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°C～+40°C): <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°C～+40°C): ±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°C～+40°C): ±5% Nonlinear: ±5% Visual Angle: 180° Measurement Accuracy: 5%
Ambient Temperature	Measuring Range: -50°C～+80°C Resolution: 0.1°C Accuracy: ±0.1°C Working Environment: Temperature -40°C～+80°C 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°C～+80°C Humidity ≤100%RH
Wind Direction	Measuring Range: 0～360° Resolution: 3° Accuracy: ±3° Startup Wind Speed: ≤0.5m/s Working Environment: Temperature -40°C～+80°C 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°C～+80°C Humidity ≤100%RH
Module Temperature	Measuring Range: -50°C～+80°C Resolution: 0.1°C Accuracy: ±0.1°C Working Environment: Temperature -40°C～+80°C Humidity ≤100%RH
Height	1.5m
Power Supply&Communication Junction Box	Power: AC 230V, COM: RS485
IP Grade	IP65