



TSM-CO2-S series TSM-CO2-L series

CARBON DIOXIDE DETECTOR

Model: F2000TSM-CO2 Series

CE Approval

Features

- ◆ Real-time detecting CO2 level.
- ◆ NDIR infrared CO2 module inside with Self-Calibration Algorithm and more than 10 years lifetime
- ◆ Wall-mounting
- ◆ One analog output with voltage or current selectable
- ◆ Special "L" series with 6 lights indicates six CO₂ ranges and makes CO₂ level show clearly.
- ◆ Design for HVAC, ventilation systems, offices, schools or other public places.
- ◆ Modbus RS485 communication interface optional: 15KV antistatic protection, independent address setting
- ◆ CE-Approval
- ◆ For more other products such as duct probe CO2 transmitter, CO2+ Temp.+ RH 3 in 1 transmitter and CO2+VOC monitors, please see our website www.IAQtongdy.com

Specifications

Gas detected	Carbon Dioxide (CO ₂)
Sensing element	Non-Dispersive Infrared Detector (NDIR)
Accuracy@25°C(77°F),2000ppm	±40ppm + 3% of reading
Stability	<2% of FS over life of sensor (15 yr typical)
Calibration interval	ABC Logic Self Calibration System
Response time	<2 minutes for 90% step change
Warm up time	2 hours (first time) 2 minutes (operation)
CO ₂ measuring range	0~2,000ppm OR 0~5,000ppm
Sensor life	> 10 years
Power supply	24VAC/24VDC ±20%
Consumption	1.5 W max. ; 0.8 W avg.
Analog outputs	0~10VDC(default) or 4~20mA selectable by jumpers

Relay output	1X2A switch load Four set points selectable by jumpers
6 LED lights (just for TSM-CO2-L series) From left to right: Green/Green/Yellow/Yellow/Red/ Red	1 st green light on as CO2 measurement ≤ 600 ppm 1 st and 2 nd green lights on as CO2 measurement > 600 ppm and ≤ 800 ppm 1 st yellow light on as CO2 measurement > 800 ppm and $\leq 1,200$ ppm 1 st and 2 nd yellow lights on as CO2 measurement $> 1,200$ ppm and $\leq 1,400$ ppm 1 st red light on as CO2 measurement $> 1,400$ ppm and $\leq 1,600$ ppm 1 st and 2 nd red lights on as CO2 measurement $> 1,600$ ppm
RS485 interface	Modbus RTU 9600/14400/19200(default), 15KV antistatic protection.
Operation conditions	0~50°C (32~122°F); 0~95%RH, non condensing
Storage conditions	0~50°C (32~122°F)
Net weight	180g
Dimensions	100mm×80mm×28mm
Installation standard	65mm×65mm or 2"×4" wire box
Approval	CE-Approval

Models Guide

Name	Model	Description
CO2 Transmitter	F2000TSM-CO2-S100-V/A-02	1Xanalog output, CO2 range: 0~2,000ppm
	F2000TSM-CO2-S100-V/A-05	1Xanalog output, CO2 range: 0~5,000ppm
	F2000TSM-CO2-S101-V/A-02	1Xanalog output, RS485 interface (Modbus RTU).
	F2000TSM-CO2-S101-V/A-05	1Xanalog output, RS485 (Modbus RTU)
	F2000TSM-CO2-L101-N-02/05	6 lights indicate CO2 measurements range, Modbus interface
	F2000TSM-CO2-L100-V/A-02/05	6 lights indicate CO2 measurements range, 1x analog output
	F2000TSM-CO2-L101-V/A-02/05	6 lights indicate CO2 measurements range, 1x analog output, Modbus RS485 interface

Accessories	Power adaptor-E	Plug-in power adapter, Input: 100~240VAC ; Output: DC 24V/ 240mA. European plug
	Power adaptor- A	Plug-in power adapter, Input: 100~240VAC; Output: DC 24V 240mA. American plug

Wiring Diagram



