

SEM5040 Compact Photovoltaic Meteorological Station



MAIN FEATURES

- Miniaturization design
- High integration, all-in-one
- Thermopile principle
- Special process heat insulation treatment of protective cover
- Support extended parameter

APPLICATION

- Meteorological monitoring
- Micro environmental monitoring
- Grid environment monitoring
- Agrometeorological monitoring
- Traffic meteorological monitoring
- PV environmental monitoring



OVERVIEW

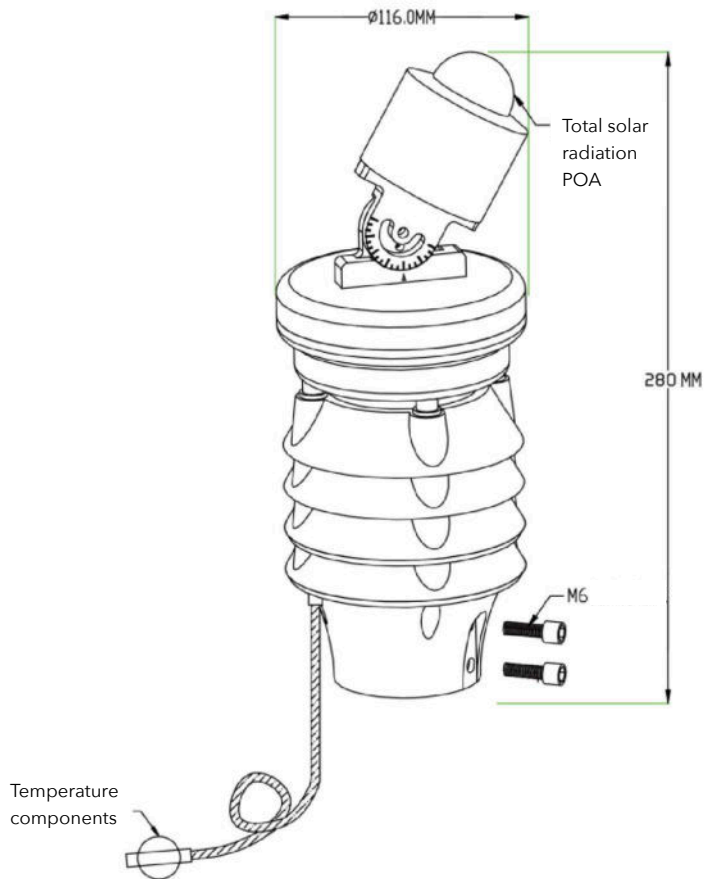
SEM5040 compact photovoltaic meteorological station is an instrument used in photovoltaic power station and new energy monitoring field. Monitoring parameters: total solar radiation POA, ambient temperature, component temperature, daily cumulative radiation.

The product innovatively integrates the conventional solar radiation meteorological parameters that need to be monitored for the operation and maintenance management of the photovoltaic power station into a structure, which is connected to the photovoltaic inverter through an RS485 interface, and can be widely used in the distributed photovoltaic power station monitoring system.

SPECIFICATION

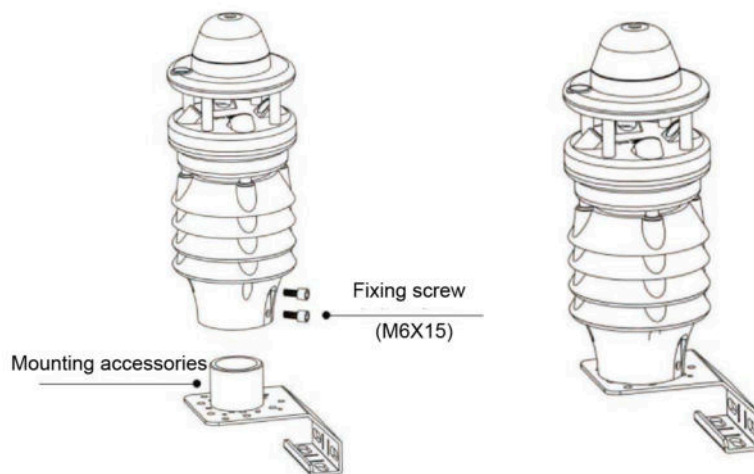
ITEMS	Range	Accuracy	Resolution	Sampling frequency
Ambient temperature	-40-85°C	±0.3°C@25°C	0.01°C	1HZ
Component temperature	-20°C~+80°C	≤ ±0.2°C	0.1°C	1HZ
Total solar radiation POA	0~2000W/m2	≤ ±3%	1W/m2	1HZ
Daily cumulative radiation	0-65MJ	≤±%5	0.001MJ	Once a minute
Working temperature	-40°C~80°C			
Output signal	Default RS485 interface, ModbusRTU; Customizable SDI-12			
Max. output frequency	Passive mode: 1/S Active mode: 1/min			
Power supply	DC12-24V			
Adjustment disc of solar radiation meter	0-60 ° range adjustable (40 ° for general standard)			
Protection level	IP65			
Fixing method	Default fixed by sleeve (Flange fixing or bending plate fixing optional)			
Fixing bracket	None for standard products, 1.5m and 1.8m brackets are optional			
Cable	Default 3m cable (other length optional)			
Remarks	<p>The SEM5040 integrated photovoltaic environment monitor is equipped with a thermal value principle total radiation meter (secondary meter) as standard, and EKO/MS-802 (Class A), MS-60 (Class B), MS-40 (Class C) total radiation meters can be selected by users</p> <p>Kipp&Zonen/CMP6 (Class B), CMP10 (Class A) total radiation meter</p> <p>Definition: Class A/B/C Grade standard determined according to ISO9060:2018 WMO global radiometer standard; Level II meter: according to GBT19565-2017 national standard for total radiation meter</p>			

DIMENSION

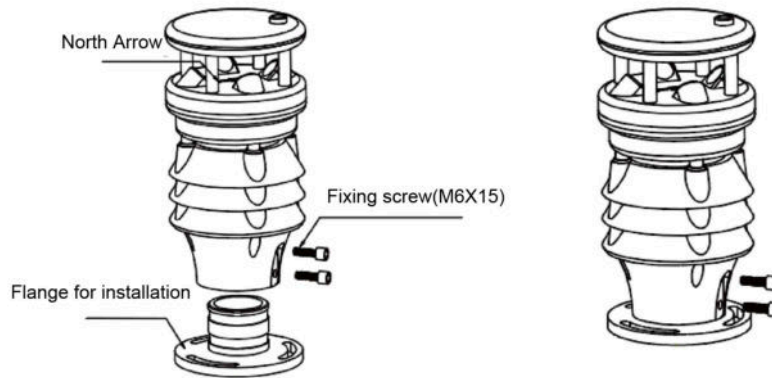


INSTALLATION

- Fixing method of bending plate:



- Fixing method of flange plate:



ORDER CODE

Name	Compact Weather Station	
Model	Code	Function
	SEM5040	Ambient temperature+Component temperature+Total solar radiation POA+Daily cumulative radiation

Note:

The SEM5040 integrated photovoltaic environment monitor is equipped with a thermal value principle total radiation meter (secondary meter) as standard, and EKO/MS-802 (Class A), MS-60 (Class B), MS-40 (Class C) total radiation meters can be selected by users

Kipp&Zonen/CMP6 (Class B), CMP10 (Class A) total radiation meter

Definition:

Class A/B/C Grade standard determined according to ISO9060:2018 WMO global radiometer standard;

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