



## MS-410 Pyranometer

### Technical Specifications

ISO 9060 First class

Double dome for lower zero offset

Balance costs and quality

ISO 17025 certified calibration

5 years warranty

The MS-410 First class pyranometer made for routine global solar radiation measurements. The MS-410 is perfectly suited for sampling 10-minute averages of the solar radiative flux in horizontal or tilted configurations. It 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 practical light-weight anodized aluminum housing and a stable low TC detector. These features, together with the two, high quality machined hemispheric glass domes are the key to the excellent performance characteristics of the MS-410.

The MS-410 pyranometers are manufactured in a consistent way followed by strict quality inspection and performance evaluation. EKO provides a unique calibration compliant to the international standards defined by ISO/IEC17025/9847.

	<b>MS-410</b>
<b>ISO 9060:1990</b>	First Class
<b>Output</b>	Analog (mV)
<b>Response time 95%</b>	< 18 Sec.
<b>Zero off-set a) 200W/m<sup>2</sup></b>	< 6 W/m <sup>2</sup>
<b>Zero off-set b) 5K/hr</b>	+/- 2 W/m <sup>2</sup>
<b>Non-stability change/1 year</b>	+/- 1.5 %
<b>Non-linearity at 1000W/m<sup>2</sup></b>	+/- 1 %
<b>Directional response at 1000W/m<sup>2</sup></b>	< 20 W/m <sup>2</sup>
<b>Spectral selectivity 0.35-1.5µm</b>	-
<b>Temperature response -10°C to 40°C</b>	+/- 2 %
<b>Tilt response at 1000W/m<sup>2</sup></b>	< 2 %
<b>Sensitivity</b>	Approx. 10 µV/W/m <sup>2</sup>
<b>Impedance</b>	140 Ω
<b>Operating temperature range</b>	-40 - 80 °C
<b>Irradiance range</b>	0 - 2000 W/m <sup>2</sup>
<b>Wavelength range</b>	285 - 3000 nm (50% points)
<b>Ingress protection IP</b>	67
<b>Cable length</b>	10 m

<b>Options</b>	<b>MS-410</b>
<b>Cable length</b>	20 / 30 / 50 m

Specifications are subject to change without further notice.