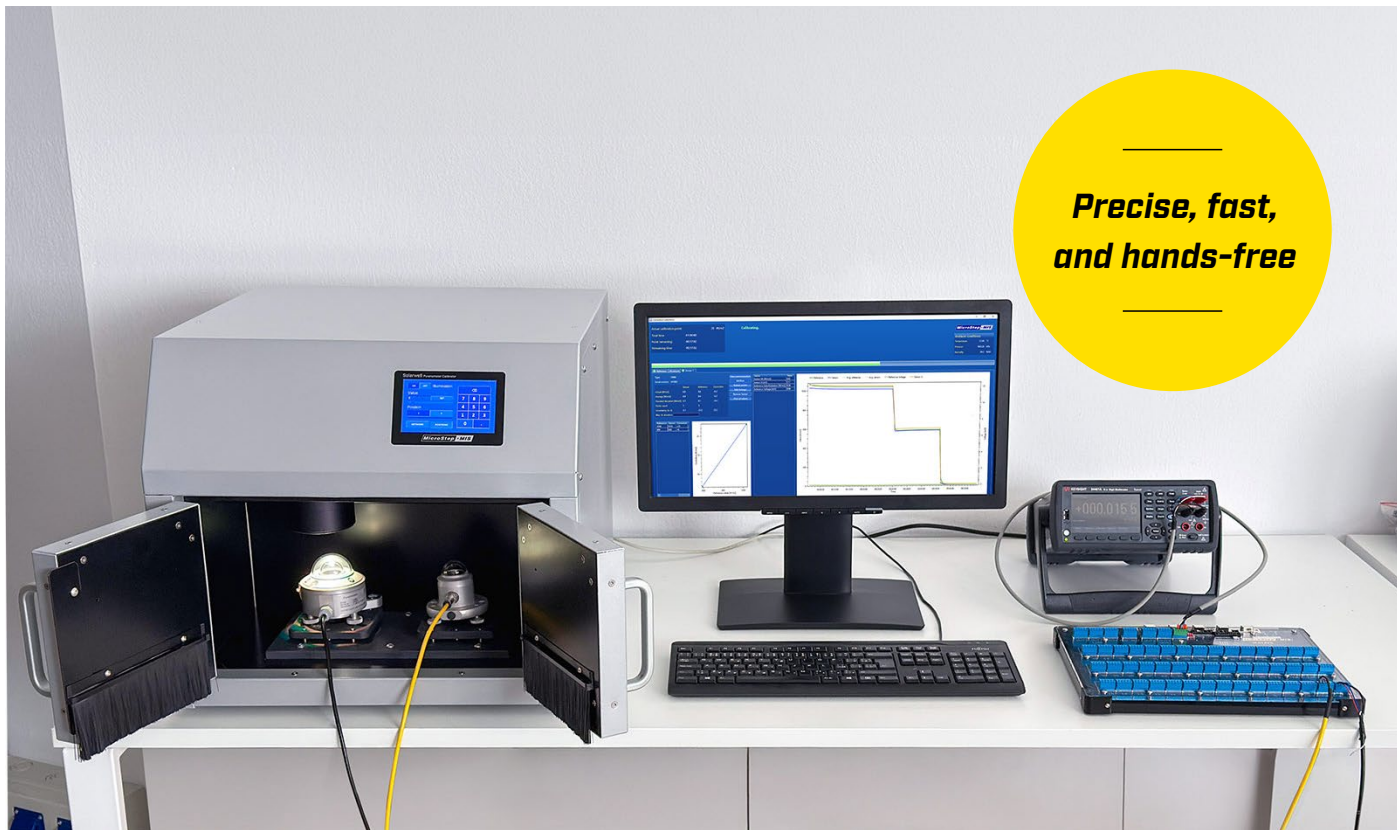


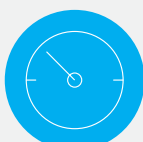
# Solarwell

## Pyranometer Calibrator

Developed by MicroStep-MIS, Solarwell brings next-generation precision, stability, and automation to pyranometer calibration - delivering accurate results with minimal effort.



Highest optical  
performance and  
accuracy



Consistent  
results in every  
calibration



Efficient,  
long-life light  
source



Adjustable  
irradiance for any  
sensor type

### 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 built in, quiet, and easy to operate.

### Stable light source

An integrated, regulated AAA-class LED light source (IEC 60904-9:2020) provides constant and homogeneous irradiance throughout the calibration process. High stability ensures repeatable and reliable results, while the LED

technology requires less cooling, is more energy-efficient, and offers a significantly longer service life than arc lamps.

### 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 enables adjustment of irradiance intensity (0–930 W/m<sup>2</sup>), communication parameters, and other calibrator settings.

### Automatic calibration and adjustment

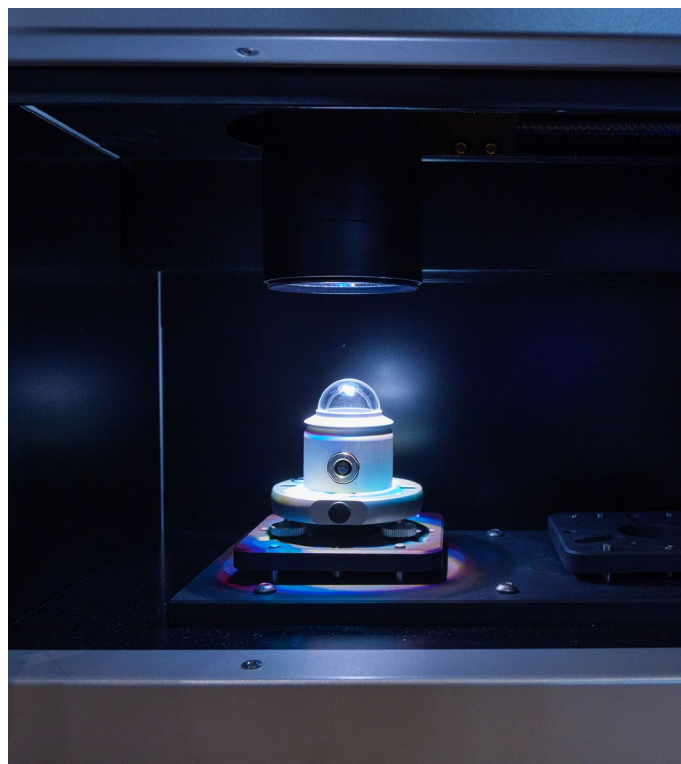
The calibration and adjustment process, including the calculation of the sensitivity coefficient, can be fully automated using IMS4 CalibLab software. Solarwell and IMS4 CalibLab support a wide range of pyranometer models as standard, enabling fully automated, fast, and hands-free calibration.

### Precision mechanics

To ensure identical lighting conditions for both the reference and calibrated sensors, the light source moves along a high-precision guide with an accuracy of 5 µm.

### Connectivity

Solarwell is equipped with Ethernet and RS-232 ports as standard, enabling remote control and monitoring of the calibration process. If needed, additional communication options can be added based on technical feasibility. For specific sensor support, contact [calibration@microstep-mis.com](mailto:calibration@microstep-mis.com).



## Technical specifications

### General

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

### Mechanical

<b>Dimensions</b>	500 x 530 x 450 mm
<b>Weight</b>	36 kg (approximately)

### Environmental

<b>Operating temperature</b>	5 to 40 °C
<b>Operating relative humidity</b>	< 80 %RH

