

Anemometer	Range	0 to 50 m/s (112 mph)
	Sensor	20 cm diameter 4-blade helicoid propeller carbon fiber thermoplastic
	Distance Constant	2.1 m (6.9 ft.) for 63% recovery
	Threshold Sensitivity	0.4 m/s (0.9 mph)
	Wind Direction Specification Summary	
	Range	360° mechanical, 355° electrical (5° open)
	Sensor	Balanced vane, 48.3 cm (19 in) turning radius
	Delay Distance	1.2 m (3.9 ft) for 50% recovery
	Threshold Sensitivity	0.5 m/s (1.0 mph) at 10° displacement 0.7 m/s (1.6 mph) at 5° displacement
	Transducer	Precision conductive plastic potentiometer, 10K ohm resistance ( $\pm 20\%$ ), 0.25% linearity, life expectancy 50 million revolutions, rated 1 watt at 40°C, 0 watts at 125°C
Transducer Excitation Requirement	Regulated DC voltage, 15 VDC max	
Transducer Output	Analog DC voltage proportional to azimuth angle with regulated excitation voltage applied across potentiometer.	
Operating temperature	-50 to 50°C (-58 to 122°F)	

Temperature and Humidity Probe	Supply Voltage	5 to 28 Vdc (typically powered by datalogger's 12 V supply)
	Current Consumption	<ul style="list-style-type: none"> <li>• 1 mA (typical)</li> </ul> 5 mA (maximum)
	Filter Description	0.2 $\mu$ m Teflon membrane
	Settling Time	1 s
	Housing Classification	IP65
	Housing Material	AISI 316 stainless steel
	Filter Cap Material	Chrome-coated ABS plastic
	Sensor Diameter	1.2 cm (0.5 in.)
	Filter Diameter	1.2 cm (0.5 in.)
	Length	7.1 cm (2.8 in.)
	Weight	0.05 kg (0.1 lb) with 1.83 m (6 ft) cable

Pyrgeometer	Sensitivity	0.12 mV per $W m^{-2}$
	Calibration Factor (Reciprocal of Sensitivity)	8.5 $W m^{-2}$ per mV
	Calibration Uncertainty	$\pm 5 \%$
	Measurement Range	-200 to 200 $W m^{-2}$ (net longwave irradiance)
	Measurement Repeatability	Less than 1%
	Long-term Drift	Less than 2 % change in sensitivity per year
	Non-linearity	Less than 1 %
	Detector Response Time	Less than 0.5 s
	Field of View	150°
	Spectral Range	5 to 30 $\mu m$
	Temperature Response	Less than 5 % from -15 to 45 C
	Zero Offset B	Less than 5 $W m^{-2}$
	Tilt Error	Less than 0.5 %
Uncertainty in Daily Total	$\pm 5 \%$	
	Temperature Sensor	30 k $\Omega$ thermistor, $\pm 1$ C tolerance at 25 C
	Output from Thermistor	0 to 2500 mV (typical, other voltages can be used)
	Input Voltage Requirement for Thermistor	2500 mV excitation (typical, other voltages can be used)
	Heater	780 $\Omega$ , 15.4 mA current draw and 185 mW power requirement at 12 V DC
	Dimensions	37.5 mm height, 23.5 mm diameter
	Mass	90 g

Pyranometer	Sensitivity	0.057 mV per W m <sup>-2</sup>
	Calibration Uncertainty	± 5 %
	Measurement Range	0 to 2000 W m <sup>-2</sup> (net shortwave radiation)
	Measurement Repeatability	Less than 1 %
	Long-term Drift	Less than 2 % per year
	Non-linearity	Less than 1 %
	Detector Response Time	0.5 s
	Field of View	180°
	Spectral Range (50 % points)	385 nm to 2105 nm
	Directional (Cosine) Response	Less than 30 W m <sup>-2</sup> at 80° solar zenith
	Temperature Response	Less than 5 % from -15 to 45 C
	Zero Offset A	Less than 5 W m <sup>-2</sup> ; Less than 10 W m <sup>-2</sup> (heated)
	Zero Offset B	Less than 5 W m <sup>-2</sup>
	Uncertainty with Daily Total	Less than 5 %
Operating Environment	-50 to 80 C; 0 to 100% relative humidity	

<b>Compass with Serial Interface</b>	Resolution	0.5 degrees
	Accuracy	±2 degrees (rms)
	Sensitivity	50mV p-p aMOHz
	Range	0-2000 Hz

Barometric Pressure Sensor	Pressure Range	600 to 1100 hPa
	Long-Term Stability	±0.1 hPa per year
	Response Time	<100 ms
	Resolution	±0.01 hPa
	Accuracy	±0.5 hPa (@ +20°C) ±1.0 hPa (@ 0° to 40°C) ±1.5 hPa (@ -20° to +50°C) ±2.0 hPa (@ -40° to +60°C)
	Linearity	±0.4 hPa
	Hysteresis	±0.05 hPa
	Repeatability	±0.03 hPa
	Signal Output	0 to 2.5 Vdc
	Warm-up Time	< 1 s
	External Trigger Voltage	0 Vdc (sleep mode) 3 to 28 Vdc (operating mode)
	Current Consumption	< 3 mA (active) < 1 µA (sleep mode)
	Operating Temperature Range	-40° to +60°C
	Cable Diameter	0.8 cm (0.3 in.)
	Cable Length	0.8 m (2.5 ft)
	Dimensions	9.1 x 6.1 x 2.5 cm (3.6 x 2.4 x 1.0 in.)
	Weight	135 (4.8 oz)