WeatherLog®

SOL-QUAN

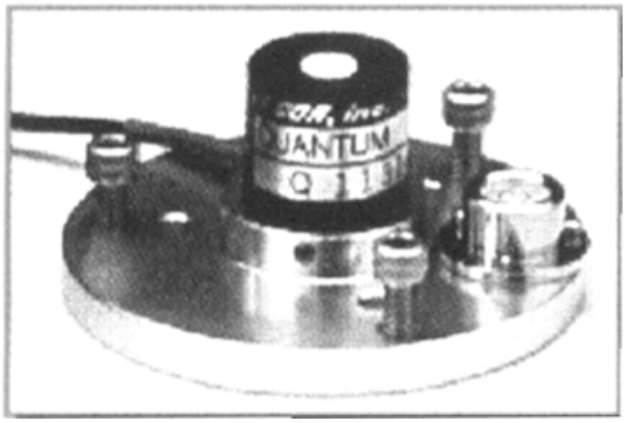
The RainWise SOLAR RADIATION SENSOR- Quantum (PAR)

The RainWise Quantum Solar Sensor is designed for measurements in solar, agricultural, meteorological, ecological and other environmental fields. It measures photosynthetically active radiation (PAR). Accurate measurements in the range of 400 to 700 nm are obtained under natural and artificial light conditions.

The sensor features a silicon photovoltaic detector mounted in a fully cosine-corrected miniature head. Colored glass filters are used to tailor the silicon photodiode response to the desired quantum response and an interference filter is used to provide a sharp cutoff at 700 nm.

The Quantum Solar Sensor is mounted on a leveling base and is available with either a flat base or plug-in mount to fit the RainWise Quadpod or Monopod mounting systems. It is manufactured of high stability silicon (detector), aluminum, stainless steel and PVC (base for RainWise Mount).

The RainWise Quantum Solar Sensor is guaranteed by the manufacturer Licor for one year. It is important to plan for recalibration of the instrument on an annual basis. Recalibration is not covered under the unit's warranty.



SPECIFICATIONS

Range:	Wavelengths of from 400-700 nm
Accuracy:	Maximum ± 5%
Sensitivity:	Typical 5µA per 1000µmol $s^{-1}m^{-2}$
Linearity:	Maximum deviation of 1% up to 10,000µmol $s^{-1}m^{-2}$
Stability:	<±2% change over a 1 year period
Response Time: 10 µs	
Temperature Dependence:	0.15% per °C maximum
Cosine Correction:	Cosine corrected up to 80° angle of incidence
Azimuth:	<±1% error over 360° at 45° elevation
Operating Temperature:	-40°C to +65°C
Operating Humidity:	0 to 100%