



CDT-15A Suspended Matter Sensor

For weather automation applications



Features

- On-line & real-time monitoring
- Integral temperature element for enhanced accuracy
- Double junction and long diffusion path for reference pollution resistance
- No external module, a whole design
- Multiple output signal is optional
- Measurement of scattered and attenuated radiation.

CDT-15A The principle of suspended matter sensor technology is based on electrochemical reactions. When there is a suspended substance in the water, it will adsorb on the electrode surface to form a film, change the electrochemical state of the electrode surface, and thus affect the electrode potential. It can be used to detect algae, bacteria, zooplankton and other microorganisms in water, as well as to detect the pH value, temperature, dissolved oxygen and other indicators of water quality. In addition, it can also be used for wastewater monitoring in drinking water plants and industrial wastewater treatment plants. In the food processing industry, it can be used to control bacterial contamination and ensure beverage quality.

Typical installation locations

- Environmental protection
- Agriculture
- Water conservancy
- Industrial wastewater treatment

Design structure

Principle: When a beam of light passes through a water sample containing suspended matter, the suspended matter will absorb and scatter the light, making the intensity of the transmitted light weakened. By measuring the intensity change of the transmitted light, the concentration of suspended matter in the water can be calculated.

Easy installation

The sensor is installed in a position where the water flow is relatively rapid and the temperature changes are minimal to ensure the accuracy of the measurement data. For example, when installing in the pipeline, you can choose a straight pipe section and away from the elbow, valve and other parts; When installing in a pool or sink, avoid installing in a corner or dead water corner. At the same time, consideration should be given to facilitate future maintenance and calibration operations.

Avoid direct sunlight and dusty environments, and there can be no strong vibration and electromagnetic interference around, in order to prevent affecting the performance and measurement accuracy of the sensor.

Reliable operation

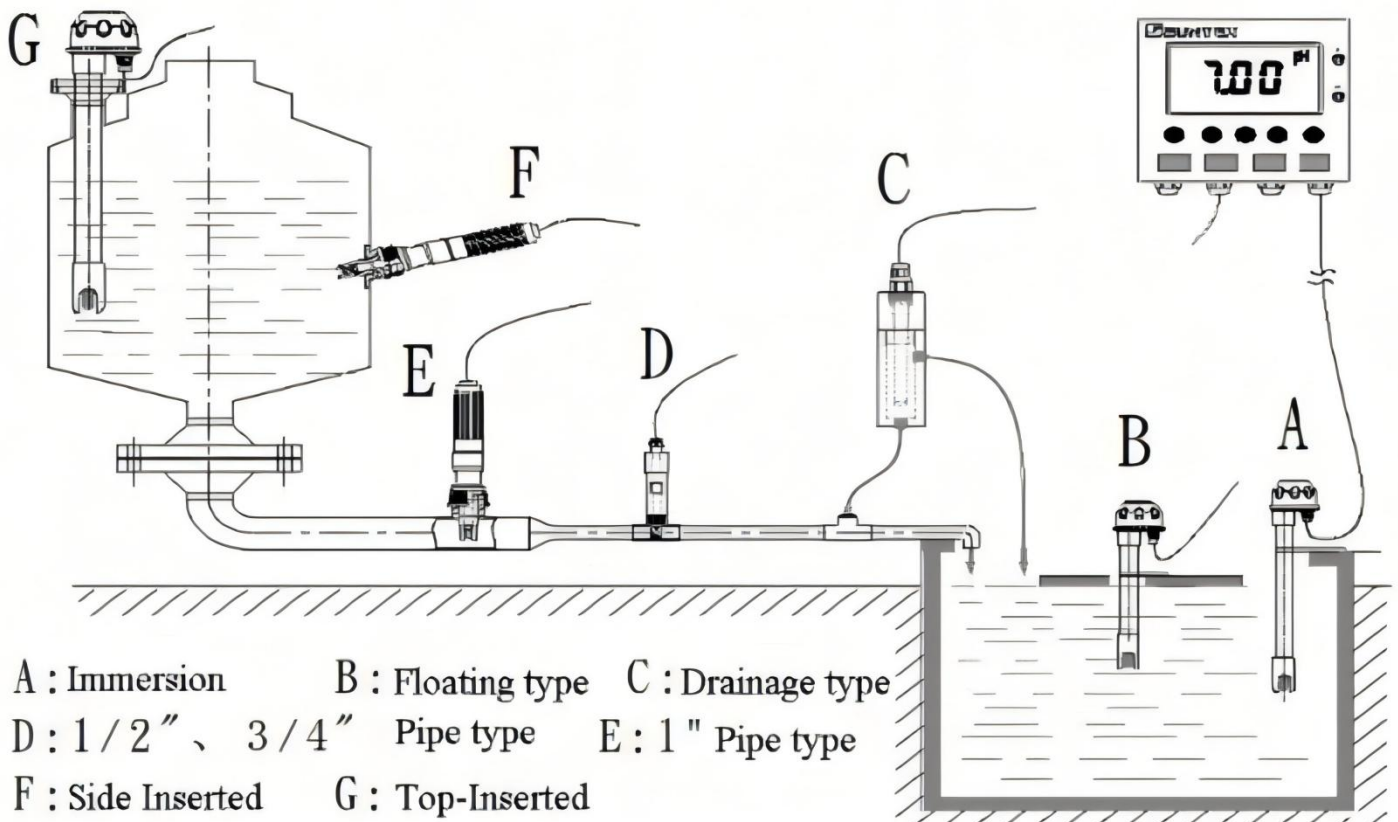
The correct installation position and method are critical to the reliability of the sensor. Choose a location that accurately reflects the Suspended Matter value of the solution to be tested for installation, and avoid installation in places where there are bubbles, sediments or other disturbing factors. At the same time, when installing, ensure that the contact between the sensor and the tested solution is good to avoid leakage or loosening.

