

Vehicle ultrasonic weather station

Model ES-W8000



Main features

- Internal rechargeable lithium battery, which can work continuously for more than 5 hours;
- The detection probe has a built-in three-axis electronic compass and a gravity accelerometer, which can calculate the azimuth angle with the real north;
- The detection probe is equipped with a heating device to ensure normal operation in severe cold climates;
- No moving parts, the entire system is maintenance-free

Compliance

The electromagnetic compatibility in accordance with the following applicable directives:
 LVD 2014/35/EU Low Voltage
 EMC 2014/30/EU
 Electromagnetic Compatibility
 EMC 2014/35/EU
 Electromagnetic Compatibility

Introduction

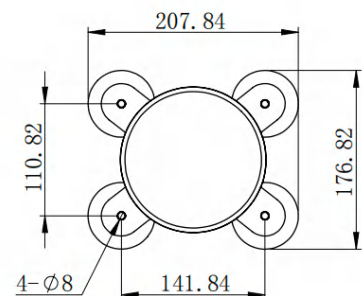
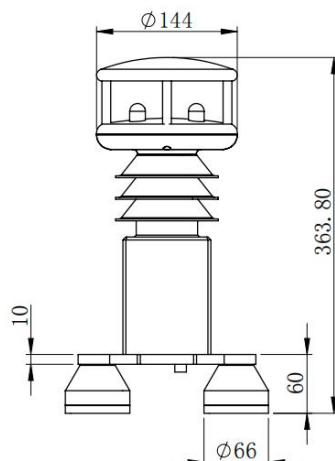
ES-W8000 vehicle portable ultrasonic weather station is a professional vehicle-mounted automatic weather station sensor independently developed by our company that can measure multiple meteorological parameters, simultaneously measuring various meteorological factors such as atmospheric temperature, atmospheric humidity, wind speed, wind direction, atmospheric pressure, rainfall, dust, and visibility, and displaying data in real-time on site. Its characteristics are high integration, high detection accuracy, and fast response time.

Four high strength magnets (rubber wrapped) are installed at the bottom of the ES-W8000 vehicle mounted automatic weather station to facilitate adsorption on the top of the vehicle. The automatic weather station is equipped with a built-in rechargeable lithium battery and Bluetooth data transmission module, which can send the weather station detection data to the mobile phone APP terminal in real time or receive it through a laptop computer. The on-board weather station receiving software displays and stores the data sent by the weather station.

The total weight of the ES-W8000 vehicular automatic weather station is only 1.8kg, equipped with a dedicated instrument box, making it very portable to carry. It is very simple and convenient to use.

Dimension

Unit:mm



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 – 1020hPa	±1hpa	0.1hPa
Precipitation (Rain)	Radar (Distinguishing rain/ snow)	0-200mm/hr	±5%	0.01mm
ITEMS	Optional functions			
PM2.5/PM10*	0-1000 µg/m3			
Visibility*	20-10000Meter			
Latitude/Longitude*	GPS/Beidou positioning coordinates			
Antenna height*	Height above mean sea level			
Geographic height*	Geoid Separation			
Horizontal accuracy*	Horizontal longitude factor (0.5~99.9), the smaller the longitude, the higher the longitude			
Movement speed*	Speed in knots or meters per hour			
Mobile heading angle*	The angle between the north of the detector and the true north is calculated clockwise, with a maximum of 359.9 degrees			
ITEMS	Other parameters			
Digital output	Bluetooth (standard); GPRS (optional)			
Power	Two 18650 rechargeable lithium batteries that can operate for up to 24 hours (without rain module)/ MICRO USB interface			
Data storage	Internal data storage chip (stores one piece of data per minute and can store 365 days of data)			
Size	190*174*335m			

Order guide

ES-W8000	Vehicle-mounted integrated ultrasonic weather station		
	CODE	Function type	
	XXXXXX	W1= wind speed W2 = wind direction R = rainfall	T= temperature H = humidity P=PM1.0/PM2.5/PM10 A= atmospheric pressure V=Visibility
		CODE	Signal output
		1	Bluetooth
		2	GPRS
ES-W8000	W1W2THA	1	Order example