

MS-802 Pyranometer

MS-802 Pyranometer

The MS-802 Secondary Standard Pyranometer is the ultimate reference sensor to measure global solar irradiance with the highest precision. Its robust brass mechanical construction makes it a durable sensor suitable to be used in harsh environments. The MS-802 is used as standard for PV research and climatology studies around the world.

In combination with a Sun tracker (STR-series) or manual shading ring (RSR-01), respectively the Global Normal Incidence (GNI) and Diffuse (DHI) irradiance can be measured. The MS-802F is a MS-802 with integrated ventilator unit to improve the performance under various environmental conditions (prevents or minimizes the effect of dew, rain, snow, ice and dust).

Features

- Secondary Standard Pyranometer
- Fast Response Time (95% < 5S)
- Temperature Compensated In A Wide Temperature Range
- High Quality Optical Glass Domes For Proper Cosine Response
- MS-802F is an MS-802 with a 110 VAC/12 VDC Ventilation System To Prevent Any Possible Influence Of Frost, Snow And Dust



MS-802 Pyranometer

Specs

Specifications (typical)	MS-802 / MS-802F
ISO 9060 classification	Secondary Standard
Response time 95% (sec)	< 5
Zero offset - Thermal radiation (200W/m ²)	< 6 W/m ²
Zero offset - Temperature change (5K/hr)	< 2 W/m ²
Non-stability (change/year)	< 0.5 %
Non-linearity (at 1000W/m ²)	< 0.2 %
Directional response (at 1000W/m ²)	< 10 W/m ²
Spectral selectivity (0.35-1.5μm)	< 1 %
Temp. response (for 50°C band)	< 1 %
Tilt response (at 1000W/m ²)	< 0.2 %
Sensitivity (μV/W • m ⁻²)	Approx. 7
Impedance (Ω)	Approx. 500
Operating temperature range (°C)	- 40 to +80
Irradiance range (W/m ²)	0 - 4000 W/m ²
Cable length	10m
Wavelength range	285 to 3000 nm