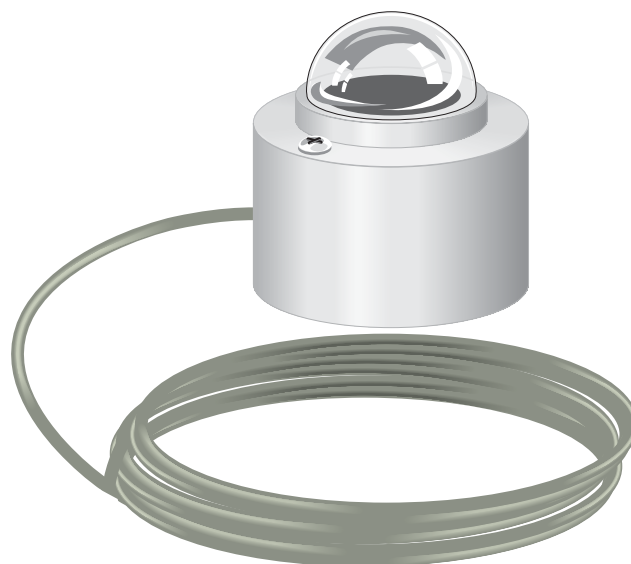


Solar Radiation Sensor

Model CM3

The CM3 is a rugged pyranometer manufactured by Kipp & Zonen. It is fully compliant with all ISO-9060 second class pyranometer performance specification criteria. The CM3 measures solar radiation with a high-quality blackened thermopile protected by a dome. The blackened thermopile provides a flat spectral response for the full solar spectrum range. This allows the CM3 to be used under plant canopies or lamps, when the sky is cloudy, and for reflected radiation measurements. The CM3 produces a mV signal that is measured directly by a Campbell Scientific datalogger.

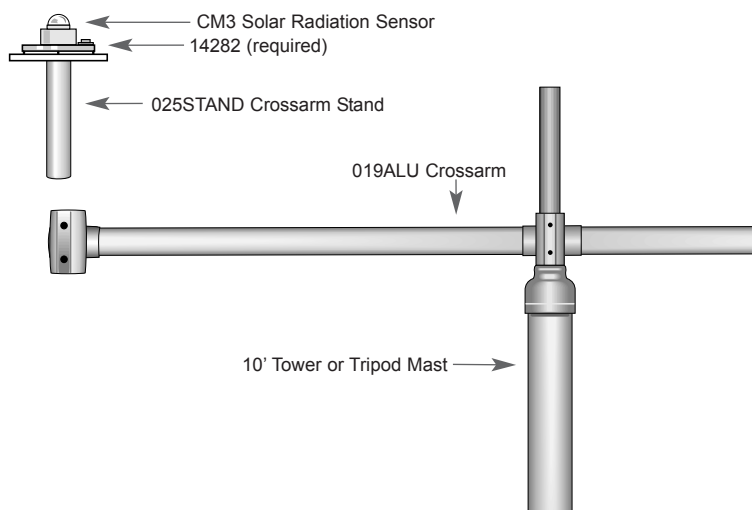


Mounting

To ensure accurate measurements, the CM3 should be leveled using a 14282 leveling fixture which incorporates a bubble level and three adjusting screws. The 14282 leveling fixture attaches either to a 025STAND Crossarm Stand, or 015ARM Mounting Arm. The 025STAND attaches to a 019ALU Crossarm sitting atop a tripod or UT10 Tower. The 015ARM mounts onto a tripod mast or tower leg.

Ordering Information

CM3	Pyranometer, includes 15' lead length.
14282	Leveling Fixture, includes mounting and leveling screws



Specifications

Light Spectrum Waveband:	305 to 2800 nm
Maximum Irradiance:	2000 W m ⁻²
Signal Output:	0 to 50 mV
Sensitivity:	10 to 35 μV W ⁻¹ m ²
Operating Temperature:	-40° to +80°C
Temperature Dependence:	±6%/C° (-10° to +40°C)
Non-linearity (at 100 W m ⁻²):	<±2.5%
Tilt Response (±80°):	<±2% at 1000 W m ⁻²
Expected accuracy for daily sums:	±10%
Dimensions:	2.1" (5.4 cm) diameter, 2.3" (5.8 cm) height
Weight (with cable):	12 oz (343 g)
ISO Classification:	Second Class

Note: If solar radiation data are to be used in procedures for estimating stability, then second class pyranometers are acceptable. (*EPA Meteorological Monitoring Guidance for Regulatory Modeling Applications*, pages 2-10.)



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