Sunshine Duration Sensor



Description

The SEN-SR-SS is a Sunshine sensor with a TTL (High / Low) output and exhibits excellent cosine response. It incorporates a silicon-cell photodiode that measures solar radiation. With a sensor housing design that features a fully potted, domed-shaped head making the sensor fully weatherproof and self-cleaning.

Specifications

Power Supply: 10-14 VDC

Spectral Range: 360 nm to 1120 nm (wavelengths where

response is 10 % of maximum)

Sunshine Threshold: 120 W/m²

Sensitivity: 0.20 mV per W/m²

Calibration Factor: 5.0 W/m² per mV (reciprocal of sensitivity)

Calibration Uncertainty: ± 5 % Measurement Repeatability: < 1 %

Non-stability (Long-term Drift): < 2 % per year Non-linearity: < 1 % (up to 1750 W/m²)

Response Time: < 1 ms Field of View: 180°

Output: TTL High for 'Sunshine'

TTL Low for 'No Sunshine'

Directional (Cosine) Response: ± 5 % at 75° zenith angle

Temperature Response: -0.04 ± 0.04 % per C

Operating Environment: -40 to 70 C, 0 to 100 % relative humidity

Cable length: 5m (extendable at extra cost)

Input: Self Powered for mV O/P For others O/P10-28 VDC, 30-60 VDC

Output: mV O/P : 0 to 400 mV



Determining Sunshine duration for different application

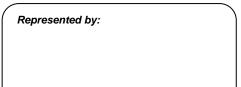
Ordering Guide

Output Model No.
For mV O/P: SEN-SR-SS-mV



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** Drawing & specifications are subjected to change at any time without prior notice as per manufacturing suitability.