QS-FS wind speed sensor

⊙Specification specifications

Small and lightweight, easy to carry and assemble, the three-cup design ensures can be effectively obtained

Get external environmental information. Specifications are as follows:

QS-FS wind speed sensor

Product Manual

⊙ material

Mainly using high-quality polymer carbon fiber as raw material, with good anti-corrosion and anti-corrosion

Erosion and other features can ensure that the instrument will not be rusted for a long time, and it will be smooth inside.

The bearing system ensures the accuracy of information collection.

⊙Scope of application

Can be widely used in greenhouses, environmental protection, weather stations, ships, terminals, breeding

The wind speed measurement of the environment.

⊙Features

◆ Small size, easy to carry and easy to install
◆ High measurement accuracy, wide measuring range and good stability
◆ Reasonable structure design and good appearance quality
◆ Data information has good linearity, long signal transmission distance and strong resistance to external interference.

⊙Fixed way

Flange mounting method, threaded flange connection makes the wind direction sensor lower pipe fittings

Fastened to the flange, the chassis is Φ65mm, open on the circumference of Φ50mm

Four mounting holes of Φ6mm are fastened to the bracket by bolts.

Keep the entire instrument at an optimal level and ensure the accuracy of the wind direction data.

The flange connection is easy to use and can withstand large pressures.

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⊙Technical parameters

· Accuracy: ±1m/s
· Start wind: 0.2-0.4 m/s

▲ Voltage output type
Range: 0~32. 4 m/s
Supply voltage: 7V~24 V DC
Output signal: 0.4~2V or 0~5 V, 1~5 V
Wind speed value = (output voltage -0.4) / 1.6 * 32.4

▲ current output type
Range: 0~32. 4 m/s
Supply voltage: 12V~24V DC
Output signal: 4~20 mA
Load capacity: ≤200Ω
Wind speed value = (output current -4) / 16 * 32.4

▲ Pulse output type
Range: 0~60 m/s
Output signal: pulse (0.88m/s per pulse)

▲ 485 type
Range: 0~32. 4 m/s
Supply voltage: 7V~24V DC
Communication protocol: Modbus-RTU

MOD **MODBUS** protocol **(** can be customized **)**

◆ Communication method: 485 communication, transmission distance < 1000 meters
◆ Communication rate: 9600, n, 8, 1
◆ Communication protocol: MODBUS-RTU protocol, the factory station number is station 2, as needed

Can be modified.

The commands of the ModBus protocol include:

Read the wind speed value (factory is station 2)

Example of reading the wind speed command format:

02 03 00 00 00 01 CRC (CRC double byte check)

Note: The first byte of the start 02 is the station number. If you have modified the station number setting,

The first 02 digit should be changed to the station number you set. The CRC is written after

The CRC of the bit is verified and written after recalculation.

An example of the command format for returning wind speed:

02 03 02 00 1F CRC (CRC double byte check)

Note: Bits 4 and 5 of 001F are the values of wind speed.

Wind speed data analysis method:

Wind speed (m/s)=0X001F/10=31/10=3.1

Modify your own station number

Method 1: Know the current station number and send the following command

02 10 10 00 00 01 02 00 03 CRC (double byte) Its function is to set the station number

There are 2 on the 3rd

Note: The italicized large characters are replaced with the original station number, and the normal body characters are replaced with the desired ones.

The target station number value can be sent, and the customer needs to calculate the value of the CRC by itself.

Method 2: Forget the station number of the original station, you need to connect the product to the computer alone, pay attention to

There can be no other 485 products on the bus, and it is operated by station 0. The instructions are as follows:

00 10 10 00 00 01 02 00 03 CRC (double byte)

Note: The large characters are the target station number values that you want to modify, and the customer calculates the CRC check.

value.

Method 3: You can use the setting of the station number of our company software. See software for details

⊙ line color definition

Voltage and current and pulse type wiring definition

name	External line		
Power red		Brown	
Ground blue		black	
signal yellow	or	blue	

485 type wiring definition

name	External line
power supply	brown
485-A	blue
485-B	gray
Ground wire	black

⊙ signal output diagram

⊙ Precautions for use

Graphical description

caveat

Failure to wire the wire may damage the device and the instrument connected to the device

If the input power exceeds the maximum access power of the device, it will cause damage to the device.

Pay attention to

Please read this manual thoroughly before use.

Connect the device line correctly

First confirm

*Check if the device is the same as the one you purchased

*Check if the appearance of the device is damaged

*Check if the equipment accessories are complete

常见 Common faults and solutions

1, the sensor output signal is abnormal

◆Check if the power supply voltage is stable
◆Check if the power supply range is normal
◆Check if the line is connected

2, the sensor has no signal output

◆Check whether the positive and negative poles of the power supply are connected correctly.
◆Check if the power supply voltage meets the requirements

⊙Maintenance and maintenance

This instrument is a scientific and technological product with excellent design and functional principle, should pay attention to maintenance

And maintenance. The following suggestions will help you use your maintenance service effectively.

* Avoid the instrument being scratched, maintain the integrity of the external protective film, increase the life of the instrument

Life

* When using the instrument, please fix the joints firmly to avoid damage to the instrument.

* Rough treatment of the instrument will destroy the internal circuit board and the delicate structure

*Do not apply paint to the instrument. The application will block the debris in the detachable parts.

Affect normal operation

* Clean the outside of the instrument with a clean, dry soft cloth

*Check the power of other configured devices regularly to ensure the instrument works normally.

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