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Carbon Dioxide Transmitter <u>NEW</u>

With Temperature and RH% Transmitting



Tongdy Control Technology Co., Ltd www.tongdy.com

- 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 CO₂ sensor inside with special Self Calibration. It makes CO2 measurement more accurate and more reliable.
- More than 10 years lifetime of CO₂ sensor
- High accuracy temperature and humidity measurement
- Combined both humidity and temperature sensors seamlessly with the digital auto compensation
- 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%

- 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



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°C	±30ppm + 3% of reading
Stability	<2% of FS over life of sensor (15 yr typical)

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Calibration		ABC Logic Self Cali	bration Algorithm	
Response Time		<2 minutes for 90% step change		
Signal update		Every 2 seconds		
	Ter	nperature	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°F); 0~95%RH, non condensing		
Storage conditions		-40~70℃(-40~158°F)		
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		
U	Standard			

Models Guide

G01-CO2-B <u>X₁X₂C -Y</u>01 – <u>U 02/05/20</u>

X₁X₂: 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
- $\pmb{\mathsf{C:}} \ \texttt{24VAC/VDC} \ \texttt{power supply}$

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

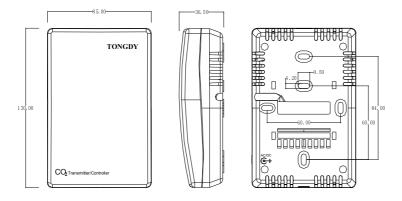
02/05/20: CO2 range

- 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



24Vac∕dc ↓	GND ↓	AN1	AN2	AN3	B A RS-485	
1	2	3	4	5	6 7	1



