PM Ecology

SOLAR RADIATION SENSOR

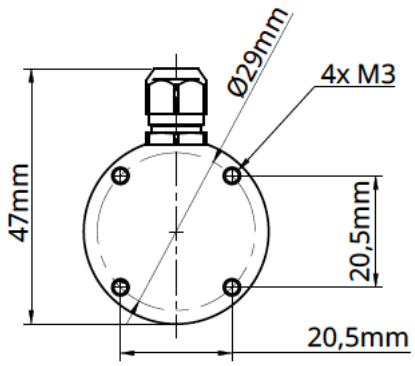
SSR2AD

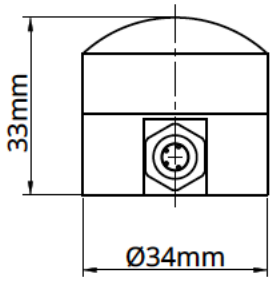
MAIN FEATURES
High accuracy of measurements
Excellent characteristics
Waterproof enclosure with IP67
Analog (0-5V) and digital (SDI-12) outputs
Low power consumption

SSR2AD solar radiation sensor uses photodiode as the sensing element. The device has been designed for constant outdoor use and the radiation is measured on the whole hemisphere with the full sight vision of 180°. The sensor works great in photovoltaic, food farming, thermal convection and evaporation systems. It is fully compatible with PM Ecology data loggers and devices of other manufacturers with analog 0-5V or digital SDI-12 inputs.

The calibration of the sensor is made for natural, unshaded daylight. In case of artificial light, the measured data will be not correct, or the sensor must be recalibrated using appropriate source of light. In most cases the sensor is used to measure solar radiation reaching flat surface, however if required, the sensor can be used in reversed or slanted position. The enclosure is made of anodized aluminum with ingress protection IP67. SSR2AD is suitable for use in every weather conditions.

DIMENSIONS:





TECHNICAL SPECIFICATION	
Model	SSR2AD
Working temperature	-40 … + 60 °C
Sensing element	Photodiode
Output signal	0-5V and SDI-12
Radiation intensity range	0 … 1595 W/m^2
Spectral range	430 – 1100 nm
Accuracy	+/- 3%
Sensitivity	3,13 mV per W/m^2
Response time	< 1 second
Non-linearity	< +/- 1%
Long-term stability	< +/- 2% yr
Temperature influence on the measurement	< +/- 0,15% / °C
Ingress Protection	IP 67
Cable length	1 m, optional extension
Weight	0,13 Kg

WIRING SCHEMA

Sensor output	
Green	Signal SDI-12
Yellow	(+) power supply
White	(-) mass
Brown	Analog signal
Yellow-green	Ground

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