

	PYRANOMETER				
SPECIFICATION	CMP3	CMP6	CMP10	CMP21	CMP22
Classification to ISO 9060:1990	Class C	Class B	Class A	Class A	Class A
Sensitivity	5 to 20 μ V/W/m ²	5 to 20 μ V/W/m ²	7 to 14 μ V/W/m ²	7 to 14 μ V/W/m ²	7 to 14 μ V/W/m ²
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/m)	0 to 30mV	0 to 30mV	0 to 20mV	0 to 20mV	0 to 20mV
Maximum operational irradiance	2000 W/m ²	2000 W/m ²	4000 W/m ²	4000 W/m ²	4000 W/m ²
Response time (63 %)	< 6 s	< 6 s	< 1.7 s	< 1.7 s	< 1.7 s
Response time (95 %)	< 18 s	< 18 s	< 5 s	< 5 s	< 5 s
Spectral range (20 % points)	285 to 3000nm	270 to 3000nm	270 to 3000nm	270 to 3000nm	210 to 3600nm
(50 % points)	300 to 2800nm	285 to 2800nm	285 to 2800nm	285 to 2800nm	250 to 3500nm
Zero offsets (unventilated)					
(a) thermal radiation (at 200 W/m ²)	< 15 W/m ²	< 10W/m ²	< 7W/m ²	< 7W/m ²	< 3W/m ²
(b) temperature change (5 K/h)	< 5 W/m ²	< 4 W/m ²	< 2W/m ²	< 2W/m ²	< 1W/m ²
Nonstability (change/year)	< 1%	< 1%	< 0.5%	< 0.5%	< 0.5%
Non-linearity (100 to 1000 W/m ²)	< 1.5%	< 1%	< 0.2%	< 0.2%	< 0.2%
Directional response (up to 80 ° with 1000 W/m beam)	< 20 W/m ²	< 20 W/m ²	< 10 W/m ²	< 10 W/m ²	< 5W/m ²
Spectral selectivity (350 to 1500 nm)	< 3%	< 3%	< 3%	< 3%	< 3%
Tilt response (0 ° to 90 ° at 1000 W/m ²)	< 1%	< 1%	< 0.2%	< 0.2%	< 0.2%
Temperature response	< 5% (-10 °C to +40 °C)	< 4% (-10 °C to +40 °C)	< 1% (-10 °C to +40 °C)	< 1% (-20 °C to +50 °C)	< 0.5% (-20 °C to +50 °C)
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	NA	NA	NA	10 k Thermistor	10 k Thermistor (optional)
Detector type	Thermopile	Thermopile	Thermopile	Thermopile	Thermopile
Operating and 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%	0 to 100%	0 to 100%	0 to 100%	0 to 100%
MTBF (Mean Time Between Failures)	> 10 years	> 10 years	> 10 years	> 10 years	> 10 years
Ingress Protection (IP) rating	67	67	67	67	67
Onsite pyranometer uncertainty	Calculate with Suncertainty App	Calculate with Suncertainty App	Calculate with Suncertainty App	Calculate with Suncertainty App	Calculate with Suncertainty App
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.