

Product Specification Report

Supplier Name:		IGEN Tech Co., Ltd.	
Customer Name:			
Customer Part No.:			
Product Name:		Weather Station	
Product Type:		WP-2S	
Effective Date:			
Customer Approval		Supplier Approval	
Confirmed By	Approved By		

Version	Note	Updated Time	Updated By
1.0			

Introduction

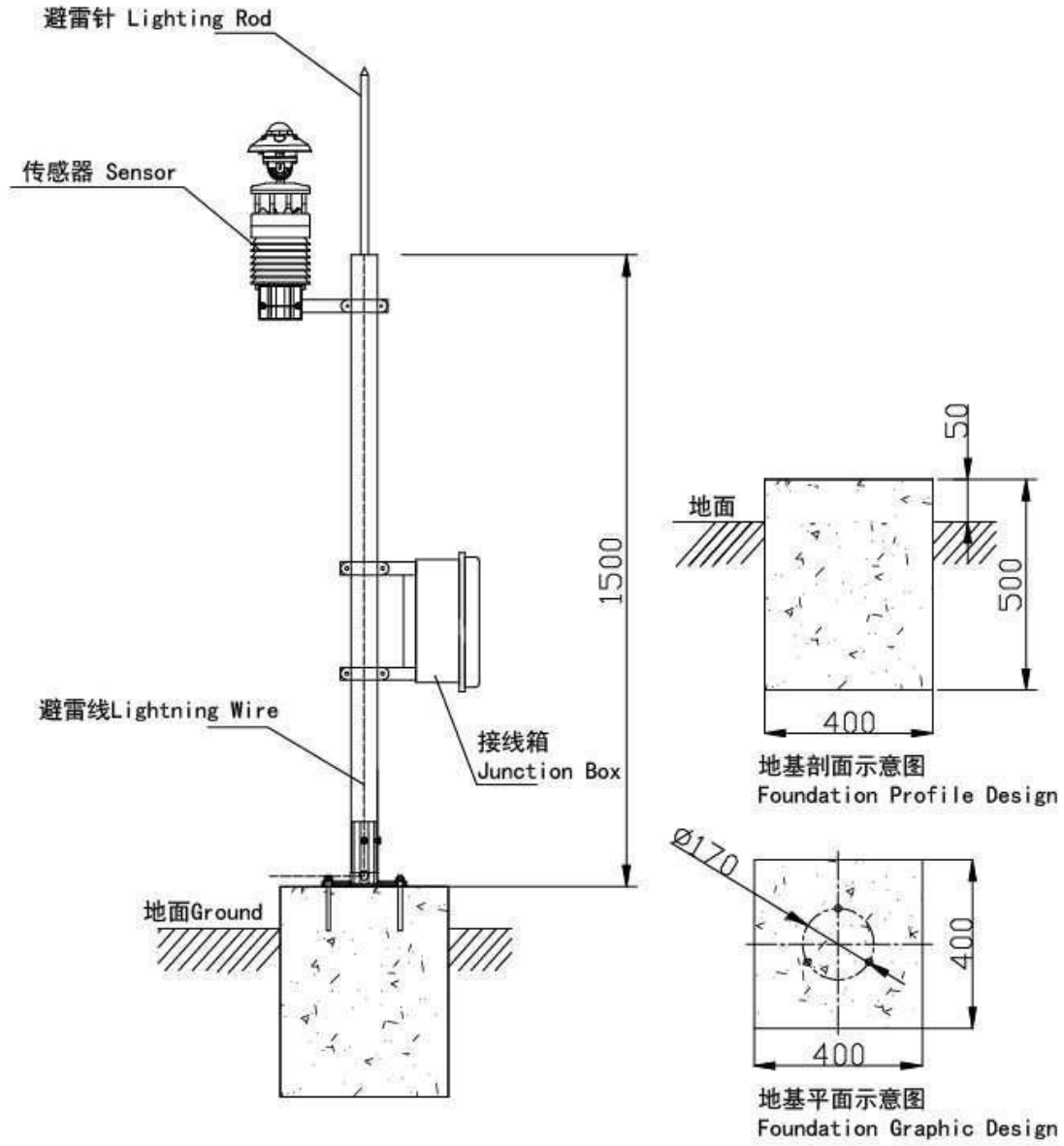
SOLARMAN Weather Station, model WP-2S, is specially designed for PV system, which can provide a best environmental monitoring plan including pyranometer, ambient temperature, ambient humidity, wind direction, wind speed, module temperature. Accurate real-time data, durable product along with powerful platform help users to evaluate the generation efficiency of PV system in a more convenient manner.

