

SEM8000 Vehicle-mounted integrated ultrasonic weather station

MAIN FEATURES

- The internal rechargeable lithium battery can be used for more than 10 hours of continuous work;
- The detection probe has a built-in three-axis electronic compass and gravity accelerometer, which can calculate the azimuth angle with the true north;
- The detection probe has its own heating device to ensure normal operation in severe cold climates;
- There are no moving parts, and the entire system is maintenance-free



OVERVIEW

SEM8000 vehicle-mounted automatic weather station is a professional-grade vehicle-mounted automatic weather station sensor independently developed by our company that can measure multi-element meteorological parameters. It also measures six major meteorological elements including atmospheric temperature, atmospheric humidity, wind speed, wind direction, air pressure and rainfall. And real-time display of the six-element data on site, which is characterized by high integration, high detection accuracy, and fast response time. Two high-strength magnets (rubber wrapped) are installed at the bottom of the automatic weather station, which can be easily attached to the top of the car. A rechargeable lithium battery and a wireless Bluetooth data transmission module are built in the bottom of the automatic weather station. The weather station detection data can be sent to the mobile phone APP in real time, or it can be received through a laptop. The vehicle-mounted weather station receiving software displays and stores the data sent by the weather station. . The total weight of the vehicle-mounted automatic weather station is only 1.8kg, and it is equipped with a special instrument box, which is very light to carry. It is very simple and convenient to use.

SPECIFICATION

ITEMS	Principle	Range	Accuracy	Resolution
Wind speed	Ultrasonic	0-60m /s	± 2%	0.1m/s
Wind direction	Ultrasonic	0-359 °	±3 °	1 °
Temperature	MEMS sensor	- 40 °C - + 80 °C	± 0.5°C	0.1 °C
Humidity	MEMS sensor	0 – 100%	±5%	1%
Atmospheric pressure	MEMS sensor	150 – 1100hPa	±1hpa	0.1hPa
Precipitation (Rain)	Radar	0-100mm/hr	±5%	0.1mm
Digital output	Bluetooth			
Power supply	12VDC Built-in rechargeable lithium battery last for4 hours			
IP protection	IP65			
Operating environment	-40°C - +70°C,0 - 100%			
Communication	ModBus, NMEA-0183, ASCII			
Size	150*110*320mm			
Material	ABS engineering plastics/aluminum alloy			
Power Consumption	185mA@12V(heating off)			

With compass and GPS integrated, output real-time relative wind speed, direction as well as true wind speed and direction, compass heading, GPS speed.

APPLICATION



Bluetooth

APP

PC software



ORDER CODE

Name	Vehicle-mounted integrated ultrasonic weather station	
SEM8000	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.