CODA

CDF-13B Wind Speed Display Controller

For weather automation applications

The CDF-13B wind speed display controller gives a visual indication of real-time wind speed , with a LED digital display. In its housing shell, build in a microprocessor with the function of high performance, low power consumption. The wind speed early warn value and alarm value can be set by buttons on the panel. When alarming, the signal output can be controlled by relay. CDF-13B is the companion to our CDF-10B wind speed sensor.

Typical installation locations

- Top of building
- Walls
- Open areas
- Outdoor locations

Design structure

Wind cup: Usually made of high weather resistance, high strength, corrosion and water resistant metal materials, such as aluminum alloy. The shape and size of the wind cup have been carefully designed to ensure accurate rotation at different wind speeds.

Sensor housing: made of aluminum alloy or other metal materials to protect the internal mechanical structure and electronic components. The shell is usually waterproof, dust proof and corrosion resistant to adapt to a variety of harsh environmental conditions

Easy installation

Mount the sensor on the bracket to ensure that the sensor's wind cup can rotate freely without any hindrance. Use bolts or other fasteners to fix the sensor on the support, and be careful not to tighten or loosen it too much, so as not to affect the performance of the sensor.

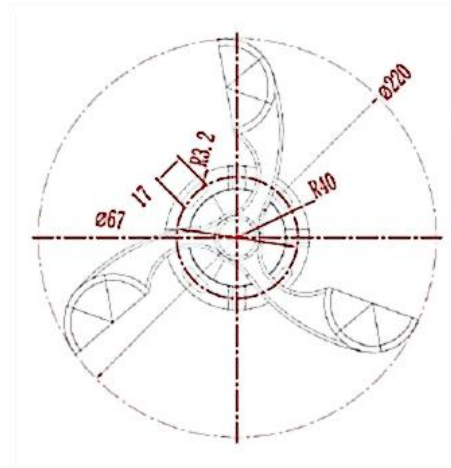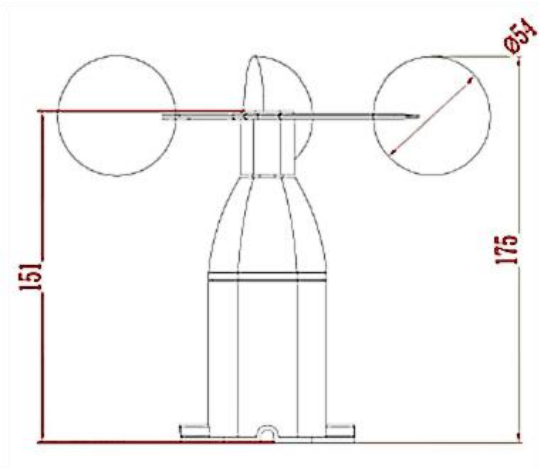If the wireless anemometer needs to transmit signals through a wired mode, connect the signal transmission line between the sensor and the receiver. Ensure that the lines are properly connected to avoid signal interference or transmission interruptions.

Reliable operation

The sensor's wind cup, rotating shaft, bearing and other mechanical components have been carefully designed and processed, with good accuracy and stability. The shape and size of the air cup ensure accurate rotation at different wind speeds, and the combination of the rotating shaft and bearing reduces friction and wear, increasing the service life of the sensor.

Dimensions & installing

CDF-13B connector dimension

Output characterist

Relay

Set the maximum alarm wind speed

Two relay outputs, default is normally on

Wireless

Optional LORA 433Mhz wireless output

Technical data

Measurement performance, models CDF-13B

Items	Specification	
Range	0-60m/s	0-216km/h
Resolution(display)	0.1m/s	0.1km/h(<100km/h) 1km/h(≥100km/h)
Accuracy(sensor)	±1m/s	
Alarm response time	<100mS	
Type of alarm	Sound and light alarm	
Contact capacity	5A@30VDC	
Early warning	Any value within 0 m/s ~39 m/s, the early warning value must be lower than the alarm value	Any value within 0km/h ~99km/h, the early warning value must be lower than the alarm value
Alarm	Any value within 1 m/s~40 m/s	Any value within 1km/h ~144km/h
Operating Temperature	-30℃-+70℃	
Power supply	AC100-240V/DC12V/DC24V	
Power consumption	With wire:<3W(sensor & controller) Wireless:sensor: 0.25W,controller: 2.5W	
Ingress Protection	Controller:IP54,wind speed sensor:IP65	
Weight(unpacked)	Controller:315g,wind speed sensor:240g	
Main material	Controller:ABS,wind speed sensor:Aluminum alloy & 304SS	
Storage Condition	10℃-50℃@20%-90%RH	

Model number	Type	Output	Special features
CDF-10A	Wind speed	Pulses(PNP) RS485 4-20MA 0-5V	Three cup plastic wind speed
CDF-11A	Wind direction	RS485 4-20MA 0-5V	Plastic wind direction sensor
CDF-12A	Pipe wind speed	RS485 4-20MA 0-5V 0-10V	Duct type wind speed sensor
CDF-13B	Wind speed display controller	LED display	Wireless output relay output
CDF-15A	Digital Anemometer	LCD display	Hand-held anemometer
CDF-20B	Combined Wind Speed & Direction	RS485 4-20MA 0-5V 0-10V	Integrated wind speed and direction
CDF-21A	Ultrasonic Wind Speed & Direction	RS232/RS485(Modbus/NMEA-0183), Voltage(0-5V),Current(4-20mA) optional	Ultrasonic principle
CDF-22A	Mini Ultrasonic Wind Speed & Direction	4-20mA,RS232/RS485(Modbus or NMEA-183), SDI-12	Ultrasonic principle
CDF-26B	Recorder station for wind	LCD display & 4G WIFI Ethernet	Wind speed & direction recorder
CDQ-T6A	Miniature Ultrasonic Automatic Weather	RS485	Wind speed & direction temp & humidity &pressure
CDW-33A	Atmospheric Temperature,Humidity & Pressure	RS485	Shelter installation
CDY-12A	Economical Tipping Bucket Rainfall	Pulses(@10kΩ&0.01uF),RS485	Diameter :φ200mm, height: 271mm
CDG-10B	Solar Radiation	0-5V,4-20mA,RS485	Spectral range:300～1100nm

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