



Mod. **RSG2std**

Secondary Standard (Class A)

Global Solar Radiation Sensor - Pyranometer

Highlighted specs

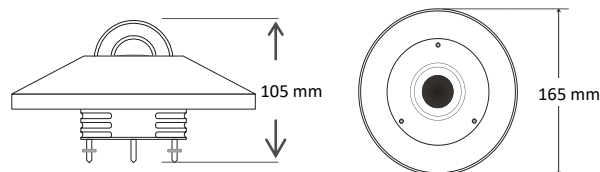
- Class A Thermopile Pyranometer low offset ($<7\text{W/m}^2$)
- ISO9060 and WMO standards compliant
- Compact and light design in aluminum IP67
- Range $0\div 2000\text{ W/m}^2$
- Spectral range $0,3\mu\text{m}\div 3\mu\text{m}$ (AirMass AM1.5G Solar Radiation)
- High sensibility $\sim 10\mu\text{V}/(\text{W/m}^2)$
- According to **CE** norms

Class A (secondary standard) global solar radiation sensor (pyranometer) with **double thermopile**. Designed to measure the **global component of the sunlight spectrum** between $0.3\mu\text{m} - 3\mu\text{m}$, according to the cosine law. **Compliant with WMO standard** for environmental monitoring, it's also an ideal instrument on **photovoltaic applications according to IEC-9060 and IEC-17025**. A high quality instrument that, thanks the different types of standard **signal output (voltage or current)** or **digital RS485 with ModBus (MCS option)**, can be easily interfaced with any acquisition system. Each instrument is supplied with calibration certificate, and relative instrumental constant. The sensor is available with heating and ventilation units (code VU), in accordance with IEC 61724-1

Range	Max 2000 W/m ² natural output; $0 \div 2000\text{ W/m}^2$ normalized output
Spectral range	$0,3\mu\text{m} \div 3\mu\text{m}$
Typical Sensibility	$10\mu\text{V}/(\text{W/m}^2)$ on $2\pi\text{ sr}$
Typical signal output	$10\text{ mV} / (\text{kW/m}^2)$
Resolution	$< 2\text{ W/m}^2$
Reponse time	$< 10\text{sec}$
Zero offset	$< 7\text{ W/m}^2$ (at 200 W/m^2), $< \pm 2\text{ W/m}^2$ ($\Delta T = 5\text{K/h}$)
Stability (long time – 1 year)	$< \pm 0.8\%$
Cosine response	$< \pm 10\text{ W/m}^2$
Temperature response ($\Delta T\ 50\text{K}$)	$< 2\%$
Non linearity	$< \pm 0.5\%$
Tilt response between $0 - 90^\circ$	$< \pm 0.5\%$
Expected daily uncertainty	$< 2\%$
Type of transducer	Double Thermopile
Signal output	$10\mu\text{V}/\text{W/m}^2$ from thermopile, [$0\div 2\text{Vdc}$, $4\div 20\text{mA}$ or RS485 ModBus] with MCS option
Working conditions	$-40 \div +80^\circ\text{C}$
Output resistance	$< 900\text{ ohm}$
Protections	Polarity reverse and transient
Made of	Anodized aluminium and stainless steel
Power supply and consumption	(auto power for N version), $10 \div 30\text{Vdc}$ $< 0,1\text{W}$ other versions
Weight	$< 850\text{g}$

Size and connections

Pin	Wire	RSG2-N
1	White	Out +
2	Green	Out -
3	Grey	GND
4	Orange	Shield



Order code

Sensor	Class A Global solar radiation sensor (Pyranometer)	RSG2std			
Output	<div> $0\div 1\text{Vdc}$ $4\div 20\text{mA}$ RS485 / Modbus (MCS option) Natural </div>		<div> A B C N </div>		
Accessories	<div> CS05 – Cable 5m sensor-datalogger CS10 – Cable 10m sensor-datalogger CSxx – Cable xx* m length, sensor-datalogger – to be specified at order SSU – Sensor support L=700-750mm </div>			<div> 05 10 xx </div>	SSU

*specify the length for no standard measures

example of order code

RSG2std

B

10

SSU