

Wind Speed Sensor WSSM50D

Product Manual

(V1.1)



SAT CONTROL

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● Important statement

Thank you very much for choosing our products, we will serve you sincerely forever. The company pursues excellent quality and pays more attention to excellent after-sales service.

Operation errors will shorten the life of the product, reduce its performance, and may cause accidents in severe cases. Please hand over this manual to the end user and read it carefully before using the product. And please keep it in a safe place for reference when needed. The company reserves the right to modify this manual due to product technology and process updates. If there is any change, no further notice will be given, and the final interpretation of this manual is reserved.

● Product overview

The wind speed sensor produced by our company is a wind speed sensor with high reliability and high performance. This series of sensors can stably and accurately collect environmental wind speed signals, and is suitable for high-altitude operations, construction machinery, port machinery and other occasions.

The sensor has a built-in digital circuit with strong anti-radio frequency, anti-electromagnetic interference and anti-lightning surge. The circuit of the wind speed sensor collects the electrical signal that the rotational speed output of the wind cup is linearly related to the ambient horizontal wind speed;

The main structural parts of the product are made of alloy materials, and the surface is treated. The product has good waterproof and corrosion resistance. The internal and rotating parts are all sealed, which can effectively prevent the intrusion of water, salt spray and sand.

● Features

- ◇ Developed based on the principle of non-contact magnetic sensor measurement
- ◇ Built-in high-performance sensor, the collected data has high precision and high reliability
- ◇ The wind speed measurement range is wide, and the starting wind speed is low
- ◇ The wind speed sensor adopts an all-metal shell, which has good corrosion resistance and strong wind resistance
- ◇ The wind cup is made of stainless steel, which can be used under harsh conditions
- ◇ The circuit protection adopts a fault-tolerant design, and the sensor will not be damaged in the case of wrong wiring
- ◇ Comply with CE EMC standard, multi-level lightning protection and anti-surge design
- ◇ It can work in a wide voltage range of 15-30VDC

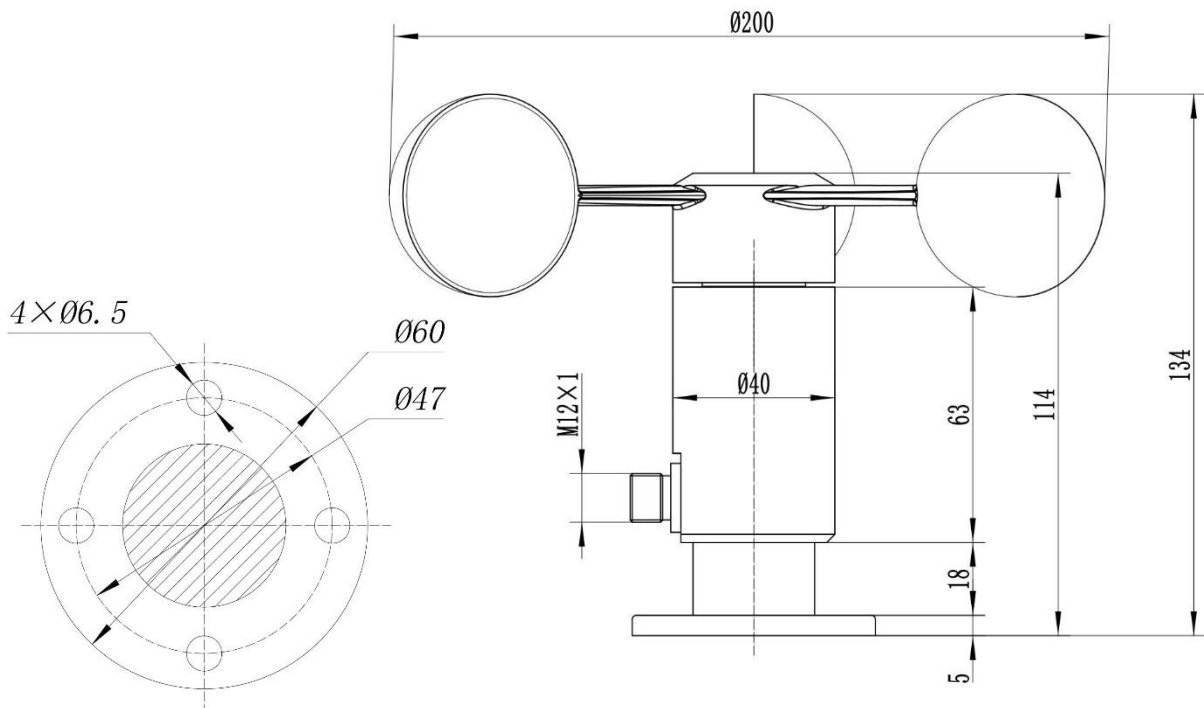
● Scope of application

It is suitable for wind speed monitoring in factories, electric power, ports, factories and mines, wind turbines, large mechanical equipment, etc.

● Technical indicators

Operating Voltage	15-30VDC, 5V/24V (pulse)	Measuring range	0~50m/s
Start wind speed	≥0.5m/s	Wind strength	> 70m/s 30min
Precision	±0.5m/s(< 5m/s); ±3%FS(≥5m/s)	Degree of protection	IP65
Operating temperature	-20°C~+85°C	Static protection	15KV
Working humidity	0%~95% (non-condensing)	Output signal	0-24VDC DIGITAL
The main material	Aluminum alloy / polyester coating		

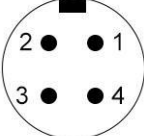
● Installation notes



1. Please install the sensor horizontally, as shown in the left figure, the angle between the installation base and the horizontal plane should not exceed 5° , so as to ensure that the sensor can accurately measure the wind speed at low wind speed;

2. As shown in the left figure, the position and shape of the wind cup and windmill arm directly affect the sensor. Please do not grasp the wind cup and windmill arm during installation, so as not to damage the sensor structure and affect the measurement accuracy.

● **Electrical installation notes**

M12 connector	Output	M12 pin	Wire color	Definition
	Analog signal output	1	Brown	+Vcc (power supply positive)
		2	White	Iout/Vout (output positive)
		3	Blue	GND (power negative)
		4	Black	PE (ground)

Other outlet methods can be customized, and the specific wiring is subject to the product logo.



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