

WeatherLog®

SOL-PYR

The RainWise Solar Radiation Pyranometer

The RainWise Pyranometer is designed for measurements in solar, agricultural, meteorological and hydrological studies. The sensor features a PIN silicon photo diode mounted in a fully cosine-corrected miniature head.

Output of the sensor is a voltage equal to 0.5 millivolts per watt per square meter for sunlight intensities of up to 2000 watts per square meter. The standard resolution of the sensor is 10 watts per square meter. Using a 10 bit digitizer, the sensor is capable of providing minimum resolution of 2 watts per square meter.

The Pyranometer is available with either a flat base or plug-in mount to fit the RainWise Monopod mounting system. It is manufactured of high stability silicon (detector), aluminum, stainless steel and PVC.

When installed in a RainWise Monopod the sensor utilizes the mounts built-in level. When purchased as a separate sensor, a level is attached to the sensor housing.

The RainWise Pyranometer is covered by a five year warranty.



SPECIFICATIONS

Range:	Wavelengths of from 400-1200 nm	Temperature Dependence:	.06% per °C maximum
Accuracy:	Maximum $\pm 5\%$ Typical $\pm 3\%$	Cosine Correction:	Cosine corrected up to 80° angle of incidence
Sensitivity:	Typical - 0.5 millivolts / W / m ²	Operating Temperature:	-65°C to +80°C
Linearity:	Maximum deviation of 1% up to 1000 W m ⁻²	Operating Humidity:	0 to 100%
Response Time:	10 microseconds		
Input Voltage:	8 to 16 VDC		