

Tunnel ultrasonic wind sensor

Model ES-W3033



Introduction

ES-W3033 tunnel ultrasonic wind speed and direction detector is a special type for tunnels. The detection probe is installed on the tunnel wall to provide the tunnel control room with wind speed and wind direction detection values in the tunnel as the basic basis for ventilation and operation. The detector can observe the instrument operation status and detection data in real time on site. At the same time, the analog and switch signals output by the data output interface can be connected to the PLC in the nearby sub-control room, and then connected to the main control room through the data optical terminal and optical fiber.

Main features

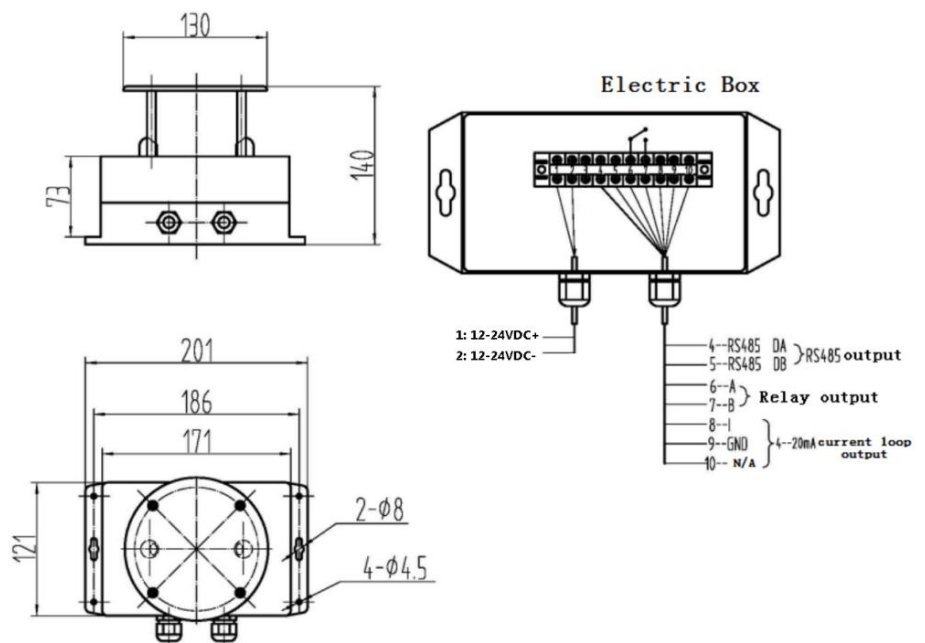
- Cast aluminum body, anodized surface, adapt to the harsh environment in the tunnel
- The sampling area spans the lane in the tunnel, more realistically reflecting the gas flow rate in the tunnel
- Using the ultrasonic detection principle, it is not affected by the ambient temperature
- Non-contact detection, no moving parts inside, reducing the failure rate

Application

- Construction safety management
- Ventilation management
- Fire prevention and emergency response

Dimension & Connection

Unit:mm



Specification

Measurement principle	Ultrasonic time-difference technology
Installation	Wall of tunnel
Measurement range	wind speed - 30 m / s ~ +30 m / S (other range customzied)
Measurement accuracy	wind speed ± 0.1 M / S
Averaging time	0.1 seconds to 60 minutes, adjustable
Accuracy	±2%
Digital interface	RS232, RS485
Protocol	ModBus
Signal output	Wind Speed:4-20 mA output(load < 500Ω)
	Wind Direction: Relay output(three terminals NO or NC)
Power supply	100~220VAC±10%, 50Hz/60Hz
Protection Grade	IP66
Operating temperature	-45°C - +75°C
Operating humidity	-0 - 100%
Power consumption	1W

Order guide

ES-W3033	Ultrasonic Wind Speed & Direction Sensor		
	CODE	Function type	
	A	Wind speed	
	B	Wind speed + wind direction	
		CODE	Signal output
		1	4~20mA
		2	RS232
		3	RS485
		4	2 passive relay outputs
ES-W3033	A	3	Order example