

**SEM5000Z Micro Weather Station**

**MAIN FEATURES**

- -Standard configuration monitoring T/RH/P/WD/WDIR, RS485(MODBUS )
- High precision, reliable performance, suitable for outdoor weather harsh environment
- Real-time monitoring of meteorological environmental data, low cost, suitable for grid distribution
- Small size, modular design, flexible layout
- Optional GPS positioning, device tracking function
- Data acquisition adopts 32-bit high-speed processing chip, stable and anti-interference.



**OVERVIEW**

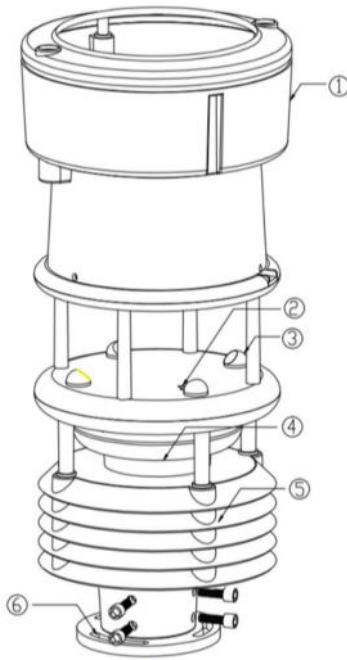
SEM5000Z is innovatively realizes the six meteorological standard parameters (T,RH,P,WD,WDIR,Rianfall) through a highly integrated structure, which can realize the 24-hour continuous online monitoring of outdoor meteorological parameters, and output the six parameters to the user at one time through the digital communication interface.In addition, It can be expanded to increase other meteorological and environmental parameters (AQI six parameters:CO, NO2, SO2, O3, PM2.5, PM10).

They can be widely used in urban environmental monitoring, wind power generation, meteorological monitoring, Bridges, tunnels, ships, aviation airports, agricultural meteorology, water conservancy meteorology, power environment, highway meteorological monitoring and other fields.No maintenance and on-site calibration is required.

**SPECIFICATION**

ITEMS	Principle	Range	Resolution	Accuracy
Wind speed	Ultrasonic	0-60m /s	0.01m/s	(0-30m/s)±0.3m/s or ±3% (30-60m/s)±5%
Wind direction	Ultrasonic	0-360 °	0.1°	±2°
Temperature	MEMS	- 40 °C - + 60 °C	0.1 °C	± 0.3°C(@25°C, typical case)
Humidity	MEMS	0 – 100%	0.1%RH	±3%RH (0-90%RH)
Atmospheric	MEMS	300 – 1100hPa	0.1hpa	±0.5hpa(0-30°C)
Rainfall	Photology	0-200mm/h	0.2mm	Error<5%
Digital output	RS485(Modbus)			
Power supply	12-24VDC, solar power			
IP protection	IP66			
Fixed form	A) Sleeve fixed; B)Flange adapter fixed			
Power consumption	<1W@12V			
Mounting frame	1.5m, 3m Flange, 1.8m tripod			
Material	ASA+engineering plastics			
GPS	Device tracking and positioning			
Data release	PC、Telephone APP、LED、LCD TV display, etc			

**DIMENSION**



- 1. Rainfall sensor (**Tipping bucket rainfall**)
- 2. Arrows to point north
- 3. Ultrasonic probe
- 4. Control circuits
- 5. Thermometer shelter (temperature, humidity, air pressure monitoring position)
- 6. Bottom fixed with flange

