

Wind Direction Sensor RY-FZ02



1.1 Product Introduction

The wind direction sensor is small and light in appearance, easy to carry and assemble. The large weathercock design concept can effectively obtain external environmental information. The shell is made of ASA material, which has good anti-corrosion and anti-corrosion characteristics, which can ensure that the instrument is long-term use without rusting. Cooperate with the internal smooth bearing system to ensure the accuracy of information collection. It is widely used in wind direction measurement in greenhouses, environmental protection, weather stations, ships, docks, and breeding.

1.2 Features

- Range: 0~359.9°
 - Anti-electromagnetic interference treatment
 - Using high-performance imported bearings, low rotation resistance, accurate measurement
 - ASA shell, with high mechanical strength, high hardness, corrosion resistance, long-term discoloration, can be used outdoors for a long time
 - The structure and weight of the equipment are carefully designed and distributed, the moment of inertia is small, and the response is sensitive
 - Optional output mode 4-20MA, 0-5V, 0-10V, RS485 (ModBus-RTU communication protocol), easy to access
- Specification

1.3 Specifications

Model	RY-FZ02
Resolution	3°
Wind direction-measuring range	0~360°
Working voltag	12~24V DC
Accuracy	±3°
Protection level	IP65
Material	ASA shell
Colour	Black

Cable	3m(Cable length can be customized)
According for WMO NO:8 I,III (2018)	

Communication protocol

1、Communication specifications

9600,N,8,1

2、Write station number command

Command format device address function code start register address
 register number data length data CRC check
 00 10 0001 0001 02 00xx CRCloCRChi
 (XX=0X01-0XFF)

Response format device address function code start register address
 register number CRC check
 00 10 0001 0001 CRCloCRChi

Example: Command 00 10 00 01 00 01 02 00 33 EA 04

 Response 00 10 00 01 00 01 51 D8

3、Read station number command (fixed command)

command format: device address function code start register address
 register number CRC check
 00 03 0001 0001 CRCloCRChi

Response format device address function code data length data CRC
 check
 00 03 02 00xx CRCloCRChi (XX=01-ff)

Example: Command 00 03 00 01 00 01 D4 1B

 Response 00 03 02 00 FF C5 C4

4、Read data command

command format: device address function code start register address

register number CRC check

xx 03 0000 0001 CRCloCRChi

Response format device address function code data length data CRC
check

xx 03 02 xxyy CRCloCRChi

Example: Command FF 03 00 00 00 01 91 D4

Response FF 03 02 00 9E 10 38

Note: wind direction: 4th and 5th byte 00 9E=158/10=15.8°

Corresponding table of degree and wind direction



