CO2 plus TVOC Monitor

G01-CO2-B5 Series

CO2+TVOC+Temperature&Humidity Monitoring

- Real time indoor air quality detection and alarm
- Monitoring carbon dioxide and TVOC (mix gases)
- Temperature and humidity detection and display
- Three-color backlit LCD
- Buzzer alarm available
- 1xon/off output optional to control a ventilator
- Wall mounting and desktop placement
- Excellent performance with easy operation





Features

- Real time indoor air quality monitoring with CO2 plus TVOC and Temp.&RH
- NDIR CO₂ sensor with special Self-Calibration makes the CO2 measurement more accurate and more reliable.
- More than 10 years lifetime of CO₂ sensor
- More than 5 years lifetime of Semi-conductor TVOC (mix gases) sensor
- Digital temperature and humidity sensor with more than 10 years lifetime
- Three-color (green/yellow/red) LCD backlight

for optimal/moderate/poor ventilation levels

- Buzzer alarm available
- Optional 1xrelay output to control a fan
- Easy operation by the touch button
- Perfect performance in low cost for IAQ detection and monitoring
- 220VAC or 24VAC/VDC power supply selectable; power adaptor available;
- Desktop and wall mounting available
- Application in classrooms, offices, hotels and other public rooms

Monitoring Focus

Carbon Dioxide (CO₂)

Indoor CO2 level is a universal accepted parameter for the condition of indoor ventilation and air quality.

- Non-dispersive infrared (NDIR) CO₂ sensor with more than 10-year lifetime
- ABC self-calibration technology guarantees reliable CO2 measurement
- CO₂ range: 0~2000ppm or 0~5000ppm
- Rapid response, high stability and consistency

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Mix Gases (TVOC-Total Volatile organic compound)

VOC emitted from building materials, decoration materials and furniture, includes toluene, ammonia, H2S, formaldehyde and other harmful gases. Its necessary to real time detect these harmful gases. But it's costly to use the professional instruments to detect each single gas. Also it's possible to monitor for daily use. These gases exit in air for a long time and their volatilization level are different in different temperature and humidity, the reliability of such detection by a professional instrument for a single gas is very limited.

This multifunction IAQ monitor uses a mix gas sensor. It has high sensitive to kinds of volatile pollutant gases (VOC) such as ammonia, toluene, formaldehyde and cigarette smoke, alcohol, H2S, and carbon monoxide. So it is very suitable to monitor the general indoor air quality in real time and long term. The mix gases sensor responds quickly to any change of the concentration of such gases. Not only you may open windows for fresh air coming but also the monitor can control a ventilator/air-cleaning devise based on the indication and alarm.

- Built in the semi-conductor mix gases sensor
- 5~7 years life time
- High sensitive to volatile gases like ammonia, toluene, formaldehyde, sensitive to cigarette smoke, alcohol, H2S, etc.
- Small volume, lower consumption

Temperature and humidity

Switzerland digital temperature/humidity sensor built in with high accuracy and stability. It also has compensation to CO₂ and TVOC which makes the measurements more accurate by minimizing environmental effects.

LCD Display



Application

G01-CO₂-B5 monitor is designed to monitoring room air quality including CO₂ and TVOC, as well as room temperature and humidity. It detects and monitors indoor IAQ level. It provides one on/off output to control a ventilator according with the CO₂ or TVOC measurement or according with both of them.

It provides both buzzer alarm and three colors backlit switching alarm.

- Hotel, exhibition hall, hospital, shop, restaurant, air port, train station, theater and other public places
- House, villa, office, meeting room, classroom and other rooms
- All ventilation systems

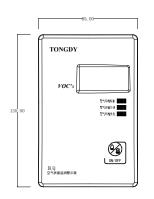
Specifications

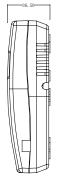
Monitoring parameters	CO ₂	TVOC	Temperature	Relative humidity		
Sensor	Non-Dispersive Infrared Detector (NDIR)	Semiconductor mix gases sensor	Digital combined temperature and humidity sensor			
Measuring range	0~5000ppm	1~30ppm	-20~60℃	0~100%RH		
Display Resolution	1ppm	5ppm	0.1℃	0.1%RH		
Accuracy@25℃(77°F)	±60ppm + 3% of reading	±10%	±0.5℃	±4.5%RH		
Life time	15 years (normal)	5∼7 years	10 years			
Stability	<2%		<0.04℃ per year	<0.5%RH per year		
Calibration cycle	ABC Logic Self Calibration					
Response Time	<2 minutes for 90% change	<1 minute (for 10ppm hydrogen, 30ppm ethanol) <5 minute (for a cigarette) in 20m² room	<10 seconds	to reach 63%		
Warm up time	72 hours (first time) 1 hour (operation)					
Electrical Characteristics						
Power supply	100~240VAC 18~24VAC/VDC with the power adaptor available					
Consumption	3.5 W max. ; 2.5 W avg.					
	Displa	y and Alarm				
LCD Display	Green: CO ₂ <1000ppm (optimal air quality) TVOC: — or — — (low pollution) Yellow: CO ₂ >1000ppm (moderate air quality) TVOC: — — or — — — (medium pollution) Red: CO ₂ >1400ppm (poor air quality) TVOC: — — — or — — — (heavy pollution) Two modes selectable: both CO2 and TVOC over the above setpoints(default)					
	Either CO2 or TVOC over the above setpoints					
	Conditions of U	Ising and Installation				
Operation conditions	-10~50°ℂ(14~122°F); 0~95%RH, non condensing					
Storage conditions	0~50°C (32~122°F)/ 5~90%RH					
Weight	200g					
Dimensions	130mm(L)×85mm(W)×36.5mm(H)					
Installation	Desktop or wall mount (65mm×65mm or 85mmX85mm or 2"×4" wire box)					
Housing IP class	PC/ABS, protection class: IP30					

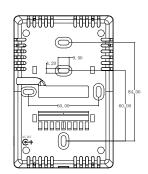
■ Models Guide

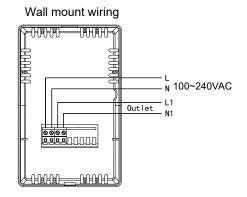
Model	Name	Description	Power Supply
G01-CO2-B530C	CO2, TVOC, temperature and humidity monitor/alarm	Three-color backlit LCD, buzzer alarm	24VAC/VDC, with DC power socket
G01-CO2-B540C	CO2, TVOC, temperature and humidity monitor/controller	Three-color backlit LCD, buzzer alarm; 1 on/off output; a touch key for operation a touch-key for operation	24VAC/VDC
G01-CO2-B540D	CO2, TVOC, temperature and humidity monitor/controller	Three-color backlit LCD, buzzer alarm; 1 on/off output; a touch-key for operation	100~240VAC
921	Wall-mounting plate	Use for wall mounting. See below figure	Just for G01-CO2- B530C
921+922	Desktop Bracket	Can be used for wall mounting type to the desktop type	Just for G01-CO2- B530C
870	Power adaptor	input:100~240VAC output:DC24V/240mA	Just for G01-CO2-B530C

■ Mounting and Dimensions

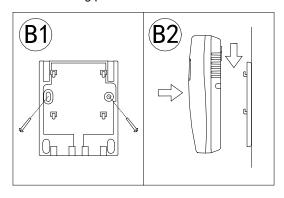




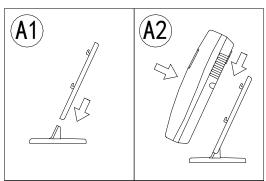




Wall mounting plate-921



Desktop bracket-921+922



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