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Carbon Dioxide Transmitter NEW

With Temperature and RH% Transmitting

Tongdy Control Technology Co., Ltd
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- Real time carbon dioxide detection and transmitting
- High accuracy Temperature and humidity detection
- Provide 3xanalog linear outputs for measurements
- With or without LCD selectable
- 3-color backlit LCD for indication and alarm
- Modbus RS485 interface
- CE-approval

Features

- Design for real time measuring ambiance carbon dioxide level and temperature +RH%
- NDIR infrared CO_2 sensor inside with special Self Calibration. It makes CO2 measurement more accurate and more reliable.
- More than 10 years lifetime of CO_2 sensor
- High accuracy temperature and humidity measurement
- Combined both humidity and temperature sensors seamlessly with the digital auto compensation
- Basis type without LCD and standard type with LCD selectable
- 3-color backlit LCD provides indication and alarm function
- Wall mounting type with multi-dimensions for easy installation.
- Provide Modbus RS485 communication interface
- 24VAC/VDC power supply. A DC socket optional to be connected a power adaptor
- EU standard and CE-approval

Application

- Building ventilation systems
- Industry ventilation systems
- Airport, train station, shopping mall, office, classroom and other public places for air quality measurement and indication
- Lab., warehouse, and other places to detect CO2+Temp. +RH%

Specifications

Carbon Dioxide	
Sensing element	Non-Dispersive Infrared Detector (NDIR)
CO_2 measuring range	0~2000ppm/ 0～5,000ppm/0~ 20000ppm optional
CO2 Accuracy@25℃	±30ppm + 3% of reading
Stability	<2% of FS over life of sensor (15 yr typical)

Calibration	ABC Logic Self Calibration Algorithm	
Response Time	<2 minutes for 90% step change	
Signal update	Every 2 seconds	
	Temperature	**Humidity**
Measuring range	-20℃~60℃ (default) 0℃~60℃ selectable	0-100%RH
Accuracy	±0.4℃	<3%RH (20%-80%RH)
Display resolution	0.1℃	0.1%RH
Stability	±0.1℃	±1%RH per year
Storage environment	10℃-50℃, 10%RH~80%RH	
General Data		
Warm up time	24 hours (first time) / 5 minutes (operation)	
Power supply	24VAC/VDC	
Consumption	1.8 W max. ; 1.2 W avg.	
Analog outputs	3 X analog outputs 0~10VAC or 4~20mA selectable in the order or by jumpers	
LCD	3-color backlit LCD display CO_2, Temperature and humidity Green: CO_2≤1000ppm Yellow: 1000ppm< CO_2 ≤1400ppm Red: CO_2>1400ppm	
RS485 interface (optional)	RS-485 with Modbus protocol, 19200bps rate, 15KV antistatic protection, independent base address.	
Operation conditions	0~50℃(32~122℉); 0~95%RH, non condensing	
Storage conditions	-40~70℃(-40~158℉)	
Net Weight	240g	
Dimensions	130mm(H)×85mm(W)×36.5mm(D)	
Installation	wall mounting with 65mm×65mm or 2”×4”wire box	
Housing and IP class	PC/ABS fireproof plastic material, protection class: IP30	
Standard	CE-Approval	

■ Models Guide

G01-CO2-B X_1X_2C -Y01 – U 02/05/20

X_1X_2: housing type

10- basis type without LCD, 24VAC/VDC power supply

11-basis type without LCD, 24VAC/VDC power supply with a DC socket

30-standard type with LCD, 24VAC/VDC power supply

31- standard type with LCD, 24VAC/VDC power supply with a DC socket

C: 24VAC/VDC power supply

Y: analog output quantity

3-3Xanalog outputs

1-1xanalog output

0-no analog output

U: the way of analog ouputs

A- 4~20mA output

V- 0~10VDC(default)/2~10VDC/0~5VDC/1~5VDC output

02/05/20: CO2 range

02- 0~2000ppm

05- 0~5000ppm

20-0~20000ppm

Accessory:

P/N	Name	Description
870	Power adaptor	Input:100~240VAC, Output: DC 24V/ 240mA
921	Bracket	As a wall plate which the CO2 transmitter can be mounted on.

■ Mounting and Dimensions