Mod. RSG

2nd Class (Class C)
Global Solar Radiation Sensor – Pyranometer
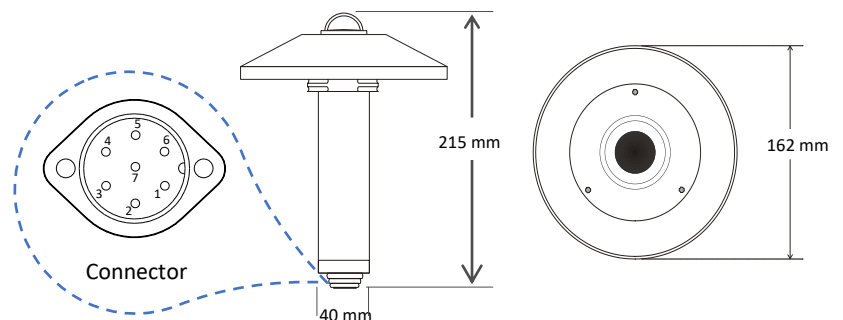
Highlighted specs

- 2nd Class (C Class) Thermopile Pyranometer low offset (<20W/m^2)
- ISO9060 and WMO standards compliant
- Compact and light design in aluminium for hot and cold climates IP67
- Spectral range 0,3µm÷3µm (AirMass AM1.5G Solar Radiation)
- High sensibility ~10µV/(W/m2)
- According to CE norms

Global solar radiation sensor (**pyranometer**) with **thermopile**,**C class**. Designed to measure the **global component of the sunlight spectrum** between 0.3 um - 3um, according to the cosine law. **Compliant with WMO** for environmental monitoring, is also an ideal instrument on **photovoltaic applications according to IEC-9060 and IEC-17025**. A quality instrument that, thanks the different types of standard **signal output** (**voltage or current**) or **digital RS485** with **ModBus**, can be easily interfaced with any acquisition system. Each instrument is supplied with calibration certificate and relative instrumental constant.

Range	max 2000 W/m^2 natural output; 0 ÷ 2000 W/m^2 normalized output
Spectral range	0,3µm ÷ 3µm
Typical Sensibility	10 µV/(W/m^2) on 2 π sr
Typical signal output	10 mV / (kW/m^2)
Resolution	< 8 W/m^2
Reponse time	< 25sec
Zero offset	< 20 W/m^2 (at 200 W/m^2); < ±6 W/m^2 (ΔT = 5K/h)
Stability (long time – 1 year)	< ±2%
Cosine response	<±22 W/m^2
Temperature response (ΔT 50K)	< 8%
Non linearity	< ±2%
Tilt response between 0 – 90°	< ±4%
Expected daily uncertainty	<10%
Type of transducer	Thermopile
Signal output	10µV/W/m^2 from thermopile; 0÷2Vdc, 4÷20mA or RS485 ModBus
Working conditions	-40 ÷ +80°C
Output resistance	< 40 ohm
Protections	Polarity reverse and transient
Made of	Anodized aluminium and stainless steel
Power supply and consumption	(auto power for N version) 10 ÷ 30Vdc <0,1W other versions
Weight	< 600g

Size and connections

Pin	RSG-N	RSG-A	RSG-B	RSG-C
1				
2	Out +	Out +	Out +	RS485 A
3	Out -	Out -	Out -	RS485 B
4	Gnd	Gnd	Gnd	Gnd
5	/	Vdc(10÷28V)	Vdc(10÷28V)	Vdc(10÷28V)
6				
7				

Connector

215 mm

40 mm

162 mm

Order code

Sensor	Total solar radiation sensor (Pyranometer) Class C	RSG			
Output	0÷2Vdc		A		
	4÷20mA		B		
	RS485 / Modbus		C		
	Natural from thermopile		N		
Accessories	CS05 – Cable 5m sensor-datalogger			05	
	CS10 – Cable 10m sensor-datalogger			10	
	CSxx – Cable xx* m length, sensor-datalogger – to be specified at order			xx	
	SSU – Sensor support L=700-750mm				SSU
*specify the length for no standard measures		example of order code	RSG	B	10	SSU