

SEM6000 Micro automatic meteorological station

MAIN FEATURES

- No moving parts, maintenance free for the whole system
- Modbus communication protocol, standard RS485 / RS232 / SDI-12 output
- Electronic compass, GPS or Beidou global positioning module can be added
- Internal heating device ensures normal operation in severe cold climate
- Integrated automatic weather station with PM2.5 and PM10 dust particle concentration



OVERVIEW

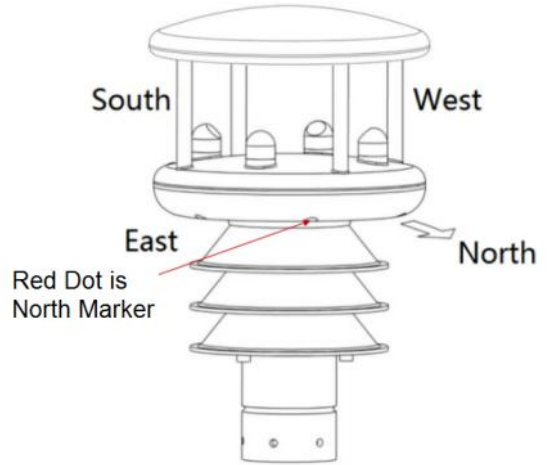
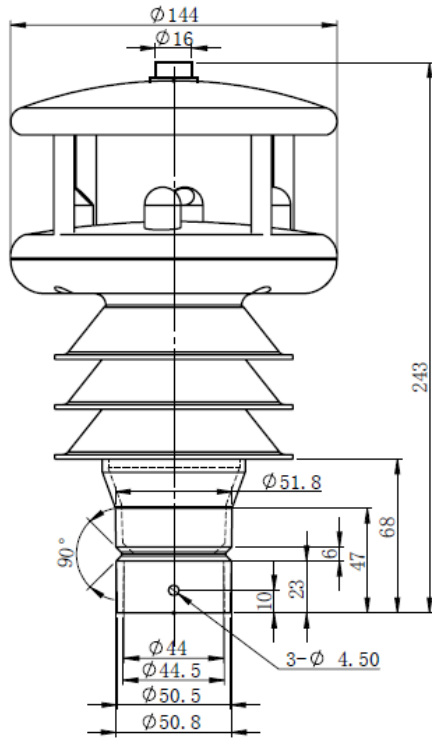
SEM6000 Micro automatic meteorological station is a civil integrated meteorological station independently developed by our company, which can measure multi-element meteorological parameters. At the same time, it measures nine main environmental parameters, including atmospheric temperature, atmospheric humidity, wind speed, wind direction, air pressure, rainfall, illumination, radiation, dust concentration, etc. It is characterized by high integration of all modules and fast response time. GPS global positioning module and electronic compass can also be installed inside. The above functional modules can be assembled freely according to the needs of users, so they can meet the needs of different customers.

It is mainly used in Intelligent City, urban environment monitoring, agricultural automatic meteorological monitoring station, automatic traffic meteorological station along the highway, field meteorological monitoring station, high-voltage transmission and transformation line, tower control, automatic meteorological station and other industries.

SPECIFICATION

ITEMS	Principle	Range	Accuracy	Resolution
Wind speed	Ultrasonic	0-60m /s	± 2%	0.01m/s
Wind direction	Ultrasonic	0-359 °	±3 °	1 °
Temperature	MEMS sensor	- 40 °C - + 80 °C	± 0.5°C/±0.3°C	0.1 °C
Humidity	MEMS sensor	0 – 100%	±2%	0.1%
Atmospheric pressure	MEMS sensor	150 – 1100hPa	±0.5hpa	0.1hPa
Precipitation(Type:Rain/Hail/Snow; Intensity:Rain)	Radar	0-200mm/hr	±10%	0.01mm
Luminance*	Silicon	0-200000lux	±5%	1Lux
Solar Radiation*	Silicon	0-2000 W/m2	±5%	1 W/m2
UV Index*	Silicon	0-15	±5%	1
PM1.0/PM2.5/PM10*	Laser scattering	0-1000µg/m3	±10%	1µg/m3
Visibility*	Scattering	10-10000m	±10%/15-20%	1m
Noise*	MENS sensor	30-130 dB	±5%	1m
Digital output	RS232, RS485, SDI-12			
Power supply	VDC: 7V-30V (Heating Version Starting From 12VDC)			
IP protection	IP65, IP66 or customzied			
Operating environment	-40°C - +60°C,0 - 100%			
Communication	ModBus, NMEA-0183, ASCII			
Size	Ø144×240 mm (height varies depending on parameters)			
Material	White/ABS			
Power Consumption	Less than 1W (heating 5W)			

