



CDF-22C Mini Ultrasonic Wind Speed & Direction Sensor

For weather automation applications



Features

- Adapt to complex weather conditions
- No moving parts, long service life
- The surface preservative treatment
- Strong anti-interference
- High accuracy
- Automatic heating anti-frozen
- Ultrasonic anemometers usually use high-frequency ultrasound for measurement and can complete multiple measurements in a short period of time

CDF-22C The wind speed and direction meter are a kind of measuring instrument which uses the time difference of ultrasonic wave in the air to measure the wind speed and direction. CDF-22C uses low-power chip with power consumption of only 0.3W, which is especially suitable for solar or battery powered environment with high power consumption requirements. Due to the adoption of new technology and new process, the structure is more compact and compact. Optional temperature and air pressure module.

Typical installation locations

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

Design structure

It mainly calculates the wind speed by measuring the time difference between the propagation of ultrasonic waves in the air. The sensor generally has two pairs of ultrasonic probes, which are mounted opposite each other. One of the pair of probes transmits ultrasonic waves and the other receives them.

Easy installation

The ultrasonic anemometer is installed on the bracket and fixed by bolts or other fasteners. During installation, attention should be paid to the direction of the anemometer to ensure that the ultrasonic probe can work normally. After installation, the ultrasonic anemometer is adjusted and calibrated. By comparing the measurement results of the standard anemometer, the anemometer can be calibrated to ensure the measurement accuracy.

Reliable operation

Strong anti-interference ability: ultrasonic anemometer is not affected by electromagnetic interference, vibration and other factors, and has strong anti-interference ability. In complex environments, such as industrial sites, field, etc., it can also work stably and reliably.

Technical data

Measurement performance, models C D F - 22 C

Item	Technical Specification
Power Supply	5-30VDC
Power consumption	0.3W
Output Signal	RS232/RS485(Modbus or NMEA-183), SDI-12
Operating Temperature	-20℃~+60℃
Ingress Protection	IP65
Dimension	Φ110*140mm
Weight(unpacked)	0.18kg
Main material	ABS

Technical Specification			
Item	Range	Resolution	Accuracy
Wind speed	0-70m/s	0.1m/s	±5%
Wind direction	0-360°	1°	±3°
Starting Threshold	0.1m/s	0.1m/s	
Extreme Wind Speed		70m/s	

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-13B	Wind speed display controller		LED display	Wireless output relay output
CDF-15A	Digital Anemometer		LCD display	Hand-held anemometer
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



Published by CODA | © CODA 2024

www.codasensor.com

All rights reserved. Any logos and/or product names are trademarks of CODA or its individual partners. Any reproduction, transfer, distribution or storage of information contained in this document is prohibited. All specifications — technical included — are subject to change without notice.

Hunan Coda Electronic Tech Co.,Ltd

T: +86-0731-85117089

W: www.codasensor.com

E: Molly@codasensor.com