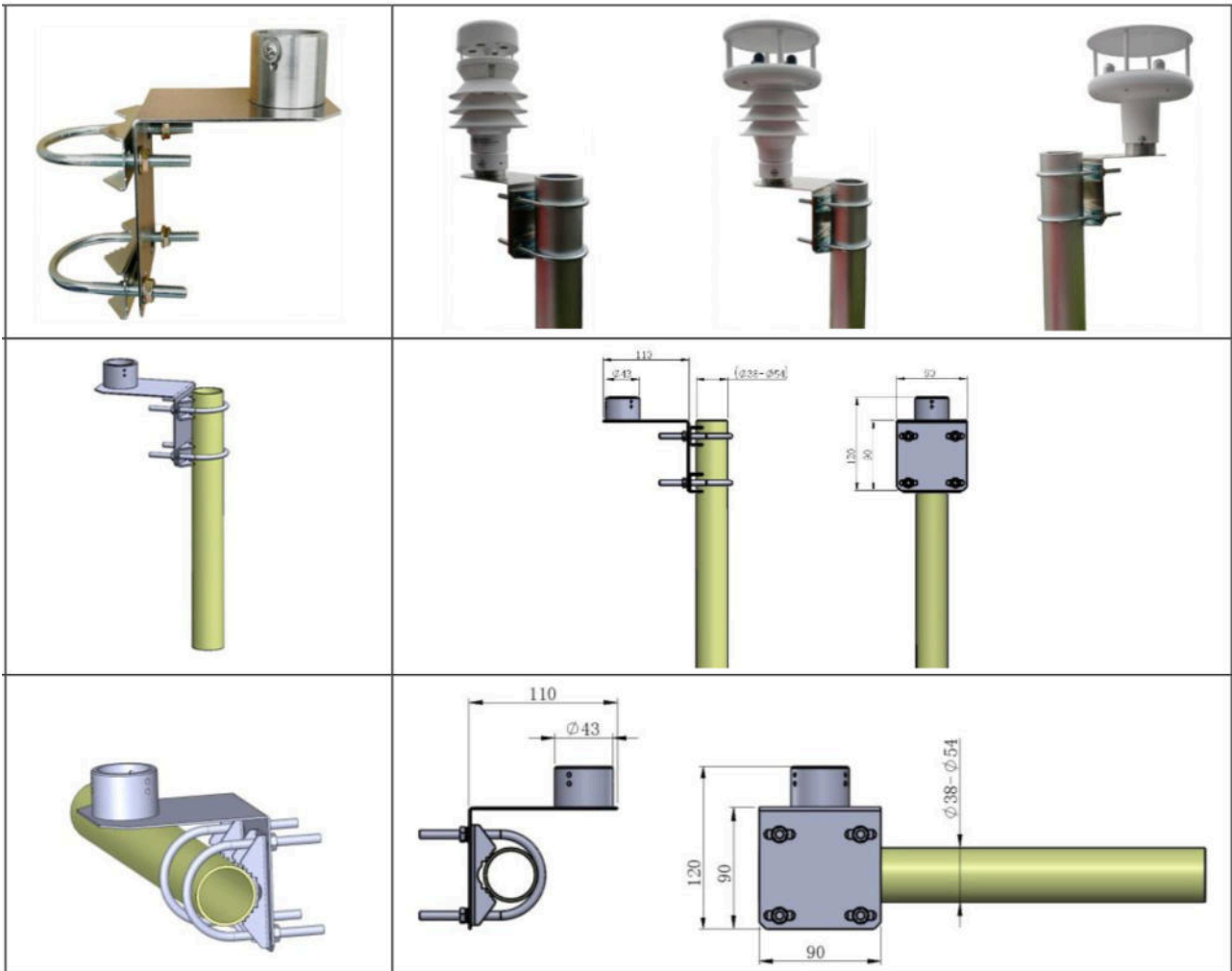
**ORDER CODE**

Name	Small Automatic Weather Station	
SEM5000Z	CODE	Function type
	A	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall
	B	Wind speed + wind direction+temperature +humidity +rainfall
	C	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+GPS
	D	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+ electronic compass
	E	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+ electronic compass+GPS
	F	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+radiation
	G	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+UV
	H	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+UV+GPS
	I	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+UV+GPS+ electronic compass
J	Wind speed + wind direction+temperature +humidity + atmospheric pressure+rainfall+radiation+GPS	

Note: the above parameters can be selected and combined according to the user's requirements. Please specify the specific parameters and quantity when ordering.

## INSTALLATION

### L type installation



### I type installation

