



RK120-03 Ultrasonic Wind Speed & Direction Sensor

RK120-03 Economical Ultrasonic Wind Sensor is a fully digital detector, high-precision sensors, integrated by the ultrasonic wind speed and direction sensors. it can accurately and quickly detect the wind speed, wind direction; built-in signal processing unit can output a corresponding signal in response to user needs, with the structure lightweight and compact, no moving parts, high-strength structural design can be accurately detected in the harsh climatic conditions,made the accurate and stable elements, low maintenance, an open communications protocol and so on.It can be widely used in meteorology, oceanography, environment, airports, ports, laboratories, industry and agriculture, and transportation and other fields.

FEATURES

- Adapt to complex weather conditions
- No moving parts, long service life
- The surface preservative treatment
- Strong anti-interference
- High accuracy
- Automatic heating anti-frozen



APPLICATIONS

- Environmental monitoring
- Sea-going vessel
- Bridge & Tunnel
- Solar and wind power generation
- Wind resource assessment
- Drilling platform
- Automatic weather station
- Agriculture

SYSTEM TECHNICAL SPECIFICATION

Item	Technical Specification
Power Supply	12-24VDC
Power consumption	<1W(Heating not activated); <3W(Heating activated)
Output Signal	RS232/RS485(Modbus/NMEA-0183),4-20mA/0-5V(only for wind speed & direction) optional
Operating Temperature	-40°C-+80°C
Ingress Protection	IP66
Heating power	Automatically turn on when the ambient temperature is below 0°C
Electronic compass	optional
Atmospheric pressure	optional
Dimension	Φ 144*148mm
Weight(unpacked)	0.8kg
Main material	ASA



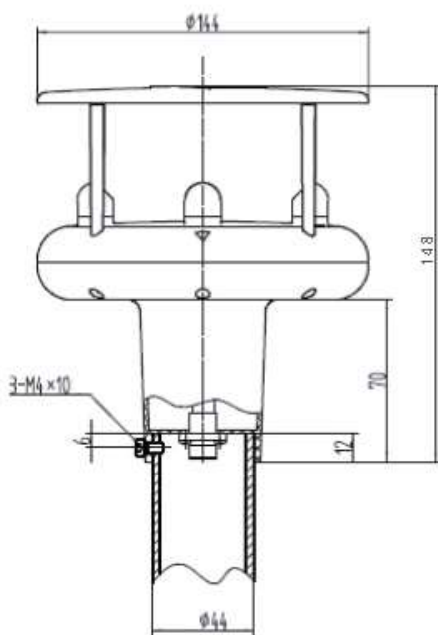
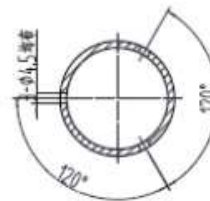
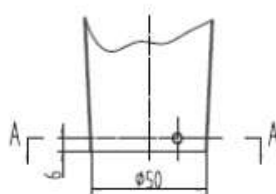
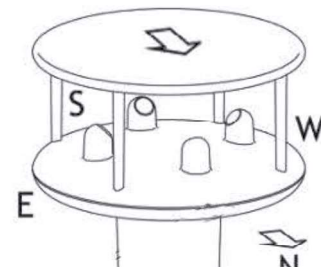
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Item	Technical Specification		
	Wind speed	Wind direction	Atmospheric pressure
Range	0-45m/s,0-60m/s	0-360°	150-1100hPa
Resolution	0.01m/s	1°	0.1hPa
Accuracy	≤10m/s: ±0.2m/s >10m/s: <±2% the current value	±3°	±1 hPa
Starting Threshold	0.1m/s	0.1m/s	
Extreme Wind Speed	60m/s		

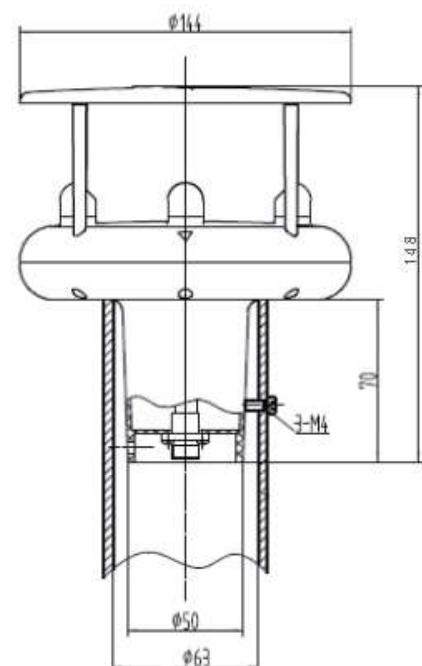
MOUNTING & DIMENSION

There is rotary adjustable mounting holes at the bottom of the sensor, when mounting the sensor, to ensure the indicator on on the sensor comply with the geographic north.

Unit: mm



installation type 1



installation type 2



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PARAMETER SELECTION TABLE

Remark	Series	Type	Parameter	Supply	Output	Cable length	
RK							
	120						
		03					
			A				Without compass & atmospheric pressure
			B				With electronic compass
			C				With atmospheric pressure
			D				With electronic compass & atmospheric pressure
				A			12-24V
				X			Other
					A		4-20mA
					B		0-5V
					C		RS485(Modbus)
					D		RS485(NMEA-183)
					E		RS232(Modbus)
					F		RS232(NMEA-183)
					G		SDI-12
						4000	4m,default
						10000	10m
						...	

Example: RK120-03AAA4000 Without compass & atmospheric pressure,Supply:12-24V, Output:4-20mA,Cable length:4m.

Complies with applicable CE directives.

Specifications subject to change without notice. Version 3.1

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