

SEM600C Micro Meteorological Station

APPLICATION

- Meteorological monitoring
- Micro environmental monitoring
- Grid environment monitoring
- Agrometeorological monitoring
- Traffic meteorological monitoring
- PV environmental monitoring
- Meteorological monitoring of wind power generation



OVERVIEW

SEM600C is a compact meteorological station with six elements, that is, the product parameters include atmospheric temperature, humidity, wind speed (third generation), wind direction (third generation), air pressure and rainfall (optical). Through a highly integrated structure, it can realize 24-hour continuous online monitoring of outdoor meteorological parameters, and output six parameters to users at one time through digital communication interface.

SPECIFICATION

ITEMS	Range	Accuracy	Resolution	Sampling frequency
Wind speed	0-40m /s	± (0.5+0.05V) M/S	0.01m/s	10Hz
Wind direction	0-359 °	± 5 ° (wind speed < 10M/S)	0.1 °	10Hz
Air temperature	- 40 °C - + 85 °C	±0.3°C@25°C	0.01 °C	1Hz
Air Humidity	0-100%RH	± 3% RH (10% - 80% RH, no condensation)	0.01%RH	1Hz
Atmospheric pressure	500 -1100hPa	±0.5hPa (25°C, 950-1100hPa)	0.1hPa	1Hz
Rainfall	Measurement form: optical; Measuring range: 0-200mm/h; Resolution: 0.2mm; Sampling frequency: 1HZ			
Working temperature	-30°C~70°C			
Output signal	The standard product is RS485 interface, ModbusRTU; Customizable SDI-12 (modules need to be purchased separately)			
Max. output frequency	Passive mode: 1/S Active mode: 1/min			
Power supply	DC9-24V			
Protection level	IP65			
Fixing method	The standard product is fixed by sleeve, see the product dimension drawing. (Flange fixing or bending plate fixing mode is optional)			
Fixing bracket	None for standard products, 1.5m and 1.8m brackets are optional (to be purchased separately)			
Cable	3m cable (10m communication cable is optional)			

Remarks:

1. The sensor integrated with the three parameters of atmospheric temperature, humidity and pressure is installed in a three-layer outdoor radiation shield, which is configured with a special proportion of PC+fiber, and the internal thermal insulation layer is sprayed to minimize the impact of solar radiation. No moving parts, ensuring the accuracy of long-term measurement data.
2. Two parameters of wind speed and direction: measure the wind speed and direction through ultrasonic principle, and output the instantaneous wind speed, instantaneous wind direction, average wind speed, average wind direction and other data.
3. Optical rainfall: automatically sense the rain falling on its outer surface, and calculate the rainfall according to the size and number of raindrops. Compared with the traditional physical tipping bucket rain gauge, the accuracy of the optical rain gauge is its weakness. Most of the time, the reading of the optical rain gauge will be close to the tipping bucket, but there will be significant deviation in abnormal events (rainstorm). However, it has no moving parts, and is more suitable for use in places where tipping bucket rainfall monitoring cannot be used, such as mobile monitoring and maintenance. The optical rainfall is more sensitive to a small amount of rainfall than the tipping bucket rainfall and is not limited by the installation site.

DIMENSION