Dimensions

CDT-15A connector dimension



Installing



Technical data

Measurement performance, models CDT - 15 A

Item	Technical Specification
Range	0-200mg/L,0-1000mg/L,0-5000mg/L
Accuracy	±5%FS
Resolution	0.1mg/L,0.1℃
Supply	12-24VDC
Output	RS485
Pressure resistance	<0.6MPa
Power consumption	<0.2W
Operating temperature	0-+50℃
Waterproofing grade	IP68
Size	30*166mm
Temperature compensation	Automatic temperature compensation

Model number	Type	Output	Special features
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
CDT-11A	PH sensor	0-2V 0-5V 4-20mA RS485	Probe: Φ28*160mm
CDT-12A	DO sensor	RS485 4-20mA	Range 0-20mg/L(ppm)
CDT-12B	DO sensor(calibrable)	RS485 4-20mA	Range 0-20mg/L(ppm)
CDT-14A	ORP sensor	RS485 4-20mA	Range -1500mV-+1500mV
CDT-15A	Suspended Matter	RS485	Range 0-200mg/L,0-1000mg/L,0-5000mg/L
CDT-17B	Soil PH sensor	RS485 4-20mA	Probe material:304SS
CDT-19B	Turbidity (SS) sensor	RS485 4-20mA	Wavelength of falling radiation: 860nm
CDT-21B	Soil EC_salinity	RS485 4-20mA	Probe material:316L
CDT-22B	Soil Moisture & Temperature	4-20mA ,0-5V,0-2V,RS485 optional	Probe material:316L
CDT-30B	Soil Moisture,Temperature & EC	RS485,0-2V	316L stainless steel
CDT-70B	Soil 7 in 1 Sensor	RS485	Soil Moisture,Temperature & EC & PH & NPK
CDT-1T2B	Seismic Detection Wave	0-20mV RS485	Natural Frequency(Hz):10±2.5%
CDT-1T3B	Soil layers temperature&moisture	RS485	Range 0-100℃ 0-70%
CDT-1T4B	TDS Sensor	RS485 4-20mA	Range 0-2000ppm
CDT-1T5B	Dissolved CO2 Sensor	RS485	Range 0-2000ppm
CDT-1T6B	Residual Chlorine	RS485	Range 2mg/L,8mg/L,20mg/L
CDT-N0C	Multi-parameter water quality Sensor	RS485	Multi-parameter integration

Published by CODA | © CODA 2024



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