

WS303 High Precision Ultrasonic Wind Speed And Direction Sensor

MAIN FEATURES

- No moving parts, no wear
- Maintenance free, long service life
- Aluminum alloy shell, more light
- Adopt ultrasonic probe reflection type, more compact structure
- Integral heating, strong anti freezing ability
- Using the phase compensation technology and random error identification technology, the output is more stable and the accuracy is higher
- Measurement compensation technology and protection technology are adopted for light rain, dense fog and lightning weather, with stronger environmental adaptability
- Digital filtering technology, stronger anti electromagnetic interference ability



OVERVIEW

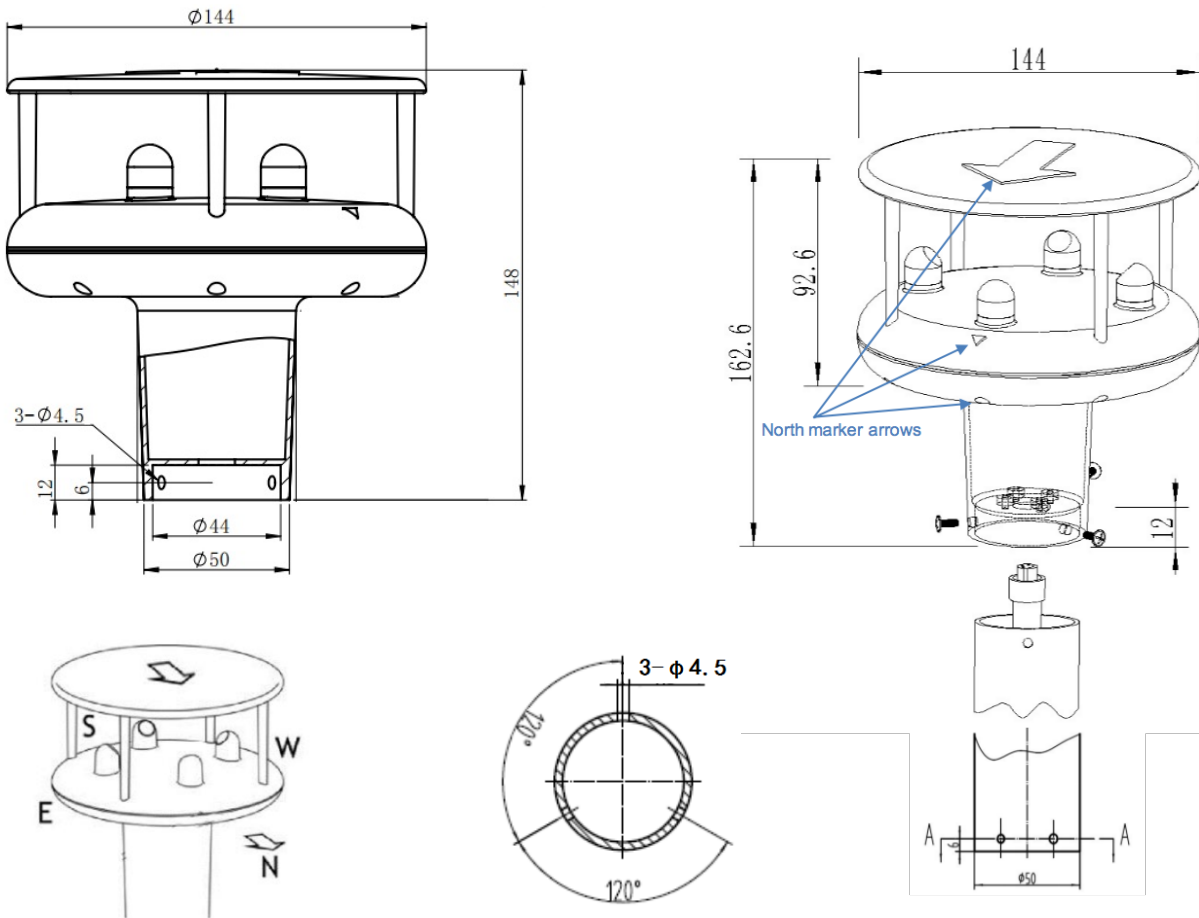
WS303 anemometer is a kind of instrument which can measure the wind speed, wind direction and acoustic temperature by using the time difference of ultrasonic propagation in the air. Compact space structure makes the volume smaller and the appearance more beautiful; all aluminum alloy shell makes the weight lighter; integral heating can work normally in cold and frozen weather. It is recommended for wind power, tunnels, high-altitude buildings and other fields.

It is mainly used in highway, meteorology, drilling platform, waterway, port, wind power generation, ship, automatic weather station and other industries.

