



## Kipp & Zonen SGR4 Pyrgeometer

**Product #:** 0376900  
**USD Price:** Contact Hach

SGR4 pyrgeometer is an instrument for the highest quality scientific measurements. The specially designed meniscus dome provides a 180° field of view with negligible directional response error. A hard-carbon coating on the outside of the dome smoothes the spectral response and provides extra protection to the silicon surface. The excellent thermal stability of the dome construction and coupling to the instrument body eliminates the need for dome temperature measurements or dome shading. SGR4 can be fitted with the CVF4 ventilation unit to further improve its performance. The SGR4 has an internal desiccant that will last for at least 10 years. This minimizes maintenance significantly. The interval for dome cleaning can be extended, and the quality of measurements maximized, by fitting SGR4 with the CVF4 ventilation unit. The SGR4 has Modbus® interface, amplified analogue output, improved response time and temperature corrected measurement data. The long-wave net- and downward radiation are directly available over Modbus®. The wide and low power supply range from 5 to 30 VDC makes integration in meteorological and solar energy stations easy. The SGR4 is extremely robust and comes with 5 years warranty. Thanks to standardized output and connections of every SGR4, exchanging instruments for recalibration is easy. SmartExplorer Windows™ software for data logging, display of data and Modbus® address setting is provided as standard.

### Best scientific pyrgeometer currently available

Low temperature dependancy, very low window heating.

### Low maintenance

No desiccant change for 10 years, weather and UV proof cable and connector.

### Universal interface

SGR3 has both a RS485 Modbus interface plus analog 4 -20 mA or 0 - 1 Volt output.

### Smart output

Calculated LW downward radiation output.

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## Specifications

Ambient Temperature:	-40 - +176 °F (-40 - +80 °C)
Analog Output:	Yes
Analog Outputs:	4 - 20 mA or 0 - 1 V
Analogue Ouput Signal:	4 - 20 mA or 0 - 1 V
Cable Connection:	8 pin plug
Cable Length:	33, 82, or 164 ft (10, 25 or 50 m)
Definiton of Measured Values:	Long-wave atmospheric radiation
Digital Outputs:	Modbus RTU 2-wire RS-485

Dimensions:	Ø 5.9 in (150 mm), H 3 in (76.6 mm)
Field-of-View:	180 °
Housing Material:	Anodised aluminum
Interface:	RS485, Modbus RTU
IP Rating:	IP67
Measuring Range:	4.4 - 50 µm
Non-linearity:	# 1 %
Non-stability:	# 1 %
Operating Humidity:	0 - 100 %
Operating Temperature Range:	-40 - +176 °F (-40 - +80 °C)
Power Consumption:	55 mW / 100 mW
Power Supply:	5 - 30 VDC
Response Time:	# 18 s
Temperature Dependence of Sensitivity:	# 5 % (-40 °F - +158°F)
Temperature Range:	-40 - +176 °F (-40 - +80 °C)
Weight:	1.3 lbs (0.6 kg)
Zero offset A:	< 4 W/m²
Zero offset B:	< 2 W/m²