



## CARBON DIOXIDE DETECTOR

Model: F12-S8100/8201

### □ Features

- ◆ Real-time detecting CO2 level.
- ◆ NDIR infrared CO2 module inside
- ◆ CO2 sensor has Self-Calibration Algorithm and more than 10 years lifetime
- ◆ Wall-mounting
- ◆ Providing one analog output
- ◆ Only 0~10VDC output or 0~10VDC/4~20mA
- ◆ selectable
- ◆ Design for basic application in HVAC, ventilation systems applications
- ◆ Modbus RS485 communication interface optional
- ◆ CE-Approval

### □ Specifications

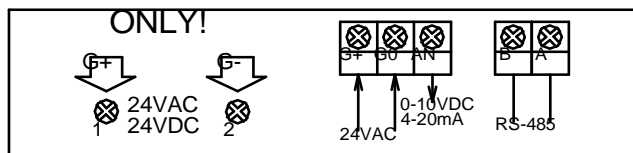
Gas detected	Carbon Dioxide (CO <sub>2</sub> )
Sensing element	Non-Dispersive Infrared Detector (NDIR)
Accuracy@25°C (77°F)	±70ppm + 3% reading
Stability	<2% of FS over life of sensor (10 yr typical)
Calibration	Self Calibration inside
Response time	<2 minutes for 90% step change
Warm up time	10 minutes (first time) 30 seconds (operation)
CO <sub>2</sub> measuring range	0~2,000ppm
Sensor life	>10 years
Power supply	24VAC/24VDC
Consumption	3.6 W max. ; 2.4 W avg.
Analog outputs	1X0~10VDC linear output or 1X0~10VDC /4~20mA selectable by jumpers
Modbus interface	Modbus RS485 interface 9600/14400/19200(default)/28800 or 38400bps
Operation conditions	0~50°C (32~122°F); 0~95%RH, non condensing
Storage conditions	0~50°C (32~122°F)
Net weight	160g

Dimensions	100mm×80mm×28mm
Installation standard	65mm×65mm or 2"×4" wire box
Approval	CE-Approval

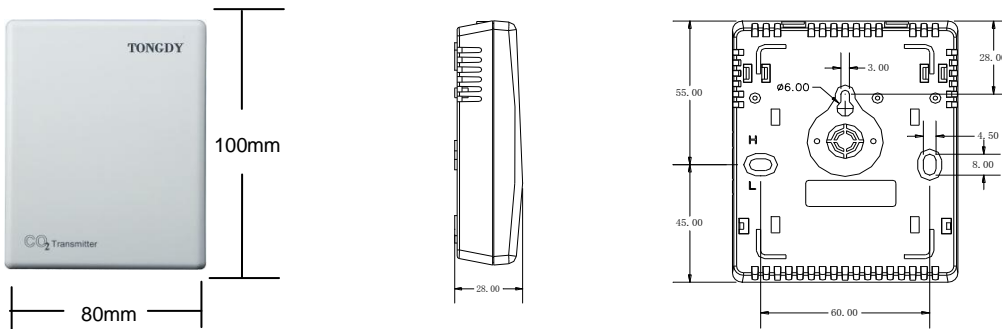
### Models Guide

Type	Model	Description
CO2 Transmitter	<b>F12-S8100</b>	1X0~10VDC output, CO2 range: 0~2,000ppm
	<b>F12-S8200</b>	1X0~10VDC/4~20mA output(selectable by jumpers), CO2 range: 0~2,000ppm
	<b>F12-S8201</b>	1X0~10VDC/4~20mA output(selectable by jumpers), Modbus RS485 communication.

### Wiring Diagram



### Mounting



### Shipping Information

Indiv. Ctn. Dim	115mm×95mm×45mm
Master Ctn. Qty	80
Master Ctn. Dim	45cm(L)×34cm(W)×34cm(H)
Master Ctn. Wt.	16KG