

**PRODUCT OVERVIEW** 

# Cup wind speed direction sensor

Model ES-W304S





#### Main features

- Integrated wind speed and direction measurement
- Imported chips, highprecision and stable performance
- EMI standard design, strong anti-electromagnetic interference ability
- Polycarbon/aluminum alloy two materials are available
- Low power consumption, long-term stable work.
- Optional heating function to cope with bad weather

### Compliance

C F

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-W304S three cup type wind speed and direction sensor is a wind speed & direction mechanical measuring instrument independently developed and produced by our company. This product is composed of shell, wind cup and circuit module, with internal integrated photoelectric conversion mechanism, industrial microcomputer processor, standard current generator, current driver, etc.

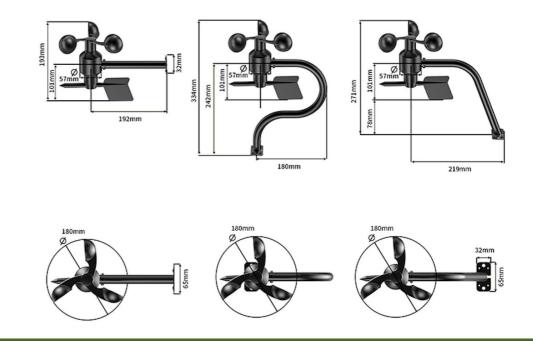
The circuit PCB is made of military grade a material, which ensures the stability of parameters and the quality of electrical performance; the electronic components are made of imported industrial grade chips, which makes the whole circuit have extremely reliable anti electromagnetic interference ability.

### Application

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

#### Dimension

Unit:mm



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## Specification

Wind speed range	0 ~ 30m/s; 0 ~ 50m/s; 0 ~ 60m/s; (other ranges can also be customized)		
Wind direction range	0~360°		
Accuracy	±(0.3+0.03V) m/s, ±1°		
Signal output	A: Analog: (0-2v, 0-5V, 0-10V), 4-20mA (current loop) B: SDI-12 (American Hydrological Organization Serial Data Communication Interface Protocol) C: RS485 (standard Modbus RTU protocol, device default address: 01) D: Lora/4G/WIFI		
Power supply	$5 \sim 24 V$ DC (when the output signal is 0 $\sim$ 2V, RS485) $12 \sim 24 V$ DC (when the output signal is 0 $\sim$ 5V, 0 $\sim$ 10V, 4 $\sim$ 20mA)		
Heating supply voltage	12~24V DC		
Heating power	Average: 15W; Peak: 18W		
Starting wind speed	≤0.3m/s		
Stability time	<1 second		
Response time	<1 second		
Working environment	-30°C ~ 70°C ; Humidity: <100%RH		
Material	Aluminum alloy, ABS		
Heating mothod optional	PTC automatic heating (only for heating model)		

#### Order guide

CE

ES-W304S	Wind speed and direction Sensor			
	CODE	Material   With heating function   Without heating function		
	Y			
	Ν			
		CODE	Signal output	
		1	4~20mA	
		2	0-10V	
		3	0-5V	
		4	RS485	
		5	Lora	
		6	4G	
		7	WIFI	
ES-W304S	Ν	1	Order example	