WS200 WIND SPEED SENSOR

MAIN FEATURES

- The sensor has the advantages of compact design, high measurement accuracy, fast response speed and good interchangeability.
- Realize low cost, low price and high performance.
- Flange installation mode can realize lower outgoing line and side outgoing line, which is simple and convenient.
- Reliable performance, ensure normal operation and high data transmission efficiency.

OVERVIEW

WS200 three-cup wind speed sensor is an wind speed measuring instrument independently developed and produced by our company. It supports customized heating wind speed measuring instruments. Heating products have built-in sensitive temperature sensors and high-performance heating plates. The sensor housing is made of aluminum material, with very small dimensional tolerances, with high weather resistance, high strength, corrosion resistance and water resistance. Internal integration of photoelectric conversion mechanism, industrial microcomputer processor, standard current generator, current driver, etc.

WS200 circuit PCB adopts military-grade A-grade materials to ensure the stability of measurement parameters and electrical performance; electronic components are imported industrial-grade chips, which makes the overall anti-electromagnetic interference ability extremely reliable, and can ensure that the host is at -30 °C ~ 75 °C , humidity 5% ~ 95%RH (non-condensing) range can work normally.

This product is widely used in greenhouse, environmental protection, meteorological station, engineering machinery, ships, docks, aquaculture and other environmental wind speed measurement.

SPECIFICATION

Measurement range	0-30m / S; 0-50m / S; 0-60m / S; (other ranges can also be customized)
Starting wind speed	≤ 0.3m/s
Accuracy	± (0.3 + 0.03V) m / s, V is wind speed
Output signal	A: Voltage signal (0-2v, 0-5V, 0-10V) B: 4-20mA (current loop) C: RS485 (standard Modbus RTU protocol, device default address: 01) D: Pulse signal (pulse amplitude 3.3V, 5V choose one)
Power supply voltage	5-24vdc (when the output signal is 0-2v, RS485) 12-24vdc (when the output signal is 0-5V, 0-10V, 4-20mA)
Power consumption	24V/8mA(Heater off), 24V/0.8A(Heater on)
Stable time	< 1s
Response time	< 1s
Working environment	-30 °C ~ 75 °C (Not heated type), -40 °C ~ 75 °C(Heated type)
Cable specification	2m 3-wire system (analog signal); 2m 4-wire system (RS485) (optional cable length)
Material	Aluminum alloy
Heating mothod	PTC automatic heating (only for heating model)
Automatic heating	Bellow -1 °C , reach 25 °C automatically stop heating

Remarks: The heating function is automatically controlled according to the ambient temperature, or different start and stop temperatures can be set according to the use environment (the PWM control is used in the early stage of heating to prevent the impact of the current, the time is 120 seconds)

DIMENSION
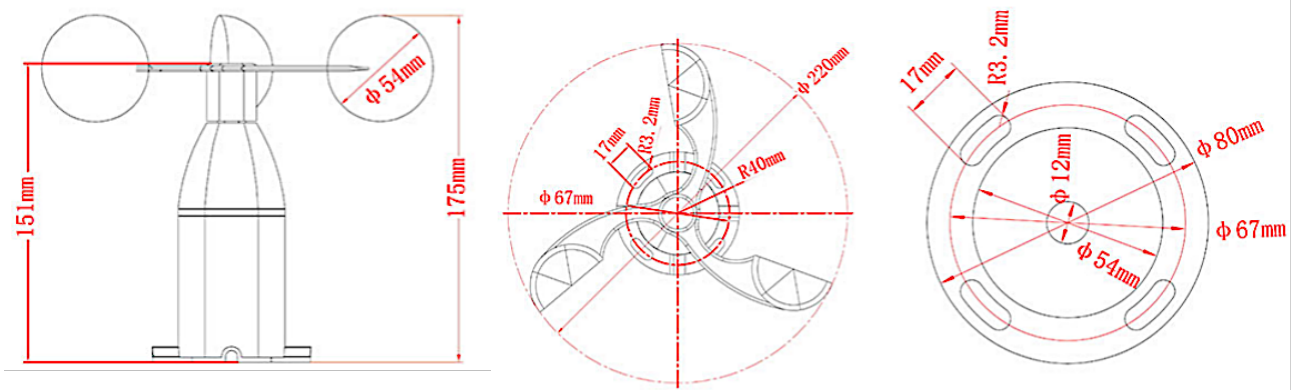
ORDER CODE

WS200	Wind Speed Sensor				
	CODE	Range			
	A	0~30m/S			
	B	0~50m/S			
	C	0~60m/S			
		CODE	Signal output		
		1	4~20mA		
		2	0-10V		
		3	0-5V		
		4	Pulse output		
		4	RS485		
			Y	With heating function	
			N	Without heating function	
WS200	A	1	N	Order example	

APPLICATION

Water Meteorology

Wind power

Bridge tunnel

Aviation airport

Appendix

Version	Modify records
V2202	Specify the working principle and details for heating function
V2203	Specify the working temperature environment difference, specify the Power consumption