



### Applications & Features

- CDTH series carbon dioxide ( CO<sub>2</sub> ) / temperature / humidity transmitters are designed for monitoring & controlling indoor air quality, temperature and humidity in one unit
- CDTHW is suitable for wall mount and CDTHD is suitable for duct mount
- High performance NDIR digital sensor and circuit, ensure precise measurement and temperature compensation
- Multiple optional RTD or thermistor sensors, compatible with a variety of control systems
- Stable, reliable and fast response
- 15 years of CO<sub>2</sub> sensor life without maintenance
- All electrical terminals are on the inside bottom, avoid any possible destroy to PCB when wiring
- Digital technology applied, multiple outputs optional, over voltage and reverse polarity protection, high reliability and anti-interference capability
- Light and state of art housing, easy installation
- Large LCD with unit indicator( CDTHW ), display carbon dioxide ( CO<sub>2</sub> ), temperature and humidity alternatively

### Specifications

#### Carbon dioxide (CO<sub>2</sub>)

**Sensor:** NDIR sensor, with ABC algorithm (Automatic Baseline Correction)  
**Sampling Method:** diffusion  
**Accuracy:** see models  
**Response time:** <10s (30cc/min, low airflow)  
**Drift:** <±10ppm/year

**Range:** 0~2000ppm( measure range 400~2000ppm)  
**Output:** 4~20mA, 0~10V, RS485/Modbus

#### Temperature

**Sensor:** Digital, RTD or thermistor, see models  
**Range:** 0~50°C  
**Accuracy:** typical ±0.5°C@15-30°C, see models  
**Output:** 4~20mA, 0~10V, RS485/Modbus or RTD/thermister

#### Relative Humidity

**Sensor:** Digital polymer  
**Range:** 0~100%RH  
**Accuracy:** 3%RH (25°C, 20~80%RH)  
**Hysteresis:** <±1%RH  
**Response time:** <10s (25°C, in slow air)  
**Drift:** <±0.5%RH/year  
**Output:** 4~20mA, 0~10V, RS485/Modbus

**Power supply:** 15~28VAC/15-36VDC

**Load resistance:** ≤500Ω (Current output), ≥2kΩ (Voltage output)

**Display:** Optional LCD Display (CDTHW)

**Display resolution:** 1ppm, 0.1°C, 0.1%RH

**Working environment:** 0~50°C, 0~95%RH(Non-cond.)

**Storage temperature:** -20~80°C

**Housing material:** fireproof ABS

**Protection:** IP30 (CDTHW), IP65 (CDTHD)

**Approval:** CE

### Models

Model	CDTHW				Wall mount CO <sub>2</sub> / Temp. Transmitter Duct mount CO <sub>2</sub> / Temp. Transmitter
<b>CO<sub>2</sub> Accuracy</b>		0			50 ppm + 5% reading 50 ppm + 3% reading
<b>CO<sub>2</sub> / Humidity Output</b>			1	B	4~20mA / 0~10VDC 4~20mA / 0~10VDC , RS485/Modbus
<b>Temperature Output</b>			1		4~20mA / 0~10VDC
			3		PT1000
			4		PT100
			5		NTC20K
			6		Ni1000
			7		NTC10K-II
			9		NTC10K-III
			A		NTC10K-A
			B		4~20mA / 0~10VDC , RS485/Modbus
<b>Display ( CDTHW )</b>				0	N/A
				1	LCD