SV-SR05 is the most affordable digital pyranometer meeting ISO 9060 requirements. It is ideal for general solar radiation measurements in (agro-)meteorological networks and PV monitoring. SV-SR05 is easy to mount and install. Various outputs are available, both digital and analogue, for ease of integration.

Introduction
SV-SR05 is a digital ISO 9060 second class pyranometer for measurement of solar radiation received by a plane surface, in W/m², from a 180° field of view angle. Different configurations are available, depending on its mounting and the output needed. The combination of easy installation and its cost makes SV-SR05 ideal for installation in (agro-)meteorology networks and PV power plant monitoring.

Benefits
- Industry standard digital outputs: easy implementation and servicing
- Easy mounting and levelling
- Pricing: second class pyranometers finally affordable for large networks
SV-SR05 design
SV-SR05 pyranometer employs a thermopile sensor with black coated surface, one dome and an anodised aluminium body with visible bubble level. Optionally the sensor has a unique ball levelling mechanism and tube mount, for easy installation. SV-SR05 has a variety of industry standard outputs, both digital and analogue: SR05-DA1 offers Modbus over RS-485 and 0-1 V output, SR05-DA2 offers Modbus over TTL and 4-20 mA current loop output.

Figure 3 'Exploded view' of SV-SR05 The optional ball levelling and tube mount allow for easy installation. The cable (standard 3 m) has an M12-A connector.

Suggested use
- general solar radiation measurements
- (agro-)meteorological networks
- PV power plant monitoring

Standards
Applicable instrument classification standards are ISO 9060 and WMO-No. 8.

See also
- view our complete range of solar sensors
- consult our pyranometer selection guide

Are you interested in this product? E-mail us at: comercial@sensovant.com

SV-SR05 specifications

| Measurand | hemispherical solar radiation |
| ISO classification | second class pyranometer |
| Calibration uncertainty | < 1.8 % (k = 2) |
| Calibration traceability | to WRR |
| Spectral range | 285 to 3000 x 10^-9 m |
| Rated operating temperature | -40 to +80 °C |
| Standard cable length | 3 m |
| Rated operating voltage | 5 to 30 VDC |
| Levelling | ball levelling* |

Output

Model SR05-DA1
- Communication protocol: Modbus over RS-485
- Digital output:
  - irradiance in W/m^2
  - instrument body temperature in °C
- Analogue output: 0-1 V
- Transmitted range: 0-1600 W/m^2

Model SR05-DA2
- Communication protocol: Modbus over TTL
- Digital output:
  - irradiance in W/m^2
  - instrument body temperature in °C
- Analogue output: 4-20 mA current loop
- Transmitted range: 0-1600 W/m^2

* Optional with / without tube mount

Options
- cable lengths: 10, 20 m
- extension cable with connector pair: 10, 20 m
- with ball levelling
- with ball levelling and tube mount (for tube diameters 25 – 40 mm)
- OEM versions