

# WS303U Compact ultrasonic wind speed and direction transmitter

### **MAIN FEATURES**

- Using the transmitted acoustic pulse, the phase difference of the receiver is measured to calculate the wind speed and direction, and the wind speed and direction data are measured and output at the same time.
- It is made of ABS engineering plastics, with small wear and long service life.
- The random error identification technology can ensure the low discrete error of measurement under strong wind, and make the output more stable without on-site calibration.
- 485 communication interface, standard Modbus RTU communication protocol, communication address and baud rate can be set, the farthest communication distance is 2000 meters.



### **OVERVIEW**

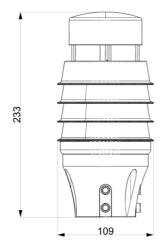
WS303U small ultrasonic wind speed and direction sensor is a wind speed and direction measuring instrument developed based on ultrasonic principle. It uses the transmitted sound wave pulse to measure the phase difference at the receiving end to calculate the wind speed and wind direction. The sensor can measure the instantaneous value of wind speed and wind direction at the same time, and is widely used in the fields of meteorology, ocean, environment, airport, port, laboratory, industry, agriculture and transportation.

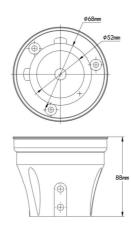
#### **SPECIFICATION**

Supply voltage	10-30V DC		
Power consumption	485: 0.12W 4~20mA/0~5V/0~10V: 1.2W		
Range	Wind speed	0 ~ 40m / S, 0 ~ 70m / S(customizable) 0.5m starting wind speed	
	Wind direction	0~360°	
Accuracy	Wind speed	±0.5+2%FS	
	Wind direction	±3°	
Resolution	Wind speed	0.01 m/s	
	Wind direction	1°	
Working environment	-40~80°C, 0~95%RH		
Wind resistance	75 m/s		
Response time	1S		
IP grade	485 type: IP65 Analog type: IP54		
Signal output	485 (Modbus RTU protocol)  4 ~ 20mA current output  0 ~ 5V voltage output  0 ~ 10V voltage output		



### **DIMENSION**





## **ORDER CODE**

WS303U	Ultrasonic Wind Speed & Direction Sensor			
	CODE	Function type		
	Α	No built-in electronic compass  Built-in electronic compass		
	В			
		CODE	Signal output	
		1	4~20mA	
		2	0-10V	
		3	0-5V	
		4	RS485	
WS303U	А	1	Order example	

# **APPLICATION**

