



Kipp & Zonen CMP22 Pyranometer

Product #: 0362930
USD Price: Contact Hach

The CMP22 has all the features of the CMP21, but instead is designed with ultra high quality quartz domes for a wider spectral range. This means the CMP22 comes with much improved directional response and reduced thermal offsets. The high optical quality of these domes enables the CMP22 to perform with a directional response of less than ± 5 W/m². Kipp & Zonen is confident that the CMP22 and SMP22 are the most accurate pyranometers currently available, and we have the historical track record to back it up.

The CMP22 has individually optimized temperature compensation and a standard thermistor sensor is fitted to monitor the housing temperature. Each instrument is supplied with its own temperature and directional (cosine response) test data.

A waterproof cable connector socket is integrated for our signature Kipp & Zonen yellow signal cable, which is available in a range of lengths pre-wired to the waterproof plug.

The integral bubble level is raised to the top of the housing and can be viewed without removing the redesigned snap-on sun shield, which also covers the connector. The screw-in drying cartridge is easy to remove and the replacement desiccant is supplied in convenient refill packets.

The CMP22 pyranometer does not require a dedicated power supply. It generates a low voltage output in the estimated range of 0 to 21 mV relative to an irradiance measurement range of 0 to 1500 W/m². When a higher voltage level or a 4 to 20 mA signal is required, the AMPBOX is the perfect solution.

ISO / IEC classification

ISO 9060:2018 spectrally flat Class A , with broad spectral range 200 to 3600 nm. ISO / IEC 17025 calibration.

Minimized maintenance

Best MTBF with 5 years warranty.

Best pyranometer available.

Quartz domes provide a broad spectral range 200 to 3600 nm and negligible thermal gradient zero-offset. Specifications far beyond the requirements for Class A.

Specifications

Analog Outputs:	0 to 21 mV
Cable Length:	33, 82, 164, 330 ft (10, 25, 50, 100 m)

Classification:	Spectrally Flat Class A (ISO 9060:2018)
Digital Outputs:	N.A.
Directional Response:	# 5 W/m ² (up to 80 ° with 1000 W/m ² beam)
Drying Cartridge and Maintenance Interval:	External, replacement after approx. 6 months
IP Rating:	IP67
Irradiance Saturation:	4000 W/m ² (Max.)
Material Enclosures:	Aluminum, anodised
Non-linearity:	# ±0.2% (100 to 1000 W/m ²)
Non-stability:	# ±0.5% (change/year)
Operating Humidity:	0 to 100%
Operating Temperature Range:	-40 to +80 °C
Response Time:	# 1.7 s (63%), # 5 s (95%)
Sensitivity:	7 to 14 µV/W/m ² # ±0.5 % (-20 to +50 °C)
Spectral Accuracy:	200 to 3600 nm
Temperature Correction:	# ±0.5% (-20 to +50 °C)
Weight:	1.3 lb (600 g)
Zero offset A:	# ±3 W/m ²
Zero offset B:	# ±1 W/m ²