

Wall Mount CO2 Transmitter

Model: TON-0002

User Manual

Specification

Sensing Element	Carbon Dioxide : Non-Dispersive Infrared Detector
CO ₂ Measurement Range	0~5000ppm
CO ₂ accuracy (@ 25℃ condition)	±40ppm + 3% of reading or ±75ppm (whichever is greater)
Stability	<2% of FS over lifetime (15 years) of sensor
Calibration	ABC Logic self-calibration
Response time	<2 minutes for 90% step change
Renewed signal	Every 2 sec
Warm up time	2 hours (First time or using again after power off for a long time) 2 minutes (operation)
Power supply	24VAC/VDC
Consumption	1.8 W max. ; 1.2 W avg.
Analog output	1x4~20mA output (default) or 1 x 0~10VDC (selectable by jumper)
3 color backlit LCD	Green: CO ₂ measurement≤ 1000ppm Yellow: 1000ppm< CO ₂ measurement≤1400ppm Red: CO ₂ measurement>1400ppm
Work condition	0~50℃(32~122℉); 0~95%RH, non condensing
Storage condition	10~50℃(50~122℉), 20~60%RH non condensing
Weight	240g
Dimensions	130mm×85mm×36.5mm
Installment standard	Wall mounting 65mm×65mm or 2"×4"wire box
Housing	PC/ABS fireproof plastic material, protection class: IP30
Certificate	CE-Approval
Version	V. B030

Important Safety Information

- ◆ Always cut off power before mounting, removing, and cleaning the alarm.
- ◆ Notice the supply power voltage of the transmitter: 24 VAC/VDC.

Mounting and Wire Connection

- ◆ Install the transmitter in the position of 1.2-1.3m high from the ground or the position where you need to collect the measurement data. Do not mount it behind the door, in the corner or near heat source, diffuser or any steam source, in direct sunlight; also do not mount it near the garbage bin, gas oven to prevent the evaluation error of the alarm.
- ◆ See the dimension in figure 2.
- ◆ Follow the step 1-3 in figure 1, power off and put the screwdriver into the groove at the bottom of the transmitter, press the lock lightly, separate the face cover from the back cover.
- ◆ Fix the mounting board on the wall with the bolt. Connect the electricity wire to the terminal (see figure 3 and table 1). Make sure the connection is correct.
- ◆ Follow the step 4 and 5 in figure 1 to close the cover.

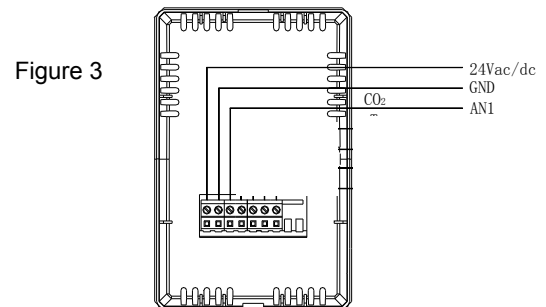
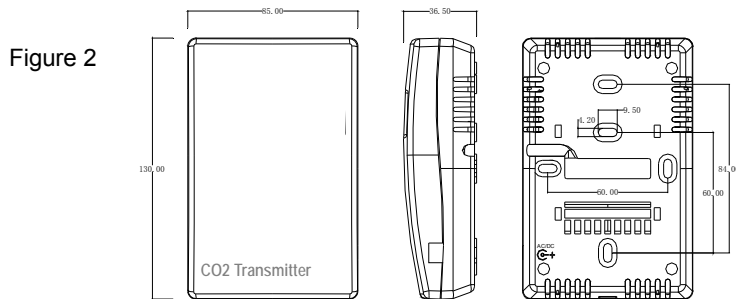
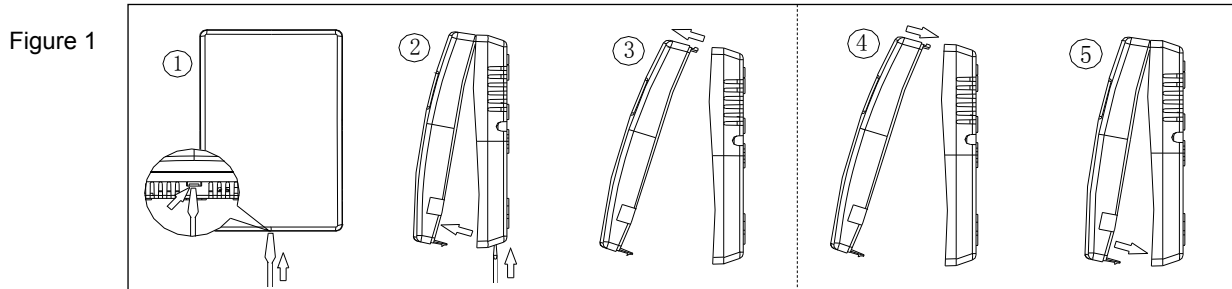


Table 1

Connection Terminal		Function	Electrical Data
1	G+	Power (+)	24VAC/24VDC +
2	G0	Power ground (-)	24VAC/24VDC
3	OUT3 (CO2)	Analog output (+)	4~20mA(default) correspond to 0~5000ppm

Output Type Selection

- ◆ Power off first and remove the face cover, you'll see Jumper J1~J3 on the upper left of the PCB board and Jumper S1~S6 in the middle right of the PCB board.
- ◆ With Jumper J1, you may be able to select the starting point of the analog output. J2 & J3 are just for manufacture test, with default of disconnection. Please don't change it!
- ◆ With Jumper S1~S6, you may be able to select either voltage or current output type. Please note that jumper S5 & S6 are corresponding to CO2 output, while S3 & S4 for temperature output, and S1 & S2 for humidity output.
- ◆ Choose the output type you want by following instructions shown in table below -

Jumper S5~S6	Jumper J1	Analog output for CO2
Upper two pins blocked	disconnected	0~10VDC
Lower two pins blocked	disconnected	0~20MA
Upper two pins blocked	Connected	2~10VDC
Lower two pins blocked	Connected	4~20MA (default)