

PRODUCT



CMP3-L
Pyranometer with Sun Shield



Protective Glass Dome and Solar Shield

Compatible with most Campbell Scientific data loggers

Overview

The CMP3-L, manufactured by Kipp & Zonen, is an ISO-second-class pyranometer that monitors solar radiation for the full solar spectrum range. It produces a millivolt signal that is measured

directly by a Campbell Scientific data logger. The CMP3-L can provide solar radiation measurements for a variety of meteorological applications.

Benefits and Features

- › Includes a white snap-on sun shield that reduces the sensor's temperature
- › Measures reflected solar radiation when inverted
- › Provides measurements in direct sunlight, under plant canopies, when the sky is cloudy, and in artificial light
- › Includes bubble level and leveling screws, eliminating the need for a separate leveling base and simplifying installation
- › Compatible with the CWS900-series interfaces, allowing it to be used in a wireless sensor network
- › Acceptable for providing the solar radiation data used in stability estimations
- › Dome protects thermopile and allows water to roll off of it

Detailed Description

The CMP3-L 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, which allows the CMP3-L to be used under plant canopies or lamps, when the sky is cloudy, and for reflected radiation measurements.

adjusting leveling screws, which enable the sensor to be leveled without using a leveling base.

The CMP3-L includes a white snap-on sun shield that reduces the sensor's temperature. It also has a bubble level and

The CMP3-L produces a millivolt signal that is measured directly by a Campbell Scientific data logger.

Two CMP3-L pyranometers can be mounted back-to-back to make a low-cost albedometer. Contact Campbell Scientific for more information.

Specifications

Sensor	Blackened thermopile protected by a dome
Measurement Description	Monitors solar radiation for the full solar spectrum range
Spectral Range	300 to 2800 nm
Maximum Irradiance	2000 W/m ²
Sensitivity	5 to 20 μV/W/m ²
Operating Temperature Range	-40° to +80°C

Temperature Dependence	±5% (-10° to +40°C)
Non-Linearity	< ±2.5% (0 to 1000 W/m ²)
Tilt Response	< ±2% at 1000 W/m ² (±80°)
ISO Classification	Class C (second class)
Dome Diameter	3.2 cm (1.3 in.)
Width	7.9 cm (3.1 in.)
Height	6.7 cm (2.6 in.)
Weight	600 g (1.2 lb) with 10 m (32.8 ft) cable