



## MS-60M Pyranometer

### Technical Specifications

ISO 9060:2018 Class B (First class)

Sub-category "Spectrally flat"

Compact and light weight

Industrial sensor outputs (MODBUS RTU)

ISO 17025 certified calibration

The MS-60M is an ISO 9060:2018 Class B (First class) pyranometer with built in MODBUS 485 RTU converter is compatible to industrial output standards. The new double dome constructions provides lower offsets and cosine errors. The MS-60M can be used with the optional MV-01 ventilator / heater.

The MS-60M 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. The sensor has a 5 year warranty with a 2 year re-calibration interval recommended and it is no longer necessary to change the desiccant.

	<b>MS-60M</b>
ISO 9060:2018	Class B
ISO 9060:2018	(First Class)
Sub-category "Spectrally flat"	Compliant
Sub-category "Fast response"	Not compliant
Output	Digital (Modbus RTU)
Response time 95%	< 18 Sec.
Zero off-set a) 200W/m <sup>2</sup>	+/- 5 W/m <sup>2</sup>
Zero off-set b) 5K/hr	+/- 2 W/m <sup>2</sup>
Complete zero off-set c)	+/- 7 W/m <sup>2</sup>
Non-stability change/1 year	+/- 1.5 %
Non-linearity at 1000W/m <sup>2</sup>	+/- 1 %
Directional response at 1000W/m <sup>2</sup>	+/- 18 W/m <sup>2</sup>
Spectral error	+/- 0.2 %
Temperature response -10°C to 40°C	+/- 2 %
Temperature response -20°C to 50°C	+/- 2 %
Tilt response at 1000W/m <sup>2</sup>	+/- 1 %
Sensitivity	-
Operating temperature range	-40 - 80 °C
Irradiance range	0 - 2000 W/m <sup>2</sup>
Wavelength range	285 - 3000 nm (50% points)
Power supply	12 - 24 VDC
Power consumption	0.2 - 0.3 W
Ingress protection IP	67

<b>Cable length</b>	10 m
<b>Additional signal processing errors</b>	+/- 1.5 W/m <sup>2</sup>

<b>Options</b>	<b>MS-60M</b>
<b>Cable length</b>	20 / 30 / 50 m
<b>Ventilation unit</b>	MV-01
<b>Albedo mounting kit</b>	MS-albedo Kit

Specifications are subject to change without further notice.