

Infrared Radiometer

IRR-P \$598

IRR-PN \$598

For orders out of the USA add 10% to the list price

- Measures temperatures of road surfaces; plant canopies; soil, snow, and water surfaces; as well as sky temperature (net longwave radiation)
- Output follows fundamental physics of the Stefan-Boltzmann Law allowing for a version of the S-B equation to correct for the effect of sensor body temperature

Specifications

		<u>Precision (IRR-P)</u>	<u>Precision Narrow (IRR-PN)</u>
Field of view		22° half angle	18° half angle
Output	Target temp.	60 μ V per °C difference from sensor body	40 μ V per °C difference from sensor body
	Sensor body temp.	0-2500 mV	0-2500 mV
Accuracy	-10 to 65 °C	\pm 0.2 °C absolute accuracy	
		\pm 0.1 °C uniformity	
		\pm 0.05 °C repeatability	
	-40 to 70 °C	\pm 0.5 °C absolute accuracy	
		\pm 0.3 °C uniformity	
		\pm 0.1 °C repeatability and uniformity	
Optics		Germanium lens	
Wavelength range		8-14 μ m (corresponds to atmospheric window)	
Response time		< 1 second to changes in target temperature	
Input power		2.5 V excitation	
Operating environment		-55 to 80 °C; 0 to 100 % RH (non-condensing) Water resistant, designed for continuous outdoor use	
Datalogger channels		1 differential (detector) and 1 single-ended (thermistor)	
Cable		4.5 meters twisted, shielded 4 conductor wire with Santoprene casing. Extra cable \$2.95 per meter.	
Dimensions		6 cm long by 2.3 cm diameter	
Mass		190 g	
Warranty		1 year parts and labor	

