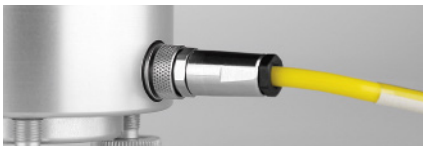
KIPP & ZONEN
SINCE 1830

The New CMP10

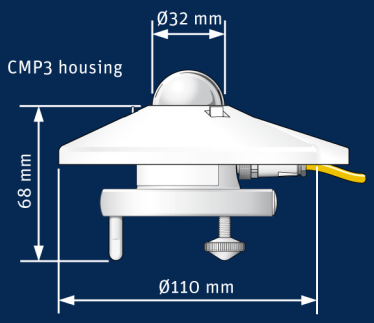
because we know what makes a secondary standard pyranometer better

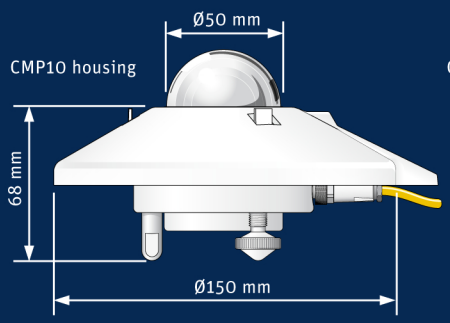


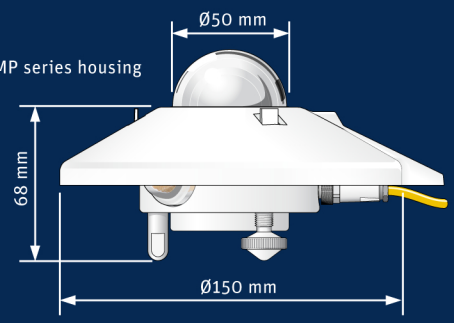
No desiccant inspection or change for 10 years!
Minimized maintenance
Lowest cost of ownership
Best price / performance ratio
Proven technology
5 year full warranty

Based on more than 30 years of experience and proven technology we have developed the CMP10. A new design that does not require regular change of desiccant and thus significantly reduces maintenance. The CMP10 is the first pyranometer in the world supplied with a full manufacturer warranty of 5 years!

www.kippzonen.com







Specifications	CMP 3	CMP 6	CMP10 & CMP 11	CMP 21	CMP 22
Classification to ISO 9060:1990	Second Class	First Class	Secondary Standard	Secondary Standard	Secondary Standard
Spectral range (50 % points)	300 to 2800 nm	285 to 2800 nm	285 to 2800 nm	285 to 2800 nm	200 to 3600 nm
Sensitivity	5 to 20 µV/W/m²	5 to 20 µV/W/m²	7 to 14 µV/W/m²	7 to 14 µV/W/m²	7 to 14 µV/W/m²
Impedance	20 to 200 Ω	20 to 200 Ω	10 to 100 Ω	10 to 100 Ω	10 to 100 Ω
Expected output range (0 to 1500 W/m²)	0 to 30 mV	0 to 30 mV	0 to 20 mV	0 to 20 mV	0 to 20 mV
Maximum operational irradiance	2000 W/m²	2000 W/m²	4000 W/m²	4000 W/m²	4000 W/m²
Response time (63 %) Response time (95 %)	< 6 s < 18 s	< 6 s < 18 s	< 1.7 s < 5 s	< 1.7 s < 5 s	< 1.7 s < 5 s
Zero offsets (a) thermal radiation (at 200 W/m²) (b) temperature change (5 K/h)	 < 15 W/m² < 5 W/m²	 < 12 W/m² < 4 W/m²	 < 7 W/m² < 2 W/m²	 < 7 W/m² < 2 W/m²	 < 3 W/m² < 1 W/m²
Non-stability (change/year)	< 1 %	< 1 %	< 0.5 %	< 0.5 %	< 0.5 %
Non-linearity (100 to 1000 W/m²)	< 1.5 %	< 1 %	< 0.2 %	< 0.2 %	< 0.2 %
Directional response (up to 80 ° with 1000 W/m² beam)	< 20 W/m²	< 20 W/m²	< 10 W/m²	< 10 W/m²	< 5 W/m²
Spectral selectivity (350 to 1500 nm)	< 3 %	< 3 %	< 3 %	< 3 %	< 3 %
Temperature response	< 5 % (-10 °C to +40 °C)	< 4 % (-10 °C to +40 °C)	< 1 % (-10 °C to +40 °C)	< 1 % (-10 °C to +50 °C)	< 0.5 % (-20 °C to +50 °C)
Tilt response (0 ° to 90 ° at 1000 W/m²)	< 1 %	< 1 %	< 0.2 %	< 0.2 %	< 0.2 %
Field of view	180 °	180 °	180 °	180 °	180 °
Accuracy of bubble level	< 0.2 °	< 0.1 °	< 0.1 °	< 0.1 °	< 0.1 °
Temperature sensor output				10 K Thermistor (optional Pt-100)	10 K Thermistor (optional Pt-100)
Detector type	Thermopile	Thermopile	Thermopile	Thermopile	Thermopile
Operational temperature range	-40 °C to +80 °C	-40 °C to +80 °C	-40 °C to +80 °C	-40 °C to +80 °C	-40 °C to +80 °C
Storage temperature range	-40 °C to +80 °C	-40 °C to +80 °C	-40 °C to +80 °C	-40 °C to +80 °C	-40 °C to +80 °C
Humidity range	0 to 100 % non-condensing	0 to 100 % non-condensing	0 to 100 % non-condensing	0 to 100 % non-condensing	0 to 100 % non-condensing
Ingress Protection (IP) rating	67	67	67	67	67
Recommended applications	Economical solution for routine measurements in weather stations, field testing	Good quality measurements for hydrology networks, greenhouse climate control	Meteorological networks, PV panel and thermal collector testing, materials testing	Meteorological networks, reference measurements in extreme climates, polar or arid	Scientific research requiring the highest level of measurement accuracy and reliability

Note: The performance specifications quoted are worst-case and/or maximum values

Standard 10 k Thermistor or optional Pt-100 temperature sensor with CMP 21 and CMP 22

Individual directional response and temperature dependence test data with CMP 21 and CMP 22

KIPP & ZONEN
SINCE 1830

Go to www.kippzonen.com for your local distributor

HEAD OFFICE

Kipp & Zonen B.V.
Delftechpark 36, 2628 XH Delft
P.O. Box 507, 2600 AM Delft
The Netherlands
T: +31 (0) 15 2755 210
F: +31 (0) 15 2620 351
info@kippzonen.com

CAMPBELL SCIENTIFIC®

Campbell Scientific (Canada) Corp.
14532 131 Avenue NW | Edmonton AB T5L 4X4
780.454.2505 | fax 780.454.2655 | campbellsci.ca

CMP10-V1310