DIMENSION & INSTALLATION



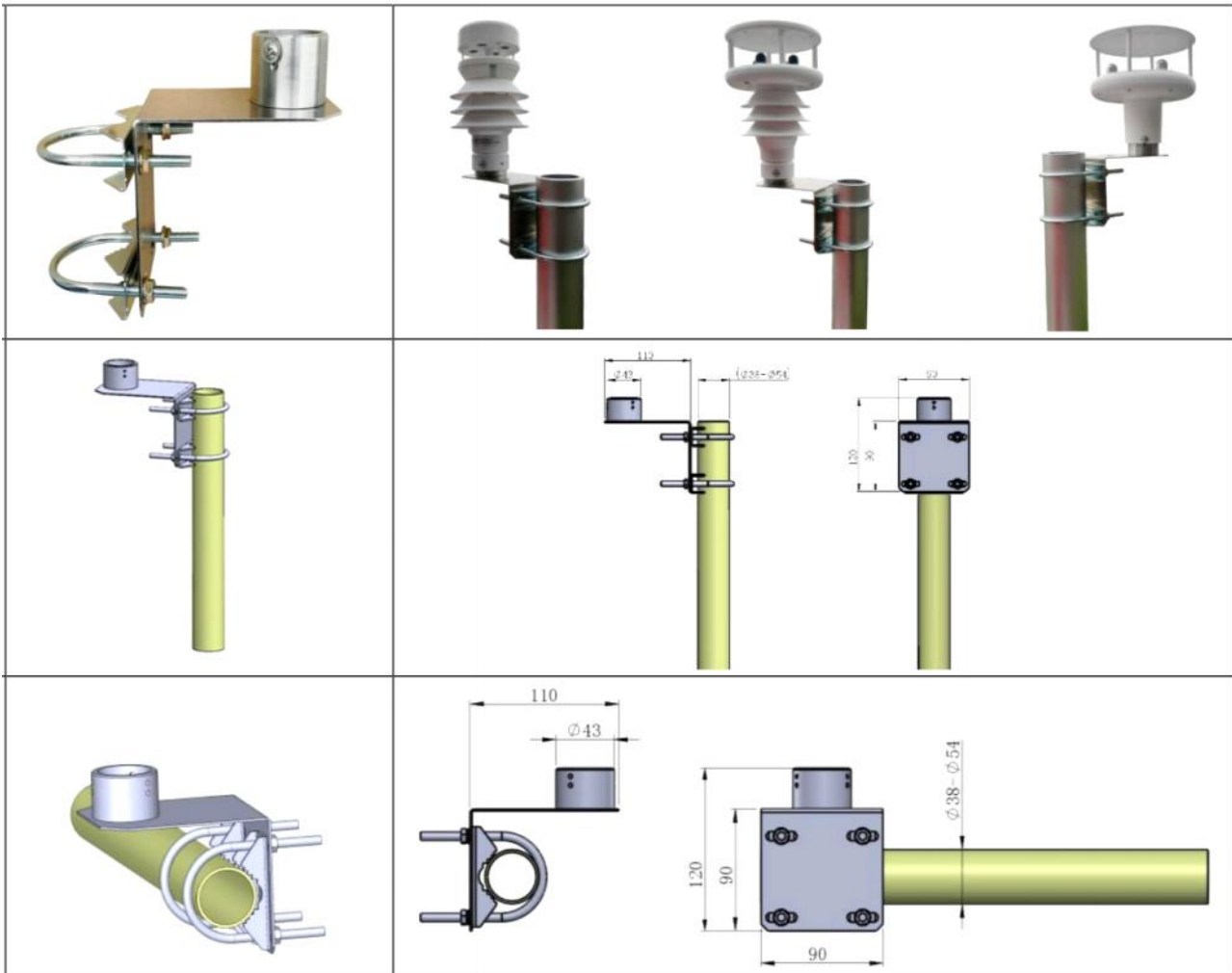
ORDER CODE

Name	Small Automatic Weather Station	
SEM6000	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

