

SOLAR RADIATION SENSOR SSR1D



FEATURES

High accuracy of measurements

Excellent characteristics

Waterproof enclosure made of anodized aluminium with IP67

Output signal 0-3V

Low power consumption

SSR1D 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 the voltage input of 0-3V.

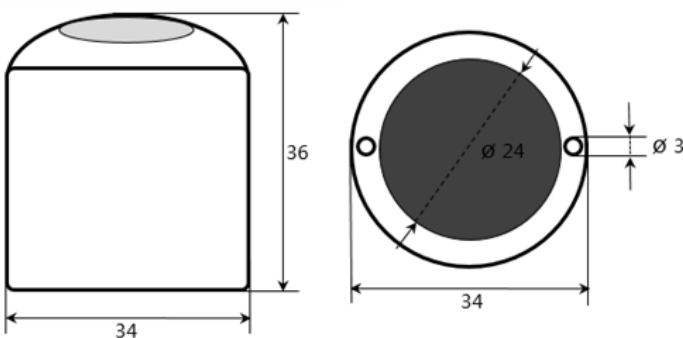
APPLICATION

The calibration of the sensor was made for natural, unshaded daylight. In case of artificial light, the measured data will be not correct.

In most cases the sensor is used to measure solar radiation reaching flat surface, however if a need be, the sensor can be used in reversed or slanted position.

The enclosure is made of anodized aluminium with ingress protection IP67. The sensor may be used in every weather condition.

DIMENSIONS (mm)



Type	SSR1D
Working temperature	-40 +65°C
Output signal	0-3V
Supply voltage	3,3-15V DC, allowed ripple voltage - 100mV
Sensing element	fotodiode
Radiation intensity range	0 ... 1500 W/m ²
Sensitivity range	300 – 1000 nm
Accuracy	+/- 5%
Sensitivity	2mV 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)	IP67
Weight	138g
Cable length	1m, optional extension

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