# Second class pyranometer | C class

# SR05-A1

Item : 003119

LowPower Technology


## Main features

- Second class | C Class
- WMO compliant
- Durable
- Easy maintenance

**SR15-A1** is a second class pyranometer according to the WMO and ISO 9060:1990 guide classification and a class C sensor. Installed horizontally, it allows for accurate measurement of global radiation to precisely meet the requirements of meteorological services

**SR05-A1** is a pyranometer designed to meet the rigorous requirements of global radiation measurement.

## Measurement principle

**SR05-A1** is an incredible sturdy thermopile pyranometer that uses a series of thermoelectric junctions to provide a signal proportional to the temperature difference between its black absorbing surface and a reference 'cold' area in the sensor body.

## Classification

**SR05-A1** complies with the "second class" specification of ISO 9060 and "class C".

## Easy to install

The height of the pyranometer is adjustable thanks to the pole system provided by PULSONIC on its PULSIA stations. Maintenance is also made easier thanks to its waterproof and pluggable connection system. The cable is protected in the pole.

## Automatic

The P4-100 central unit regularly takes radiation measurements, centralizes them and communicates them to the remote server in order to make them available to users and to calculate data such as the duration of insolation according to the WMO pyranometric standard.

This sensor is a reference and will give you many years of satisfaction!

# SR05-A1

Second class pyranometer | C class

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## Technical specifications

### General

| | |
|---|---|
| Measure | Solar radiation |
| Measuring range | 0 to 2000 W/m² |
| Calibration uncertainty | < 1.8 % (k=2) |
| Spectral range | 285 to 3000 nm |
| Sensitivity | 10 µV/(W/m²) |
| Sensitivity range | 7 to 30 µV/(W/m²) |
| Acquisition angle | 180° |
| Expected output voltage | -0.1 to 50 mV |
| Response time | 18 s |
| Zero Offset A | < 15W/m² |
| Zero Offset B | < ± 4 W/m² |
| Electric consumption | None |
| Operating temperature | -40 to +80°C |
| Temperature response | < ±3% (-10 to +40°C) |
| Max. radiation | 2000 W/m² |
| Cable length | 3 m |
| Weight | 0.5 kg |
| Connector | M12, IP67 |

### Pole for the solar generator box

| | |
|---|---|
| Length/diameter (tube 1) | 760 mm / ø25 mm |
| Length/diameter (tube 2) | 550 mm / ø20 mm |
| Adjustable amplitude | 445 mm |
| Material | Inox |

### Maintenance

| | |
|---|---|
| Recommended calibration | Every 2 years |

### Material

| | |
|---|---|
| Body | anodized aluminum |

### Generated data*

Global radiation (j/cm²)

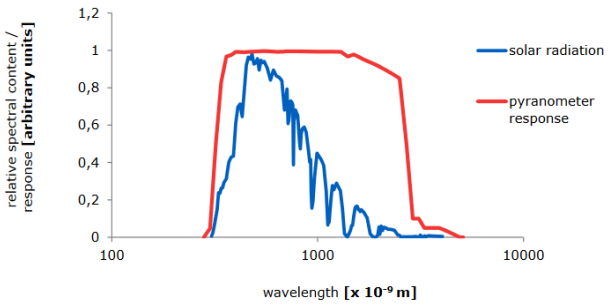
Sunshine duration (min or h)

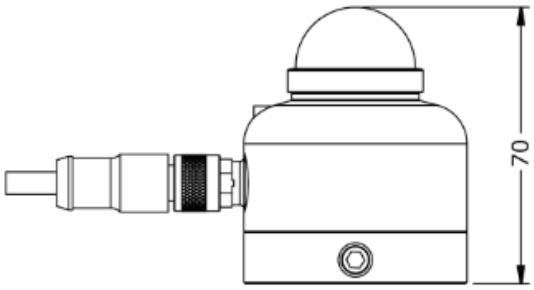
*Data generated by the data logger P4-100

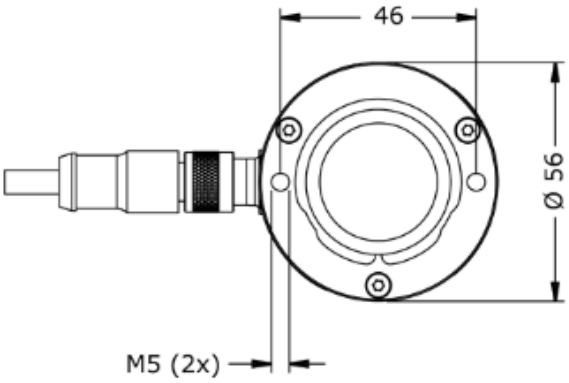
### Standard

| | |
|---|---|
| ISO | ISO 9060: 1990 Class 2 |

**Response of the pyranometer according to the solar spectrum**

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