

CO₂ MONITOR & DATA LOGGER

WiFi/LoraWAN and RS485



Product No: G01-CO2-P

Features

- Real-time monitoring of carbon dioxide
- High quality NDIR CO₂ sensor with self calibration and more than 10 years lifetime
- Temperature & RH is optional
- Three-color backlight LCD indicating three CO₂ ranges
- Buzzer alarm is available
- Data logger stores up to 1 year of readings; data download via Bluetooth app
- WiFi or LoraWAN wireless communication
- RS485 Modbus RTU interface
- Multiple power supply options available: 24VAC/VDC, 100~240VAC
USB 5V or DC5V with the adaptor, lithium battery
- Wall mounting or desktop placement



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Applications

- Schools, offices, hotels, meeting rooms
- Shops, restaurants, hospitals, other commercial environments
- Apartments, houses
- All ventilation monitoring systems
- Green building and IAQ systems requiring real-time CO2 monitoring and data upload

Specifications

Power supply	Select one as below: Power terminal: 24VAC/VDC; 100~240VAC Power Adapter: USB 5V (≥1A USB adapter), or DC5V (1A). Lithium battery: 1pc NCR18650B (3400mAh), can work continuously for 14 days.
Consumption	Max: 1.1W Avg: 0.03 W (270mA @ 4.2Vmax. ; 7mA @ 4.2Vavg.)
Gas detected	Carbon Dioxide (CO ₂)
Sensing element	Non-Dispersive Infrared Detector (NDIR)
Accuracy@25°C(77°F)	±50ppm + 3% of reading
Stability	<2% of FS over sensor lifetime
Calibration interval	ABC Logic Self Calibration Algorithm
CO ₂ sensor life	15 years
Response Time	<2 minutes for 90% step change
Signal update	Update Interval: 2 s
Warm up time	<3 minutes (operation)
CO ₂ measuring range	0~5,000ppm
CO ₂ Display resolution	1ppm
Tri-color backlit or 3-LED light Indicates three CO ₂ ranges	Green : <1000ppm Yellow: 1001~1400ppm Red: >1400ppm

LCD Display	Real time CO2, with Temp &RH optional
Temperature range (option)	-20~60℃
Humidity range (option)	0 ~99%RH
Data logger	Storage Capacity: . CO2 only: 30,600 records . CO2+ T +RH: 20,400 records Logging Duration: . CO2 only: 106 days @ 5 min; 212 days @ 10 min . CO2 +T +RH: 70 days @ 5 min; 141 days @ 10 min Download data via BlueTooth APP
Output (wireless)	. WiFi @2.4 GHz 802.11b/g/n in MQTT . LoraWAN (support regins: RU864, IN865, EU868, US915, AU915, KR920, AS923-1~4)
Output (option)	RS485 in Modbus RTU, 15KV anti-static protection
Storage conditions	0~50℃(32~122°F), 0~70%RH non condensing
Dimensions/ Weight	130mm(H)×85mm(W)×36.5mm(D) / 200g
Housing and IP class	PC/ABS fireproof plastic material, protection class: IP30
Installation	Wall mounting (65mm×65mm or 2"×4"wire box) Desktop placement with an optional desktop bracket
Standard	CE-Approval

Models Guide

G01-CO2-P X Y Z- [T/TH]

X: Output option

- 1- Only RS485 interface, Modbus RTU protocol
- 2- WiFi interface, MQTT protocol, plus RS485
- 5- LoraWAN interface, plus RS485

Y: Data logger, Bluetooth download enable

- 0- No
- 1- Yes

Z: Power supply option

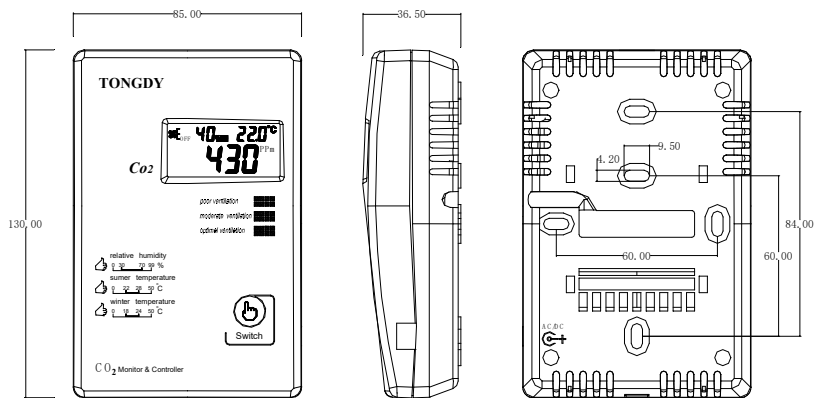
C- 24VDC/VAC

D- 100~240VAC

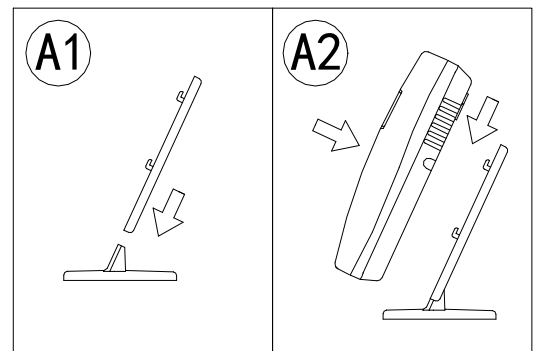
U- USB 5V

E- DC5V

B- Lithium battery (available only for RS485 or WiFi)

Mounting and Dimensions

Wall mounting



Desktop bracket