

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;



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



SOLARMAN platform provides visualized meteorological data;



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



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

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