



MS-56 Pyrheliometer

Technical Specifications

ISO 9060 First Class Pyrheliometer

Fast < 1 s response detector

ISO17025 / 9059 Outdoor calibration

Window heater to prevent dew and frost

5 years warranty

The ISO First Class MS-56 measures direct normal incidence irradiance (DNI). Also known as a pyrheliometer and used as a reference sensor for routine operation on a Solar Tracker. The all-weather MS-56 is sensitive to solar irradiance in the spectral range from 200 - 4000nm and works under the most extreme conditions in a temperature range from -40°C -80°C. The versatile MS-56 combines all features of a quick broadband detector enabled by an advanced technology thermopile detector.

The integrated low power window heater prevents dew deposition or frost on the outside window. The MS-56 has a robust but compact and smooth design which forms the new generation of EKO Instruments solar radiometers that are designed for most demanding Photovoltaic and Meteorological applications at any place on earth. Each MS-56 is calibrated and tested at EKO upon manufacture against EKO's reference sensors which are fully traceable to the WRR (World Radiometric Reference) maintained at the

PMOD/WRC (Physikalisch-Meteorologisches Observatorium Davos/World Radiation Center) in Davos, Switzerland.

The MS-56 pyrheliometers are manufactured in a consistent way followed by strict quality inspection and performance evaluation. For each sensor the temperature dependency are measured and validated through a measurement report that comes with the sensor. EKO provides a unique calibration compliant to the international standards defined by ISO/IEC17025/9059.

	MS-56
ISO 9060:1990	First Class
Salida	Analog (mV)
Tiempo de respuesta 95%	< 1 Seg.
Cero Offset A 200W/m²	0 W/m ²
Cero Offset B 5K/hr	< 1 W/m ²
Completa la compensación de cero c)	< 1 W/m ²
No estabilidad Cambio en 1 año	< 0.5 %
No estabilidad Cambio en 5 años	-
No linealidad a 1000W/m²	< 0.5 %
Selectividad espectral 0.35-1.5µm	-
Respuesta de temperatura -20°C a 50°C	< 0.5 %
Respuesta de inclinación a 1000W/m²	< 0.2 %
Sensibilidad	Approx. 10 µV/W/m ²
Impedancia	Approx. 5000 Ω
Rango de temperatura de trabajo	-40 - 80 °C
Rango de irradiancia	0 - 4000 W/m ²
Rango de longitud de onda	200 - 4000 nm
Protección de ingreso IP	67
Largo de cable	10 m

Options	MS-56
Largo de cable	20 / 30 m