

# NRG R2 PYRANOMETER

The NRG R2 is a class A pyranometer that provides highly accurate solar irradiance data at an extremely competitive price.

## Key Benefits:

- Best-in-class response time makes R2 an ideal choice when responsiveness, precision, and timely decision-making are essential for success
- Sturdy, user-friendly mounting solution simplifies and promotes effective installation
- Integrated inclinometer ensures precise alignment
- Internal monitoring of sensor's key functions provides confidence in data integrity
- Compatibility with NRG's suite of solar solutions
- Expected life span of greater than 10 years



**NRG**Systems®

## Technical Specifications:

<b>TECHNICAL SPECIFICATIONS (ACCORDING TO ISO 9060:2018)</b>	Response Time (95%)	<2s
	Zero Offset:	
	a	< +- 7 W m-2
	b	< +- 2 W m-2
	c	< +- 10 W m-2
	Long-term Instability (1 year)	< +- 0.5 %
	Nonlinearity	< +- 0.2 %
	Response According to the Cosine Law	< +-10 W m-2
	Spectral Error	< +- 0.2 %
	Temperature Response (-10 to +40 °C)	< +- 0.5 %
	Tilt Response	< +- 0.2 %
	Directional Response	< +-10 W m-2

<b>DESCRIPTION</b>	Sensor Type	Thermopile solar radiation sensor; ISO 9060:2018 Class A (Secondary Standard) compliant
	Applications	Solar resource assessment and monitoring
		Meteorological studies
		Environmental monitoring
	Sensor Range	-200 to 4000 W/m2
	Spectral Range (50%)	283 to 2800 nm
	Instrument Compatibility	NRG SymphoniePRO and LOGR-S Data Loggers
Certifications	Class A classification per ISO 9060:2018	
<b>OUTPUT SIGNAL</b>	Signal Type	RS485 Modbus-RTU
	Calibration	Characterization report included with each sensor; traceable to World Radiometric Reference (WRR)
<b>POWER REQUIREMENTS</b>	Power Consumption	15 mA @ 24 Vdc / 21 mA @ 12 Vdc
	Supply Voltage	7 to 30 V DC
<b>INSTALLATION</b>	Mounting	Mounts to tower using NRG's Mounting Plate   Pyranometer, Gen II (14357), more mounting options available
	Tools Required	Phillips head screwdriver (No. 1)
		4mm hex key
		7mm wrench
		8mm wrench
		Coin for removing desiccant cartridge
<b>ENVIRONMENTAL</b>	Operating Temperature Range	-40 °C to 80 °C (-40 °F to 176 °F)
	Operating Humidity Range	0 to 100%
<b>PHYSICAL</b>	Connections	5-pole M12 connector on sensor body
		Bare wire leads from cable connect directly to logger
		See also logger user manual for wiring diagram
	Cable Length	Various lengths available (3.5-50m)
Weight	1.37 lbs. 0.62kg	

### For more information:

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ISO 9001: 2015 Certified  
ISO 14001: 2015 Self-Certified

