

# CMA 11



**CMA 11** is a double CMP 11 pyranometer that complies with the highest level of ISO classification, Secondary Standard. It has all the features of the CMA 6 but uses higher quality glass domes and a faster response detector design with temperature compensation. The tilt error and levelling accuracy are also improved.

CMA 11 is a step up in performance from CMA 6 and is recommended for scientific applications, for which accuracy needs to be according to the highest standards.

Article	Part number
<b>CMA 11 Albedometer • 10 m cable</b>	<b>0362960-002</b>
Options for CMA 11	
CMA 11 Albedometer • 25 m cable	0362960-004
CMA 11 Albedometer • 50 m cable	0362960-005
CMA 11 Albedometer • plug only, no cable	0362960-008
100 m cable	On request
<i>Note: CMA 11 can be used with the AMPBOX but it has two individual outputs, so 2 x AMPBOX are required. Each AMPBOX is adjusted so that 4-20 mA output = 0-1600 W/m<sup>2</sup></i>	

## Specifications

ISO CLASSIFICATION	Secondary Standard
Response time (95 %)	< 5 s
Zero offsets (a) thermal radiation (200 W/m <sup>2</sup> ) (b) temperature change (5 K/hr)	< 7 W/m <sup>2</sup> < 2 W/m <sup>2</sup>
Non-stability (change/year)	< 0.5 %
Non-linearity (0 to 1000 W/m <sup>2</sup> )	< 0.2 %
Directional error (at 80 ° with 1000 W/m <sup>2</sup> beam)	< 10 W/m <sup>2</sup>
Temperature dependence of sensitivity	< 1 % (-10 °C to +40 °C)
Tilt error (at 1000 W/m <sup>2</sup> )	< 0.2 %

## Other specifications

Sensitivity	7 to 14 µV/W/m <sup>2</sup>
Impedance	10 to 100 Ω
Level accuracy	0.1 °
Operating temperature	-40 °C to +80 °C
Spectral range (50 % points)	310 to 2800 nm
Typical signal output for atmospheric applications	0 to 15 mV (upper) 0 to 10 mV (lower)
Maximum irradiance	4000 W/m <sup>2</sup>
Mounting rod (fixed)	350 mm long x 16 mm Ø

## Accessories for CMA 11

Accessories for CMA 11	Part number
<b>Desiccant Refill Pack</b> , minimum order 10 packs	<b>2643951</b>
<b>CMB 1 Mounting Bracket</b> To enable easy attachment of the mounting rod to a pole or a wall	<b>0369701</b>