# Integrated Wind Speed and Direction Sensor

**Product model: FST200-205**

Wind speed and wind direction integrated sensor is used to measure the wind speed and wind direction value, and convert it into an electrical signal, which can be directly transmitted to the recording device for processing. The sensor housing is made of aluminum alloy with high weather resistance, high strength, corrosion resistance and water resistance; the internal circuits are all protected, and the entire sensor has good adaptability to harsh environments. The cable connector has good anti-corrosion and anti-corrosion performance, which can ensure the long-term use of the instrument. At the same time, it cooperates with the imported bearing system to ensure the accuracy of wind speed and wind direction collection. Can be widely used in the field of construction machinery (crane, crawler crane, door crane, tower crane, etc.), railway, port, wharf, power plant, meteorology, ropeway, environment, greenhouse, aquaculture, air conditioning, energy saving monitoring, agriculture, medical, clean space Wind speed and wind direction measurement in other fields.

## ◆ Features

- ☑ Small size, easy to carry, simple installation, beautiful appearance;
- ☑ Has strong corrosion resistance and weather resistance;
- ☑ High measurement accuracy, wide range and good stability;
- ☑ Low power consumption, strong anti-interference ability, can work stably for a long time;
- ☑ The power supply has a wide adaptation range, good linearity of data information, and a long signal transmission distance.

## ◆ Scope of application

- ◇ Monitoring of high-altitude operations
- ◇ Meteorological station and environmental protection monitoring and control
- ◇ Monitoring and control of construction machinery operation process
- ◇ Port and terminal monitoring and control

## ◆ Technical parameter

| | |
|---|---|
| Voltage output type | 0-5VDC,0-10VDC |
| Current output type | 4-20mA |
| Digital | RS485 (Modbus RTU) |
| Power supply | DC12~30V, DC15~30V (0-10VDC output) |
| Range | Wind speed: 0-50m/s;Wind direction: 16 directions (0-360 degrees) |
| Accuracy | Wind speed: ± 0.5m/s (<5m/s); ± 3%fs (≥5m/s) |
| | Wind direction: 16 directions ±3 degrees resolution 22.5 ° |
| Maximum power consumption (DC24V) | Voltage MAX ≤ 300MW |
| | Current MAX ≤ 500MW |
| | RS485 MAX ≤ 300MW |
| Start the wind | ≥1 style |

## ◆ Dimensions
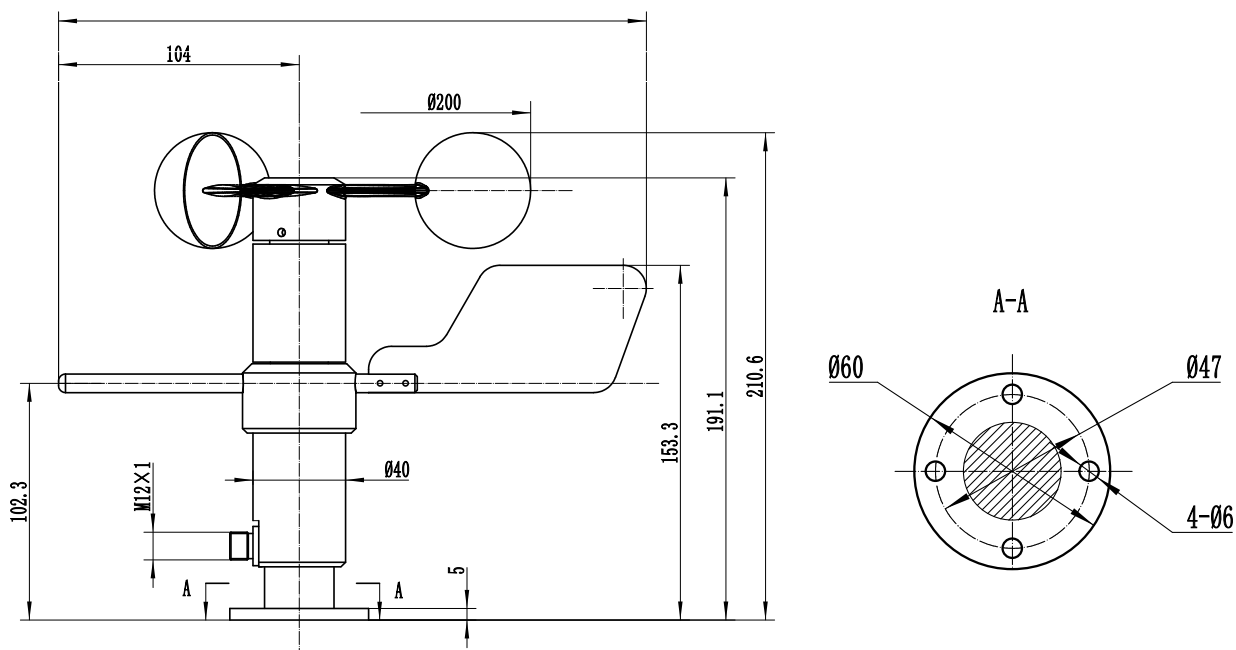


## ◆ A fixed way

Sensor installation instructions

1. Please install the sensor horizontally. The electrical connector should be aligned with the north during installation. The angle between the base and the horizontal plane should not exceed 5 to ensure that the sensor can accurately measure the wind speed and direction at low wind speeds;

2. The position and shape of the wind cup and windmill arm, wind direction rod and tail fin directly affect the accuracy of the sensor. Please do not grasp the wind cup, windmill arm, wind direction rod and tail fin during installation, so as not to damage the sensor structure and affect the measurement accuracy.

## ◆ Signal output definition

| M12 connector | Output signal | Preface | Wiring rules | |
|---|---|---|---|---|
|  | Current type | 1 | +Vcc | brown |
| | | 2 | +Iout1/+Vout1 | white (wind speed) |
| | | 3 | GND | blue |
| | | 4 | +Iout2/+Vout2 | black (wind direction) |
| | RS485 | 1 | +Vcc | brown |
| | | 2 | RS485A | White |
| | | 3 | GND | blue |
| | | 4 | RS485B | black |