

SEM2000 Mini Ultrasonic Anemometer/Compact weather station

MAIN FEATURES

- Maintenance-free, long service life
- No moving parts, zero wear
- Engineering plastic or aluminum alloy shell, lighter
- Reflective ultrasonic probe, more compact structure
- Using acoustic wave phase compensation technology, higher accuracy



OVERVIEW

SEM2000 mini automatic weather station can simultaneously monitor multiple optional meteorological parameters: wind speed, wind direction, temperature, humidity, pressure, precipitation, solar radiation, UV radiation, luminance and PM1.0/2.5/10.

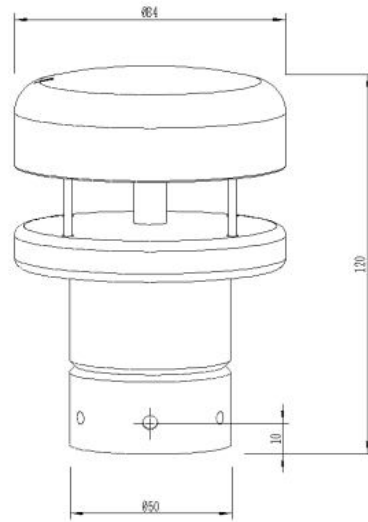
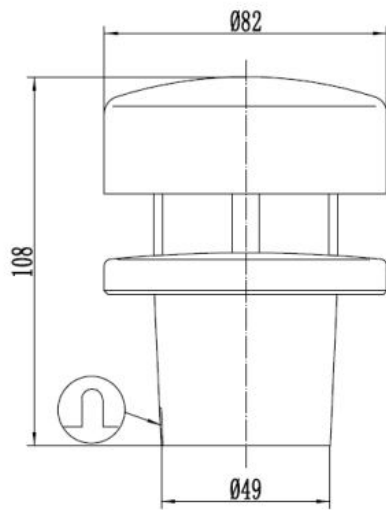
Measurement of precipitation adopts advanced small 24GHz Doppler radar, The speed rate of drops is registered with a 24 GHz radar system. By comparison between the speed rate and the size of drops, the quantity of rain or its intensity will be registered. The rain/precipitation type (rain/snow/snow-covered rain/freezing rain/hail) is determined thanks to the speed rate of the rain.

Thanks to the adoption of new technology and design, the structure is more compact and robust. No need to conduct maintenance or calibration after installation.It's very suitable to be integrated into Agrometeorological System.

SPECIFICATION

ITEMS	Principle	Range	Accuracy	Resolution
Wind speed	Ultrasonic	0-40m /s	± 3%	0.1m/s
Wind direction	Ultrasonic	0-359 °	±3 °	1 °
Temperature (optional)	MEMS sensor	- 40 °C - + 80 °C	± 0.5°C	0.1 °C
Humidity (optional)	MEMS sensor	0 – 100%	±5%	1%
Atmospheric pressure (optional)	MEMS sensor	150 – 1100hPa	±1hpa	0.1hPa
Rainfall (optional)	Radar	0-200mm/hr	±5%	0.1mm
Digital output	Digital output: RS232, RS485, SDI-12; analog output (optional): 2-4-20mA			
Power supply	VDC: 5V-30V (Heating Version Starting From 12VDC)			
IP protection	IP65			
Operating environment	-30°C - +60°C,0 - 100%			
Communication	ModBus, NMEA-0183, ASCII			
Size	Φ84×120mm ABS: 0.38kg Aluminum alloy: 0.78kg			
Material	ABS engineering plastics/aluminum alloy			
Power Consumption	0.2W (wind speed, wind direction, temperature and humidity, air pressure) + 1.5W (rainfall)			

