



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 ₂)
Sensing element	Non-Dispersive Infrared Detector (NDIR)
Accuracy@25□(77□)	±75ppm + 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 ₂ 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□(32~122□); 0~95%RH, non condensing
Storage conditions	0~50□(32~122□)
Net weight	160g

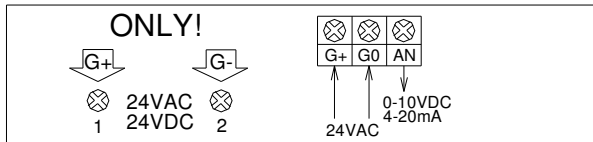
Dimensions	100mm×80mm×28mm
Installation standard	65mm×65mm or 2"×4" wire box
Approval	CE-Approval

□ **Models Guide**

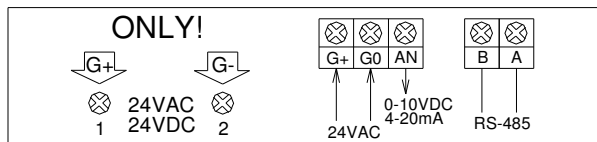
Type	Model	Description
CO2 Transmitter	F12-S8100	1X0~10VDC output, CO2 range: 0~2,000ppm
	F12-S8200	1X0~10VDC/4~20mA output(selectable by jumpers), CO2 range: 0~2,000ppm
	F12-S8201	1X0~10VDC/4~20mA output(selectable by jumpers), Modbus RS485 communication.

□ **Wiring Diagram**

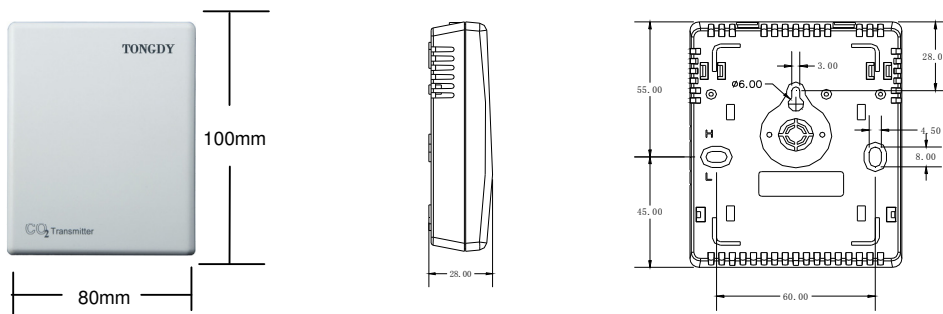
F12-S8200



F12-S8201



□ **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