CMP10

CMP10 is the secondary standard pyranometer with the best price-quality-performance ratio on the market. Based on the established CMP 11 technology, and with the same performance, CMP10 extends this quality to applications where maintenance is difficult and/or forms a major part of the cost of ownership.

The CMP10 has internal desiccant that will last for at least 10 years if the housing is not opened. This minimizes maintenance significantly.

The interval for dome cleaning can be extended, and the quality of measurements maximized, by fitting CMP10 with the CVF4 ventilation unit.

Kipp & Zonen provides every CMP10 with a 5-year warranty as standard. This warranty applies provided that the CMP10 is used only under atmospheric conditions, that the housing is not opened and that the Kipp & Zonen cable and connector is correctly fitted.

Specifications	
Classification to ISO 9060:1990	Secondary Standard
Spectral range (50 % points)	285 to 2800 nm
Sensitivity	7 to 14 µV/W/m²
Impedance	10 to 100 Ω
Expected output range (0 to 1500 W/m²)	0 to 20 mV
Maximum operational irradiance	4000 W/m²
Response time (63 %) Response time (95 %)	< 1.7 s < 5 s
Zero offsets (a) thermal radiation (at 200 W/m²) (b) temperature change (5 K/h)	 < 7 W/m² < 2 W/m²
Non-stability (change/year)	< 0.5 %
Non-linearity (100 to 1000 W/m²)	< 0.2 %
Directional response (up to 80° with 1000 W/m² beam)	< 10 W/m²
Spectral selectivity (350 to 1500 nm)	< 3 %
Temperature response	< 1 % (-10 °C to +40 °C)
Tilt response (0° to 90° at 1000 W/m²)	< 0.2 %
Field of view	180°
Accuracy of bubble level	< 0.1°
Detector type	Thermopile
Operational temperature range	-40 °C to +80 °C
Storage temperature range	-40 °C to +80 °C
Humidity range	0 to 100 % non-condensing
Ingress Protection (IP) rating	67

Part number	Instrument
0379900-002	CMP10 Pyranometer • 10 m cable
0379900-004	CMP10 Pyranometer • 25 m cable
0379900-005	CMP10 Pyranometer • 50 m cable
0379900-000	CMP10 Pyranometer • no plug, no cable
0379900-702	CMP10 Pyranometer • METEON • 10 m cable
0379900-700	CMP10 Pyranometer • METEON • no plug, no cable
0379900-802	CMP10 Pyranometer • AMPBOX • 10 m cable
0379900-800	CMP10 Pyranometer • AMPBOX • no plug, no cable
Note: AMPBOX is adjusted so that 4 to 20 mA output = 0 to 1600 W/m²	

CMP10 Secondary Standard Albedometer
A ventilated ISO Secondary Standard Albedometer can be self-assembled by ordering: 2x CMP10 Pyranometer + 1x CMF4 Mounting Fixture + 2x CVF4 Ventilation Unit
CMA 11 is an integrated unventilated ISO Secondary Standard Albedometer

Part number	Accessories
See accessories	CVF4 Ventilation Unit Recommended to reduce offsets and frequency of dome cleaning
0362700	CMF 1 Mounting Fixture For 1 or 2 unventilated radiometers (1 upper / 1 lower) Diameter 88 mm. Mounting rod 350 mm long x 16 mm Ø
0362703	CMF4 Mounting Fixture For 1 or 2 ventilated or unventilated radiometers (1 upper / 1 lower) Length 375 mm, width 280 mm. Mounting rod 350 mm long x 20 mm Ø
0367718	Adjustable Tilt Pyranometer Mounting Kit For a CMP10 pyranometer to measure tilted diffuse radiation Zenith angle can be adjusted from 0° to 90° with graduated scale
0369701	CMB 1 Mounting Bracket In combination with mounting rod for easy attachment to a pole or a wall
0346900	CM 121B Shadow Ring for unventilated radiometers Manually adjusted device provides diffuse sky irradiance measurement Note: CM 121B can not be used with CVF4 Ventilation Unit
0346901	CM 121C Shadow Ring for ventilated radiometers Manually adjusted device provides diffuse sky irradiance measurement Mounts the radiometer at the correct height when used with a CVF4
0305722	Glare Screen Kit Sun protection screen for downward facing radiometers, with fixings