F2000TSM-CO DATASHEET

Carbon Monoxide Detector And Transmitter

- Real time detect and transmit ambiance carbon monoxide level
- Up to more than five years lifetime
- 1x analog output selectable for measurement carbon monoxide in linear
- Modbus RS485 interface
- The highest performance with the lowest price

F2000TSM-CO series is specifically designed to detect and transmit carbon monoxide level in the enclosed or semi-enclosed car parks and to regulate the environment according to the measurement of carbon monoxide. It is designed for easy installation and minimum maintenance during operation. RS-485 communication interface is available as an option with independent address, thus it can be connected with a PC or DDC/PLC.

□ Features

- Wall mounting, real time detect CO level with measuring range of 0~100ppm/ 0~200pm/ 0~500ppm.
- Electrochemical sensor which offer several advantages over traditional electrochemical sensors.
- With a long life, good long term stability, and high accuracy, the CO sensor is environmentally friendly without risk of electrolyte leakage.
- With simple calibration
- The special design of easy sensor's replacement makes customers replace sensor easily by themselves
- Full time CO level detection, even the slightest leak can be detected
- One analog output with the linear relationship between CO gas concentration
- Internal microprocessor control
- Special built-in Self-Zero Correction algorithm.
- Modbus RS-485 communication with 15KV antistatic protection can be connected with a PC or a PLC/DDC, also can be calibrated carbon monoxide measurement

□ Application

- Residential and commercial CO detectors and transmitters
- Ventilation control for indoor parking garages
- Recreational vehicle CO detectors
- Kitchen rooms and restaurants
- Freezing machine rooms and other places where air quality is easy to worsen

□ Specifications

CO Measurement

Gas detected	Carbon monoxide
Sensing element	Battery operable electrochemical sensor

Gas sample mode	Diffusion
Warm up time	1hour (first time)
Response Time	Within 60 seconds
Signal Update	1s
CO Measuring Range	0~100ppm/0~200ppm/0~500ppm selectable
Accuracy	<1-ppm (at 20±5 / 50±20%RH)
Stability	±5% (over 900 days)

Electrical

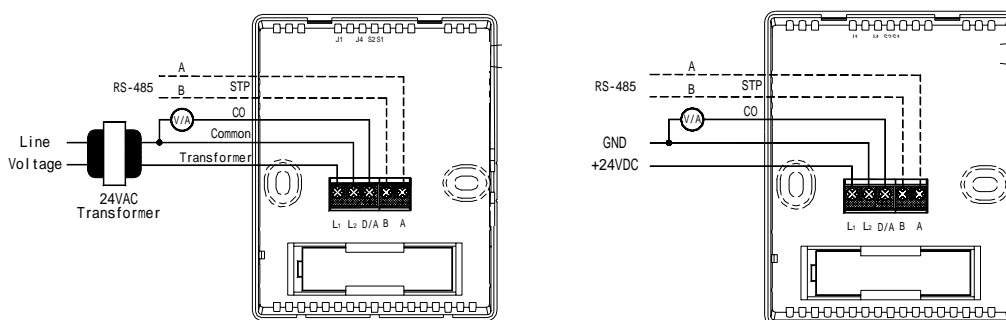|	
Power Supply	18~28VAC/VDC
Consumption	1.5 W
Wiring connections	5 terminal blocks (max.)

Outputs

Linear analog output	1x0~10VDC/4~20Ma selectable in order
D/A resolution	16 bit
D/A conversion accuracy	0.1ppm
Modbus RS485 Communication interface	Modbus RS485 interface 9600/14400/19200(default), 28800 bps, 38400 bps (programmable selection), 15KV antistatic protection

General Performance

Operation temperature	0 60 (32 140)
Operation humidity	5 99%RH, non condensing
Storage conditions	-40 70 (-40 158)
Net Weight	195g
Dimensions	100mm×80mm×28mm
Installation standard	65mm×65mm or 2"×4" junking box
Housing and IP class	PC/ABS fireproof plastic material, protection class: IP30
Compliance	EMC Directive 89/336/EEC

□ **Wiring Diagrams**

□ **Models**

ITEM	MODEL	DESCRIPTION
Carbon Monoxide Transmitter	F2000TSM-CO-C101-A	Carbon monoxide transmitter with one 4~20mA output. Modbus RS485 communication interface

(18~38VAC/VDC power supply)	F2000TSM-CO-C101-V	Carbon monoxide transmitter with one 0~10VDC output. Modbus RS485 communication interface
	F2000TSM-CO-C001	Carbon monoxide transmitter with RS485 communication interface

Note: For above items CO range can be up to 0~500ppm with default range 0~100ppm.

□ **Shipping Information**

Indiv. Ctn. Dim	115mm×95mm×45mm
Master Ctn. Qty	80
Master Ctn. Dim	44cm(L)×32cm(W)×32cm(H)
Master Ctn. Wt.	18KG

□ **Mounting**