



# Pyranometer

## New First Class Pyranometer MS-410

The EKO Pyranometer MS-410 measures the broad-band global solar irradiance. The MS-410 is perfectly suited for sampling 10-minute averages of the solar radiative flux in horizontal or tilted configurations. The MS-410 is fully compliant with the ISO9060 "First Class" norm. The flat sensor surface, coated with a special, highly absorbing black paint, is protected by two transparent hemispheric glass domes.



The MS-410 has a 180° field-of-view for measuring the hemispheric solar radiation with a cosine-weighting function. The two transparent glass domes protect the sensor efficiently from negative thermal effects. The MS-410 has a practical light-weight anodized aluminum housing and a highly efficient sensor coating. These features, together with the two, high quality machined hemispheric glass domes are the key to the excellent performance characteristics of the MS-410. EKO has over 50 years of experience in developing and manufacturing solar radiometers. This know-how is integrated into the MS-410 to present a fully-sealed and all-weather instrument built to measure the global solar irradiance in unattended outdoor installations throughout the year.

The EKO MS-410 provides a perfect balance between cost-effectiveness and quality.

## Specifications

MS-410	
Response time 95% (sec)	approx. 18
Zero offset:	
- Thermal radiation (200W/m <sup>2</sup> )	6 W/m <sup>2</sup>
- Temperature change (5K/hr)	±2 W/m <sup>2</sup>
Non-linearity (at 1000W/m <sup>2</sup> )	±1.0%
Directional response (at 1000W/m <sup>2</sup> )	±20W/m <sup>2</sup>
Spectral selectivity (0.35-1.5 μm)	-2.1%
Temp. response	<4%
Tilt response (at 1000W/m <sup>2</sup> )	<±2.0%
Sensitivity (μV/W/m <sup>2</sup> )	approx. 7
Operating temperature	-40~+80°C

Specifications could be changed without notice.

