



CDW-33A Atmospheric Temperature & Humidity & Pressure

For weather automation applications



Features

- High Sensitivity
- Fast response time
- Long service life
- Low consumption
- Good stability of output
- High temperature and high humidity environment for long-term use
- Can integrated temperature humidity air pressure at the same time

CDW-33A Atmospheric Temperature, Humidity & Pressure Sensor is a professional measurement of air temperature, relative humidity & barometric pressure. Sensors are built-in the water-proof and anti-UV shelter. It is widely used in agriculture, forestry, meteorology as well as a climate chamber, warehousing and other places. This model also can be equipped with 12 plates radiation shield (CDP-10A) to protect the sensors from solar radiation and rain

Typical installation locations

- Environmental monitoring
- Livestock farm
- Greenhouse
- Agriculture

Design structure

The design of the product uses a pen appearance structure, beautiful appearance, small, mainly used in indoor computer rooms, environmental control and outdoor weather monitoring fields, high integration, convenient application. Its main technical indicators include: the measurement range is -40 °C to 60°C (temperature), 0 to 100RH (relative humidity), 10 to 110kPa (atmospheric pressure); Cable length 2.5meters; Working environment temperature is -40 °C to 80°C; The protection grade is IP65;

Easy installation

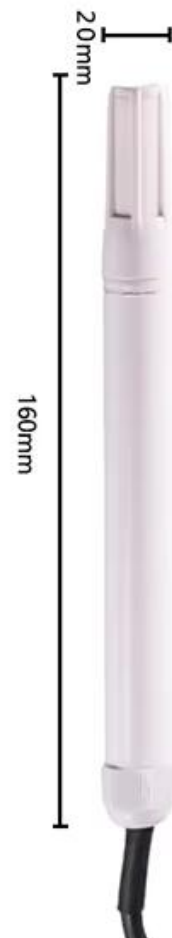
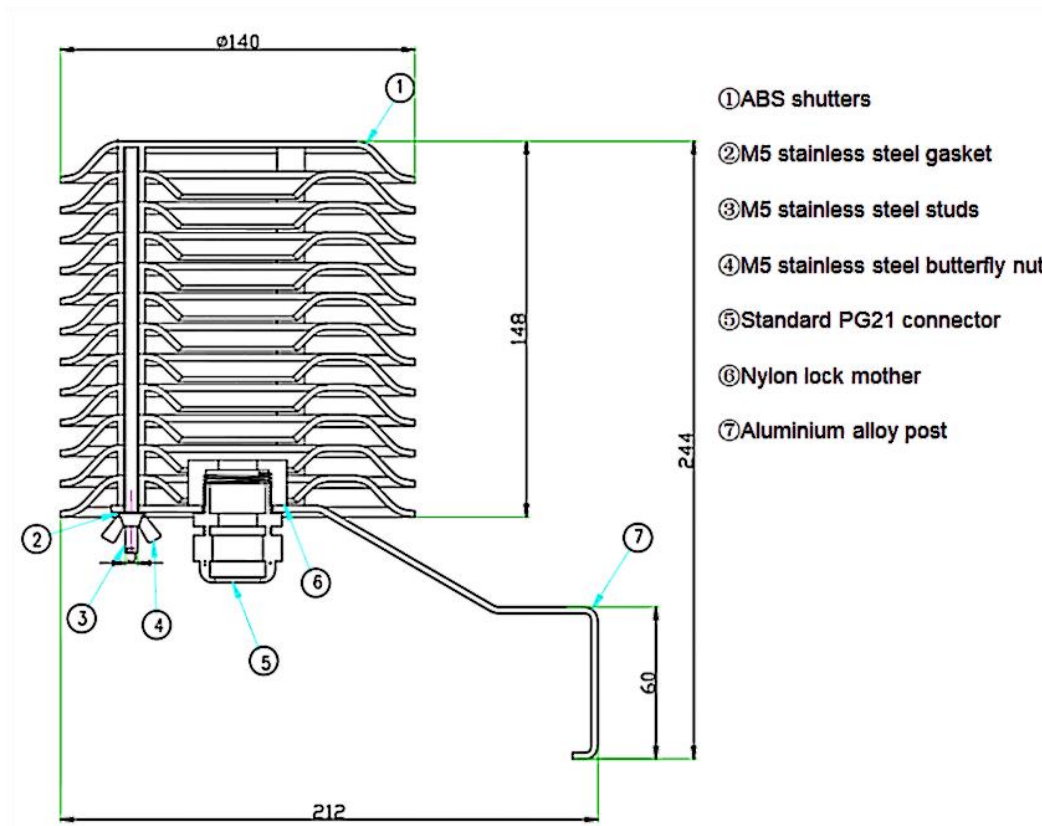
Avoid interference sources: Keep away from heat sources, cold sources, tuyere, direct sunlight, and other places that may affect the measurement accuracy. For example, do not install it near heating units, air conditioning outlets, Windows, or walls in direct sunlight. Select the appropriate installation height according to the specific application requirements. In general, for indoor environmental monitoring, the installation height can be between 1.5 meters and 2 meters from the ground, in order to better reflect the temperature, humidity and air pressure of the human activity area.

Reliable operation

The temperature, humidity and pressure sensor should be able to maintain stable performance under different temperature environments. For example, in high temperature environments, the measurement accuracy of the sensor should not be significantly affected; In low temperature environment, the sensor should also be able to work normally.

Dimensions & installing

CDW-33A 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 measurement inaccuracies.
2. Fixing rail is optional.
3. If you use indoor, recommends clamp to install, as shown on the right picture.

Technical data

Measurement performance, models CDW - 33 A

Item	Technical Specification		
	Temperature	Humidity	Pressure
Range	-40-60°C	0-100%RH	10-110kPa(100-1100hPa)
Resolution	0.1°C	0.5%RH	0.1hPa
Accuracy	±0.5°C	±3%RH	±1hPa
Supply	5VDC, 12-24VDC		
Output Signal	4-20mA,0-5V,0-10V,RS485(MODBUS),IICⓄ		
Current Consumption	<20mA		
Operating Temperature	-40°C~+80°C		
Ingress Protection	IP65		
Storage	10-60°C@20%-90%RH		
Weight(unpacked)	120g		
Probe material	ABS		
Radiation Shield(optional)	CDP-10A,12 plates		

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
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°C, -20~+50°C
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
CDW-18A	H2S Concentration	4-20mA,0-5V,0-10V,RS485	Range 0-100PPM 0-1000PPM
CDW-19A	CO Concentration	4-20mA,0-5V,0-10V,RS485	Range 0-1000PPM 0-2000PPM
CDW-1T0	Visibility sensor	RS485	Range 0-10Km/0-20Km/0-30Km
CDW-1TX	Multi-in-one gas Sensor	RS485	Multi-parameter integration

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