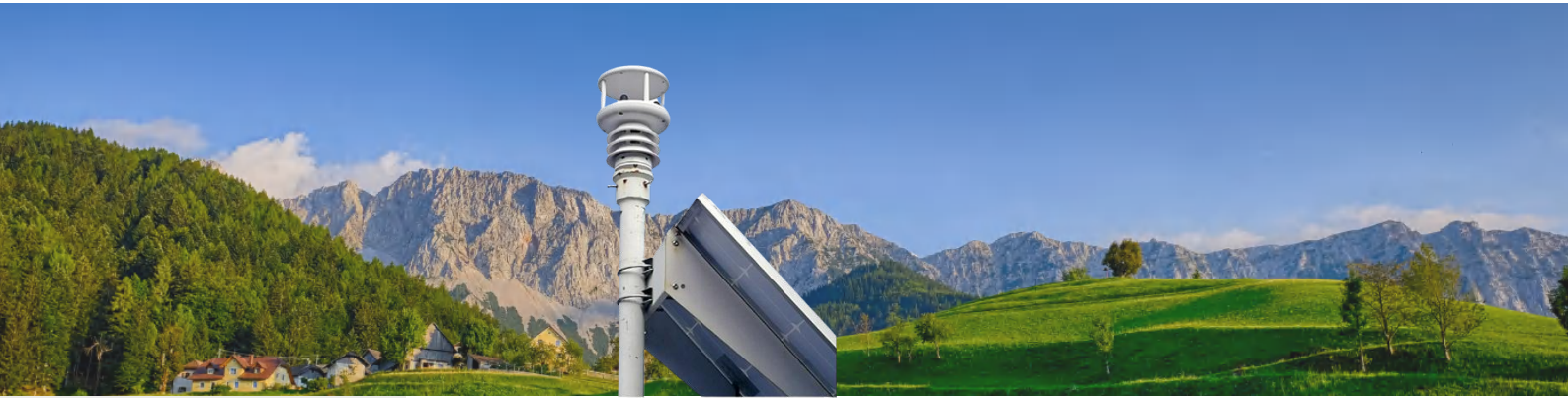


Ultrasonic weather station

Model ES-W6000



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

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

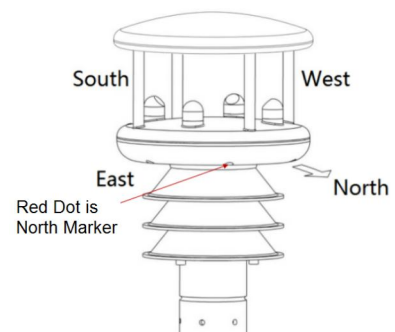
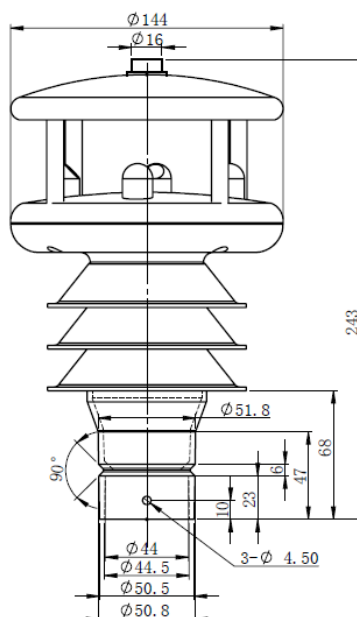
Introduction

ES-W6000 professional ultrasonic weather 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.

Dimension

Unit:mm



Specification

ITEMS	Principle	Range	Accuracy	Resolution
Wind speed	Ultrasonic	0-60m /s	± 2%	0.01m/s
Wind direction	Ultrasonic	0-360 °	±3 °	1 °
Temperature	MEMS sensor	- 40 °C - + 80 °C	± 0.5°C	0.1 °C
Humidity	MEMS sensor	0 – 100%	±2%	0.1%
Atmospheric pressure	MEMS sensor	150 – 1100hPa	±1hpa	0.1hPa
Rain Intensity* Accumulation	Radar/Piezoelectric	0-200mm/hr 0~9999999.99mm	- ±10%	0.01mm
Luminance*	Silicon	0-200000lux	±5%	1Lux
Solar Radiation*	Silicon	0-2000 W/m2	±5%	1 W/m2
PM1.0/PM2.5/PM10*	Laser scattering	0-1000µg/m3	±10%	1µg/m3
Visibility*	Laser scattering	10~10000 m	± 20%	M
UV index*	Silicon	0-15	± 5%	1
Noise*	microphone	30-130 dB	± 3dB	1dB
Sea level*	MENS sensor	-50~9000m	±5%	1m
Digital output	RS232, RS485, SDI-12			
Power supply	VDC: 7V-30V (Heating Version Starting From 12VDC)			
IP protection	Default IP65 or customized			
Operating environment	-40°C - +70°C,0 - 100%			
Communication	ModBus, NMEA-0183, ASCII			
Size	Ø144 * 248 mm			
Material	White/ABS			
Power Consumption	125mA@12V(heating off)			

Order guide

ES-W6000	Professional ultrasonic weather station		
	CODE	Function type	
	XXXXX	W1= wind speed W2 = wind direction R = rainfall V=Visibility	T= temperature H = humidity L =Luminance N=Noise A= atmospheric pressure S1 = Solar radiation P=PM1.0/PM2.5/PM10 S2=Sea level
		CODE	Signal output
		1	RS232
		2	RS485
		3	SDI-12
ES-W6000	W1W2THA	2	Order example

