

- Measuring range  $0^{\circ} \sim 360^{\circ}$ , maximum tolerance  $\pm 2^{\circ}$
- Built-in precision signal processing unit
- Support standard 7-bit Gray code and 0 ~ 5V analog signal output
- Support RS485 digital signal output and online calibration
- New magnetic induction sensor design can effectively avoid the aging problem of traditional photoelectric encoder
- Compact all-aluminum body with anti-freeze and heating function



## WDS100 Wind Direction Sensor

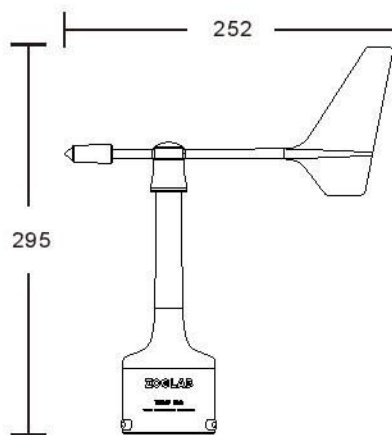
WDS100 Wind Direction Sensor adopts a new magnetic induction design to detect the wind direction angle. The maximum tolerance is  $\pm 3^{\circ}$ , and the output signal can be directly connected to the data acquisition system through RS485, or 7-bit Gray code, or 0 ~ 5V analog output. It can be widely used in meteorology, ocean, environment, airport, port, agriculture, transportation and other fields.

WDS100 is compact and exquisite in shape, featured with a robust wind vane, an unique aero-cone design and efficient heating method, suitable for all kinds of harsh environments.

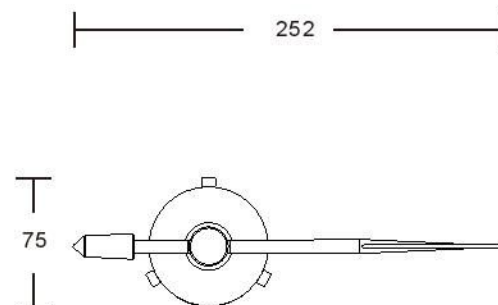
## Technical Specifications

Measuring range	0~360°(at wind speed 0.5~65 m/s)
Starting threshold	< 0.5m/s
Characteristic transfer function	Gray code output $A=0.2815 \times B$ (A = angle value, B = binary code); Analog output $A=0.072 \times U$ (A = angle value, U = analog voltage value [mv])
Accuracy	Better than $\pm 2^\circ$ (RS485) Better than $\pm 3^\circ$ (7-bit Gray code output) Better than $\pm 2^\circ$ (0-5V analog output)
Resolution	$\pm 0.35^\circ$ (RS485) $\pm 2.81^\circ$ (7-bit Gray code) $\pm 1.00^\circ$ (0-5V analog output)
Outer diameter of the mounting pole mast	50mm/52mm
Operating power	$U_{in}=5\sim 24VDC$ 20mA (typical value)
Heating power	12VDC 1A (nominal value)
Output level	High state $\approx U_{in}-0.4V$
	Low state <0.7 V
Operating temperature when heating	-50~55 °C (-58~131 °F)
Storage temperature	-60 ~70 °C (-76 ~158 °F)
Material	Housing: aluminum alloy
	Wind vane: black glass fiber nylon
Dimensions	296(H)x252(L)mm
Swept radius of wind vane	172mm
Weight	500g
Certificates	CE

### Dimensions(mm)



Front view



Top view