

Pyranometer *First Class*



Description

Rugged and precise pyranometer sensor for the measurement of global radiation, the sum of both the direct and diffuse components of solar irradiance.

A thermopile measures the temperature of a horizontal surface exposed to sunlight. Output voltage is linearly dependent on incident solar power.

An adjustable levelling plate and a bull-eye enable simple installation of the sensor.

The sensor meets ISO 9060 First Class.

Technical Data

Sensor

Sensing element	Thermopile
Output signal	0..2000 W/m ² = approx. 0..25 mV (depending on individual sensitivity)
Spectral response.....	305..2800 nm

Accuracy

Non-linearity.....	0..1000 W/m ² ± 1.5 %
Daily sum	±5 %
Response time	27 s

Power Supply

Supply voltage.....	no supply required
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Casing

Material	Aluminium / plastic temperature shield
Dome	Double glass dome
Desiccation	Replaceable desiccators
Protection class.....	IP 65
Weight	Approx. 1 kg
Mounting.....	Mounting plate, 3 adjustable screws, bull-eye level indicator

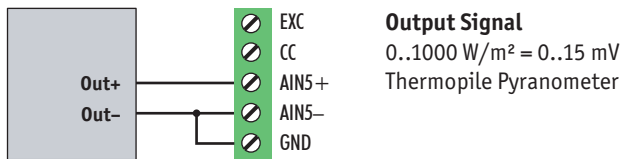
Electrical Connection

Connector..... M8 circular connector
 Cable 2 x 0.14 mm² , shielded
 Cable length..... 5 m
 Terminals..... wire end sleeves

Wiring

brown..... (+) output
 blue (-) output
 yellow/green Cable screen

Connection to Data Logger blueberry COMPACT



Standard Setup

Input: **AIN5**
 Functions: **GlobalRad(W/m²) = Voltage * 66667**
(replace slope by individual sensitivity from calibration sheet)

Environmental Conditions

Operating temperature..... -40..+70°C
 Relative humidity..... 0..100%

Compliance

The sensor meets „WMO / ISO 9060 First Class“.

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