

## CDW-12A CO2 Sensor

### For weather automation applications



#### **Features**

- High Sensitivity
- Low temperature Drift
- LED display optional
- Light construction
- Internal auto compensation
- Temperature compensation
- React quickly to pressure changes and output corresponding signals
- It can resist external interference and ensure the accuracy of measurement

CDW-12A CO2 transmitter is using NDIR principle to detect the CO2 concentration in the air, designed with advanced infrared absorption gas detection technology, a precise optical path and an excellent circuit. A temperature sensor built-in realizes temperature compensation to ensure the accuracy of measurement. It is without oxygen dependence, of long service life.

#### **Typical installation locations**

- · Environmental monitoring
- · Livestock farm
- Greenhouse
- · Agriculture

#### **Design structure**

Contains high-precision and high-stability amplifier integrated circuit for amplifying and processing the weak signal output of induction components, and has temperature compensation and other functions to improve measurement accuracy and stability.

#### **Easy installation**

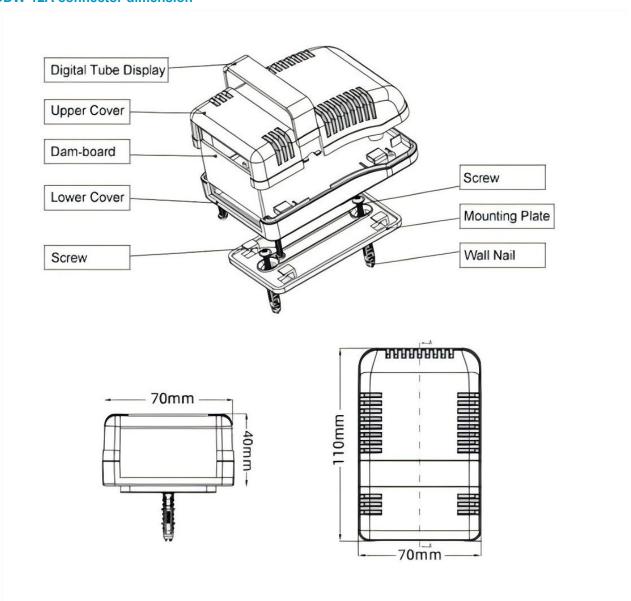
There should be sufficient space around the installation location to install and remove the sensor. Avoid choosing a narrow and crowded space to prevent difficulties caused by insufficient operation space during maintenance. It should be mounted as horizontally as possible to ensure that the sensor can accurately measure atmospheric pressure. If the installation is tilted, it may cause measurement errors.

#### Reliable operation

Carefully designed and manufactured, it has a low failure rate and can work stably in a certain temperature, humidity and pressure range.

# Dimensions & installing

#### **CDW-12A connector dimension**



#### **Mounting**

1.Install the product in stable environment area, avoid direct sunlight, away from windows air-conditioning, heating and other equipment. Otherwise it will cause atmospheric pressure measurement inaccuracies.

2. It is recommended to install in the cabinet open to the atmosphere, for example: instrument shelter

## Technical data

# Measurement performance, models CDW-12A

Itom	-12A	Technical Specif	fication
tem Range(concentration)		0-2000ppm,0-5000ppm	
Accuracy		±50ppm+2%rdg @25℃	
Supply		5VDC,12-24V	/DC
Output		4-20mA,0-5V,RS485	
Power Consumption		<0.25W	
Warm Up Time		3min	
Response Time		<20s	
Temperature Drift		≤0.2%FS/°C	
Stability		<±40ppm/year	
Repeatability		<±1%FS	
Operating Temperature		-20℃-+60℃@15-80%RH	
Storage		-20 C-+60 C@15-60%RH -40-70℃@20%-90%RH	
Shell Material		ABS	
Offeli Material		ADO	
Model number	Туре	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
CDG-10B	Solar radiation	0-5V,4-20mA,RS485	Spectral range:300~1100nm
CDG-14A	Illuminance sensor	0-5V 0-10V 4-20mA RS485	Spectral range:380~780nm
CDY-12A	Economical Tipping Bucket Rainfall	Pulses(@10kΩ&0.01uF),RS485	Diameter :φ200mm, height: 271mm
CDW-10A	Wall-mounted Barometric Pressure	RS485,4-20mA,0-5V, 0-10V	Barometric range 600-1100hPa(mbar)
CDW-12A	CO2 sensor	4-20mA,0-5V,RS485	Range 0-2000ppm ,0-5000ppm,0-10000ppm
CDW-13B	Noise sensor	RS485	Range 30-130dB
CDW-14A	Paste Type Temperature	PT100 PT1000 RS485	Range -50-+100℃, -20-+50℃
CDW-21A	Dust sensor	RS485 4-20mA,0-5V,0-10V	PM1.0,PM2.5,PM10
CDW-22A	Leaf Wetness	4-20mA,0-5V,0-2V,RS485	Wetness: 0-100% Temperature: -40-+80°C
CDW-33A	Atmospheric Temperature, Humidity & Pressure	RS485	Shelter installation
CDW-15A	O2 Concentration	4-20mA,0-5V,0-10V,RS485	Range 0-30%
CDW-16A	SO2 Concentration	4-20mA,0-5V,0-10V,RS485	Range 0-20PPM 0-2000PPM
CDW-17A	NH3 Concentration	4-20mA,0-5V,0-10V,RS485	Range 0-100PPM 0-1000PPM 0-5000PPM
			D 0.400DDM 0.4000DDM
CDW-18A	H2S Concentration	4-20mA,0-5V,0-10V,RS485	Range 0-100PPM 0-1000PPM
CDW-18A	H2S Concentration  CO Concentration	4-20mA,0-5V,0-10V,RS485 4-20mA,0-5V,0-10V,RS485	Range 0-1000PPM 0-2000PPM



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