Product Parameters

Devices	Technical Parameter
Pyranometer	ISO 9060:1990 Standard Classification: Secondary Standard Sensitivity: 7~14 $\mu\text{V}/\text{W}/\text{m}^2$ Measuring Range: 0~4000W/m ² Spectral Range: 270~3000 nm Zero-excursion (No wind) (a) Thermal Radiation (200 W/m ²) : < 7 W/m ² (b) Temperature Variation (5 K/h) : < 2 W/m ² Instability(Variation/Year): < 0.5 % Nonlinear (100 ~ 1000 W/m ²): < 0.2 % Directional Response (Max. 80 °, 1000 W/m ²) : < 10 W/m ² Spectral Selectivity (350 ~ 1500 nm): < 1 % Tilt Response(0 ° to 90 ° ~ 1000 W/m ²) : < 0.2 % Temperature Response: < 1 % (-10°C ~ +40°C) Visual Angle: 180° Working Condition: Temperature:-40°C-80°C Humidity: 0-100%RH
Ambient Temperature	Measuring Range: -50.0~+80.0°C Resolution: 0.1°C Accuracy: $\pm 0.1^\circ\text{C}$ Working Condition: 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 Condition: Temperature:-40°C-80°C Humidity: $\leq 100\%RH$
Wind Direction	Measuring Range: 0~360° Resolution: 3° Accuracy: $\pm 3^\circ$





	<p>Startup Wind Speed: $\leq 0.5\text{m/s}$ Working Condition: Temperature: -40°C-80°C Humidity: $\leq 100\%$ RH</p>
Wind Speed	<p>Measuring Range: $0\sim 70\text{m/s}$ Resolution: 0.1m/s Accuracy: $\pm(0.3+0.03V)\text{m/s}$ Startup Wind Speed: $\leq 0.5\text{m/s}$ Working Condition: Temperature: -40°C-80°C Humidity: $\leq 100\%$ RH</p>
Module Temperature	<p>Measuring Range: $-50^{\circ}\text{C}\sim +80^{\circ}\text{C}$ Resolution: 0.1°C Accuracy: $\pm 0.1^{\circ}\text{C}$ Working Condition: Temperature: -40°C-80°C Humidity: $\leq 100\%$ RH</p>
Stand	Height: 1.5m
Lighting Rod	Protection Diameter: 3m
Power Supply & Communication Junction Box	<p>Power Supply: AC 230V COM: RS485</p>
IP Grade	IP65

Installation Diagram



Product List

No.	Name	Description	Picture

1	Bracket	Bracket:1.5m; Expansion screwx3; Lightning arresterx1; Bakelitex1; Lightning linex1; Sensor holderx1	   <p>1.5m Bracket Expansion screw Lightning arrester</p>    <p>Bakelite Lightning line Sensor holder</p>
2	Irradiation sensor	Irradiation sensorx1	  <p>Irradiation sensor Certification</p>
3	Integrated sensor	Integrated sensorx1 Junction box holderx2 Allen wrenchx1 CertificationX1 Introductionx1	  <p>Integrated sensor Junction box holder (Wind speed, wind direction, temperature&humidity)</p>    <p>Allen wrench Certification Introduction</p>
4	Connection box	Connection box+Chip temperature sensorx1 485 com linex1	  <p>Connection Box+Chip temperature sensor 485 com line (20M)</p>

Product Pictures

Irradiation sensor



Front View



Side View



Back View

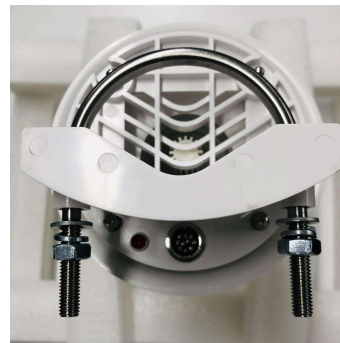
Integrated sensor



Front View



Side View



Back View

Connection box+Chip temperature sensor



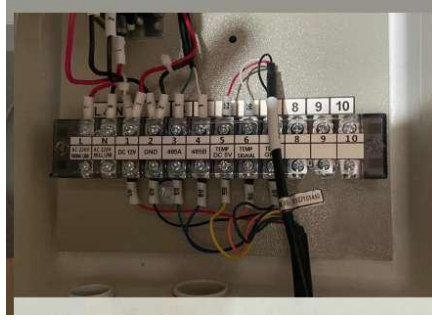
Front View



Back View



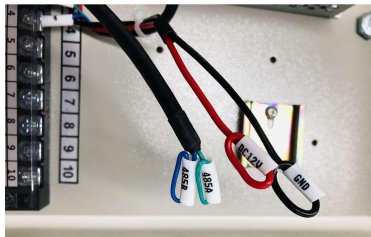
Internal View



Terminal Connection



Chip temperature sensor



DC12V with 485 com line



Connection box connector



Waterproof interface with a cut



Jam nut



Jam hole

Bracket

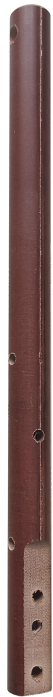


Side View



Front View

Lightning arrester & Bakelite



Bakelite



Lightning arrester

Accessory



Lightning line



Expansion screw M12x110mm



Junction box holder



Sensor holder



Allen wrench

Contact

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