SPECIFICATION

Wind speed	Range	0 - 60m/s
	Accuracy	±2%
	Resolution	0.01m/s
	Unit	m/s,km/h,knots,mph,ft/min (selectable)
Wing direction	Measure Range	0-359°
	intersection angle with geographic north	0-359°
	Accuracy	±3°
	Resolution	1°
Digital output	Interface	RS232/RS485/SDI-12
	Baud rate	9600(default),1200-19200(configurable)
	Frequency	Standard: 1Hz (1 output per second) Customized:4Hz(4 outputs per second)
	Protocol	ModBus-RTU/NMEA 0183/SDI-12
Analog output	Two ways 4-20mA Max.load 500Ω (current output is optional)	
Protection grade	IP65	
Operating Temp.	-40°C ~ +70°C	
Humidity	0 - 100%	
Power supply	DC 7~30V DC (12~24 V DC during heating function)	
Consumption	12mA@12V(Heater off), 130mA@12V(Heater on)	
Size/Weight	Φ144×165mm / 0.68kg	
Body material	ASA	
Heating function	Start heating below 5°C (Chip auto-sensing)	

DIMENSION & INSTALLATION

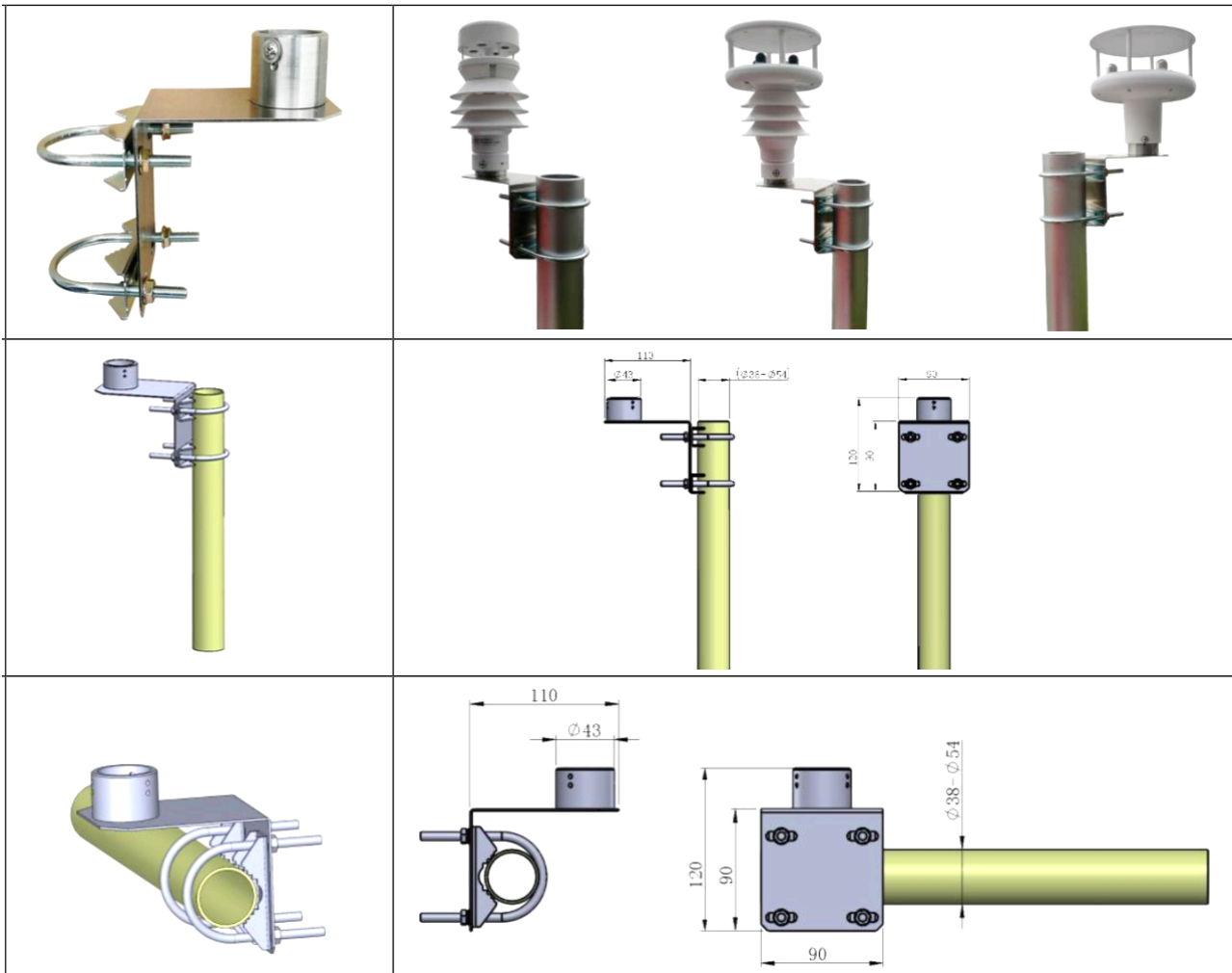


ORDER CODE

WS303	Ultrasonic Wind Speed & Direction Sensor		
	CODE	Function type	
	A	Wind speed + wind direction	
	B	Wind speed + wind direction+ atmospheric pressure	
	C	Wind speed + wind direction+ electronic compass	
	D	Wind speed + wind direction+ atmospheric pressure+ electronic compass	
		CODE	Signal output
		1	4~20mA
		2	RS232
		3	RS485
		4	SDI-12
WS303	A	1	Order example

INSTALLATION

L type installation



I type installation



Appendix

Version	Modify records
V2202	Update the specification with heating function details, update the dimension picture
V2203	Update the heating consumption
V2204	Explanation of the critical point of heating function
V2205	Update DC 7~30V DC (12~24 V DC during heating function)