

Solar Radiation Sensors

Pyranometers, quantum sensors, and net radiometers



The solar radiation sensors that Campbell Scientific offers come in a variety of designs: pyranometers, net radiometers, quantum sensors, and pyrheliometers. These sensors measure various aspects of the energy imparted by the sun on the Earth's surface. A leveling fixture fitted with a bubble level may be required to accurately install solar radiation sensors.

	ISO Classification	Spectral Range	Sensitivity	Operating Temperature Range
Digital Thermopile Pyranometer Featured CS320 GRAMFBELL GRAMFBELL	Class C (second class)	385 to 2105 nm (50% points)	0.057 mV/W/ m ²	-50° to +50°C
CS310 Quantum Sensor Featured	_	389 to 692 nm ±5 nm (wavelengths where response is greater than 50% of maximum)	0.01 mV per μmol m ⁻² s ⁻¹	-40° to +70°C
LP02 Pyranometer Featured	ISO 9060:2018 Class C (second class)	285 to 3000 nm	15 μV/W/m² (nominal)	-40° to +80°C
SR11 First Class Pyranometer Featured	Class B (first class)	285 to 3000 nm	15 μV/W/m ² (nominal)	-40° to +80°C

	ISO Classification	Spectral Range	Sensitivity	Operating Temperature Range
SR20-T2-L ISO Secondary Standard Pyranometer with 10K Thermistor Featured	Class A (secondary standard) pyranometer (ISO 9060:2018)	285 to 3000 x 10 ⁻⁹ m (20% transmission points)	7 to 25 x 10 ⁻⁶ V/ (W/m ²)	-40° to +80°C
CMP3-L Pyranometer with Sun Shield Featured	Class C (second class)	300 to 2800 nm	5 to 20 μV/W/ m ²	-40° to +80°C
CMP6 Pyranometer Featured	Class B (first class)	285 to 2800 nm	5 to 20 μV W ⁻¹ m ²	-40° to +80°C
CMP11 Pyranometer Featured	Class A (secondary standard)	285 to 2800 nm	7 to 14 μV/W/ m ²	-40° to +80°C
CMP21 Pyranometer Featured	Class A (secondary standard)	285 to 2800 nm	7 to 14 μV/W/ m ²	-40° to +80°C
NR-LITE2-L Net Radiometer Featured	_	0.2 to 100 μm	10 μV W ⁻¹ m ² (nominal)	-40° to +80°C
NR01 4-Component Net Radiometer Featured	_	 Pyrgeometer: 4500 to 50,000 nm Pyranometer: 305 to 2800 nm 	10 to 40 μV W ⁻¹ m ²	-40° to +80°C
CNR4 4-Component Net Radiometer Featured	_	Pyranometer : 305 to 2800 nm	5 to 20 μV W ⁻¹ m ²	-40° to +80°C
CS301 Pyranometer	Class C (second class)	360 to 1120 nm	0.2 mV/W/m ²	-40° to +70°C
LI200R Pyranometer	_	400 to 1100 nm	0.13 kW m ⁻² mV ⁻¹ (typically)	-40° to +65°C