DIMENSION & APPLICATION



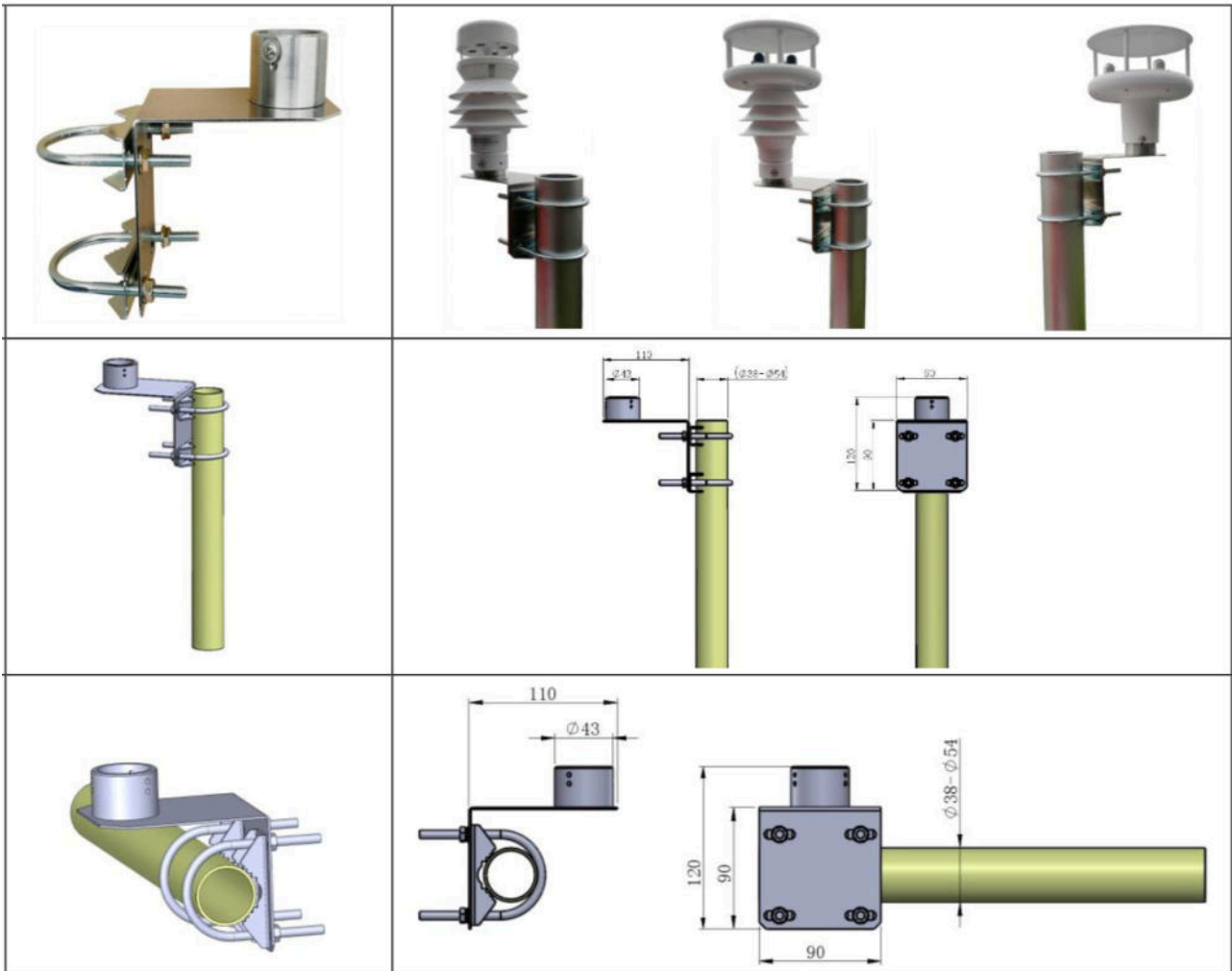
ORDER CODE

Name	Mini Ultrasonic Anemometer/Compact weather station	
SEM2000	CODE	Function type
	A	Wind speed + wind direction
	B	Wind speed + wind direction+temperature +air humidity
	C	Wind speed + wind direction+temperature +air humidity+air temperature
	D	Wind speed + wind direction+temperature +air humidity+air temperature+air pressure
E	Wind speed + wind direction+temperature +air humidity+air temperature+air pressure+rainfall	

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

