

## Pyranometer EKO MS-40

ISO 9060 Spectrally flat Class C + IEC 17025 calibrated



### Description

- ISO 9060 Spectrally flat Class C + IEC 17025 calibrated
- 5-year warranty

MS-40 Second Class pyranometer is based on the EKO's universal sensor platform with analog voltage output. The MS-40 pyranometers have been designed for agro meteorological networks and professional small scale PV sites where solar radiation is taken seriously.

The MS-40 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 years warranty with a 2 years re-calibration interval recommended and it is no longer necessary to change the desiccant.

### Specifications

Classification	ISO 9060 Second Class
Output	Voltage (mV)
Sensitivity	7 ... 14 $\mu\text{V}/\text{W}/\text{m}^2$
Resolution	-
Wavelength range	285 ... 3000 nm
Max. irradiance	2000 $\text{W}/\text{m}^2$
Response time (95%)	< 18 s
Zero offset	
(a) thermal radiation (200 $\text{W}/\text{m}^2$ )	< 12 $\text{W}/\text{m}^2$
(b) temperature change (5k/hr)	$\pm 5 \text{ W}/\text{m}^2$
Non-linearity @ 1000 $\text{W}/\text{m}^2$	$\pm 1 \%$

<b>Classification</b>	<b>ISO 9060 Second Class</b>
Non-stability change/1 year	± 1.5 %
Direction response @ 1000 W/m <sup>2</sup>	± 20 W/m <sup>2</sup>
Temperature response (-10 ... +40°C)	< 3 %
Temperature response (-20 ... +50°C)	< 4 %
Tilt response @ 1000 W/m <sup>2</sup>	± 1 %
Impedance @ 25°C	60 ... 100 Ω
Operating temperature	-40 ... +80 °C
Power supply	
Power consumption	
Cable length	10 m
Weight	0.33 kg
Protection class	IP67
Warranty	5 years
Manufacturer	EKO Instruments
Accessory	MV-01 ventilator / heater (Order-No. S64060)

Delivery includes IEC 17025 calibration certificate.

## Sensor connection diagram

Connecting EKO MS-40 to Ammonit Meteo-40 data loggers

MS-40

Sensor	Wire Colour (EKO)	Meteo-40 Analog Voltage
Solar irradiance	brown (+)	Ax
Output voltage	white (-)	Bx
	shield	Earth

