



Ultrasonic anemometer, Compact wind sensor, Wind monitoring sensor

Overview

The **BS120-03 Economical Ultrasonic Wind Sensor** is a high-precision, fully digital instrument that integrates ultrasonic wind speed and direction detection in a compact and robust design. Utilizing advanced ultrasonic technology, it delivers fast and accurate measurements of wind speed and direction without any moving parts, ensuring long-term stability and minimal maintenance.

Equipped with a built-in signal processing unit, the sensor outputs real-time data tailored to user requirements through an open communication protocol.

Its lightweight, high-strength structure is designed to perform reliably under harsh environmental conditions.

This sensor is ideal for a wide range of applications, including meteorology, oceanography, environmental monitoring, aviation, ports, laboratories, industrial automation, agriculture, and transportation systems.

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 and Tunnel
- ✓ Solar and Wind Power Generation
- ✓ Wind Resource Assessment
- ✓ Drilling Platform
- ✓ Automatic Weather Station
- ✓ Agriculture

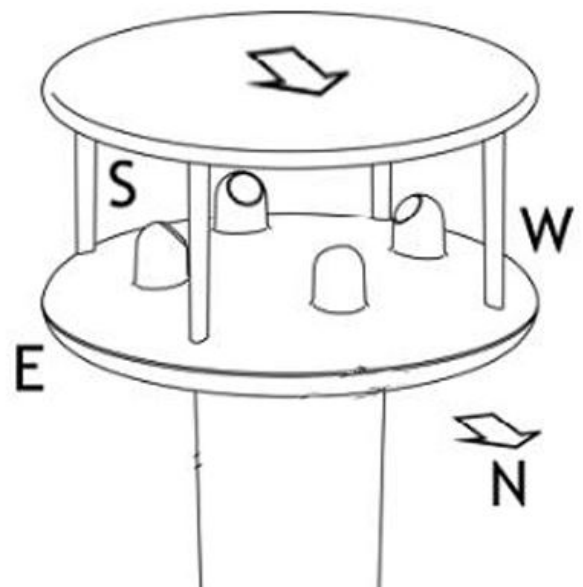
Technical Specifications

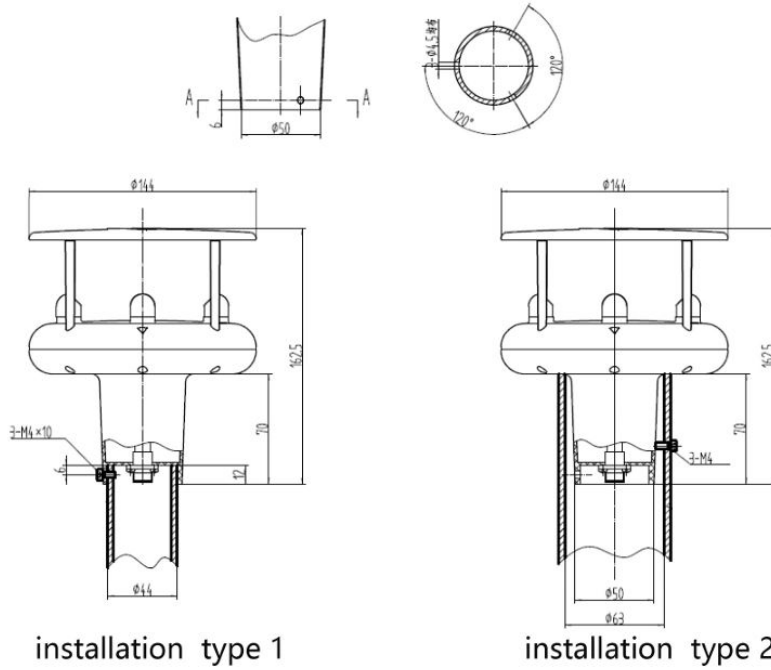
Item	Specification
Power Supply	12-24VDC
Power Consumption	<1W (Heating Not Activated); <3W (Heating Activated)
Output Signal	RS232/RS485 (Modbus/NMEA-0183) 4-20mA (Only for Wind Speed and Direction) Optional
Operating Temperature	-30°C ~ 70°C
Ingress Protection	IP66
Heating Power	3W Max
Electronic Compass	Optional
Atmospheric Pressure	Optional
Dimension	Φ145*138mm
Weight (Unpacked)	0.8kg
Main Material	Anti-Radiation ABS Engineering Plastic

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		

Dimension and Mounting

The sensor features rotary adjustable mounting holes at its base, allowing for precise alignment during installation. To ensure accurate wind direction measurement, the indicator on the sensor must be aligned with geographic north.





Parameter Selection Table

Remark	Series	Type	Parameter	Supply	Output	Cable Length	
BS							
	120						
		03					
			A				Without Compass and Atmospheric Pressure
			B				With Electronic Compass
			C				With Atmospheric Pressure
			D				With Electronic Compass and Atmospheric Pressure
				A			12-24V
				X			Other
					A		4-20mA
					B		
					C		RS485 (Modbus)
					D		RS485 (NMEA-183)
					E		RS232 (Modbus)
					F		RS232 (NMEA-183)
					G		SDI-12
						4000	4m, Default
						10000	10m
						...	

For comprehensive details, visit: www.buraq.com/BS120-03