Weather Station

SOLARMAN weather station is specifically designed for PV system. It provides a comprehensive environmental monitoring solution for users including irradiance, ambient temperature and humidity, wind direction and speed, and module temperature. With the combination of accurate real-time data, durable products and powerful online platform, SOLARMAN helps users evaluate yield efficiency in a more comprehensive and convenient way.

Accurate real-time and historical data, enabling a comprehensive evaluation of system performance;

SOLARMAN platform provides visualized meteorological data;

Standard sensors for general demands (High accuracy sensor for project with high demands);

Compatible with SOLARMAN data logger, ensuring simple configuration and lower O&M cost;

Real-time alerts with timely notification, ensuring fast troubleshoot;

Product Model	WP-2S
Irradiance (Sub-reference Level)	ISO 9060:1990 (Sub-reference Level) Sensitivity: 7～14μV/W/m2 Instability (Year): <0.5% Measuring Range: 0～4000W/m2 Spectral Range: 270～3000μm Zero Offset (No ventilation) (a) Thermal Irradiance (200W/m2): <7W/m2 (b) Temperature Variation (5K/h): <2W/m2 Nonlinear: ＜0.2% Directional Response (80°, 1000W/m2 at max.): <10W/m2 Spectral Selectivity (350～1500nm): <1% Tilt Response (0°-90°, 1000W/m2): <0.2% Temperature Response (-10℃～+40℃): <1% Visual Angle: 180°
Irradiance (Level 1)	Sensitivity: 7～14μV/W/m2 Instability (Year): ±2% Measuring Range: 0～2000W/m2 Cosine (Deviation between solar altitude angle 10° in sunny day and ideal value): ≤±2% Spectral Range: 0.28～3.0μm Temperature Characteristic (-20℃～+40℃): ±2% Nonlinear: ±2% Visual Angle: 180° Measurement Accuracy: 2%
Irradiance (Level 2)	Sensitivity: 7～14μV/W/m2 Instability (Year): <2% Measuring Range: 0～2000W/m2 Cosine (Deviation between solar altitude angle 10° in sunny day and ideal value): ≤±5% Spectral Range: 0.28～3.0μm Temperature Characteristic (-20℃～+40℃): ±5% Nonlinear: ±5% Visual Angle: 180° Measurement Accuracy: 5%
Ambient Temperature	Measuring Range: -50.0℃～+80.0℃ Resolution: 0.1℃ Accuracy: ±0.1℃ Working Environment: Temperature -40℃～+80℃ Humidity ≤100%RH
Ambient Humidity	Measuring Range: 0.0～100.0%RH Resolution: 0.1%RH Accuracy: ±2% (≤80%), ±5% (>80%) Working Environment: Temperature -40℃～+80℃ Humidity ≤100%RH
Wind Direction	Measuring Range: 0～360° Resolution: 3° Accuracy: ±3° Startup Wind Speed: ≤0.5m/s Working Environment: Temperature -40℃～+80℃ Humidity ≤100%RH
Wind Speed	Measuring Range: 0～70m/s Resolution: 0.1m/s Accuracy: ±(0.3+0.03V)m/s Startup Wind Speed: ≤0.5m/s Working Environment: Temperature -40℃～+80℃ Humidity ≤100%RH
Module Temperature	Measuring Range: -50℃～+80℃ Resolution: 0.1℃ Accuracy: ±0.1℃ Working Environment: Temperature -40℃～+80℃ Humidity ≤100%RH
Height	1.5m
Power Supply&Communication Junction Box	Power: AC 230V, COM: RS485
IP Grade	IP65