



## MS-60 Pyranometer

### Technical Specifications

ISO 9060:2018 Class B (First class)

Sub-category "Spectrally flat"

Analog output

ISO 17025 certified calibration

Optional ventilator MV-01

The MS-60 is a ISO 9060:2018 Class B (First class) pyranometer with analog output and improved performance. The new double dome construction provides lower offsets and cosine errors. The MS-60A and MS-60M provide a digital output (4-20mA or Modbus 485 RTU). The MS-60/60A/60M can be used with the optional MV-01 ventilator / heater.

The MS-60 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-60</b>
ISO 9060:2018	Class B
ISO 9060:1990	(First Class)
Sub-category "Spectrally flat"	Compliant
Sub-category "Fast response"	Not compliant
Output	Analog (mV)
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	< 3 %
Temperature response -20°C to 50°C	< 4 %
Tilt response at 1000W/m <sup>2</sup>	+/- 1 %
Sensitivity	Approx. 10 $\mu$ V/W/m <sup>2</sup>
Impedance	100 $\Omega$
Operating temperature range	-40 - 80 °C
Irradiance range	0 - 2000 W/m <sup>2</sup>
Wavelength range	285 - 3000 nm
Ingress protection IP	67
Cable length	10 m

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

Specifications are subject to change without further notice.