

Pyranometer Kipp & Zonen CMP 3

ISO 9060 Spectrally flat Class B + IEC 17025 calibrated



Description

- Measurement of solar irradiance
- ISO 9060 Spectrally flat Class B + IEC 17025 calibrated
- Widely used within World Meteorological Organisation scientific programmes

The Kipp & Zonen range of thermopile-based pyranometers is respected around the world for the measurement of solar irradiance to World Meteorological Organisation and ISO 9060:1990 standards. The instruments are used in meteorological research, solar energy research, material testing, climate control in greenhouses, building physics, science and many other applications.

The CMP series of pyranometers have ergonomic features to facilitate installation, maintenance, and exchange for recalibration.

A waterproof socket is fitted for the signature yellow signal cable, which is available in a range of lengths. The integral bubble level is raised to the top of the housing and can be viewed without removing the sun shield. The screw-in drying cartridge can be reactivated with convenient refill packets.

Specifications

Classification	Secondary Standard, ISO 9060 & WMO
Sensitivity	7 ... 14 $\mu\text{V}/\text{W}/\text{m}^2$ (see calibration protocol)
Spectral range (50% points)	285 ... 2800 nm
Max. irradiance	4000 W/m^2
Response time (95%)	5 s
Typical signal output for atmospheric applications	0 ... 15 mV

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Zero offset (a) thermal radiation (200 W/m ²) (b) temperature change (5k/hr)	<7 W/m ² <2 W/m ²
Non-linearity (0 ... 1000 W/m ²)	<0.2 %
Temperature dependence of sensitivity	<1 % (-10 ... +40 °C)
Level accuracy	0.1°
Operating temperature	-40 ... +80 °C
Cable length	10 m
Weight without cable	approx. 0.6 kg
Manufacturer	Kipp & Zonen BV

Delivery includes calibration certificate.

Sensor connection diagram

Sensor	Plug No.	PIN	Wire Colour (Kipp & Zonen)	Meteo-40 Voltage	Analog	Supply Sensor
Solar irradiance Output voltage	1		red	Ax		
	2		blue	Bx		
Shield (Housing)						Main Ground (GND)

