



## Room IAQ Monitor / Alarm

**Model#:G02-VOC-B3 SERIES**

Indoor Air Quality + Temperature +Humidity Detection  
Three-color LCD backlight, Desktop or Wall Mounting

- ◆ Real time indoor air quality detection and alarm
- ◆ High sensitivity to VOC and other indoor contaminative gases
- ◆ Temperature and humidity detection and display
- ◆ Three-color backlit LCD and buzzer alarm
- ◆ Provide 1 xon/off output to control a ventilator
- ◆ Modbus RS485 interface optional
- ◆ Excellent performance

### □ Features

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|---|---|
| <ul style="list-style-type: none"> <li>◆ Real time monitor ambience air quality</li> <li>◆ Semiconductor mix gases sensor with 5 year life</li> <li>◆ Gas detection: cigarette smoke, VOCs such as formaldehyde and toluene, ethanol, ammonia, hydrogen sulfide, sulfur dioxide and other harmful gases</li> <li>◆ Monitor temperature and relative humidity</li> <li>◆ Three-color (green/orange/red) LCD backlight indicating air quality at optimal/moderate/poor</li> <li>◆ Preset warning point of buzzer alarm and</li> </ul> | <ul style="list-style-type: none"> <li>backlight</li> <li>◆ Provide one relay output to control a ventilator</li> <li>◆ Modbus RS485 communication optional</li> <li>◆ High quality technics and elegant appearance, best choice for home and office</li> <li>◆ 220VAC or 24VAC/VDC power selectable; power adaptor available; desktop and wall mounting type available</li> <li>◆ EU standard and CE-approval</li> </ul> |
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IAQ is a comprehensive index, including room temperature, humidity, fresh air, and diverse air contaminants of low concentration. Monitoring IAQ is very important to guarantee healthy life and work. Air pollution caused by

decoration, paints on new furniture, smoke from cigarette or cooker and life or office scrap has become an invisible killer of human life, especially to the infant, the pregnant and the old, it can also cause nerve disorder or weak immunity, which is a potential danger to health.

So the key point is to monitor and control the environment we live in, and make invisible pollution visible.

As there are many kinds of harmful gases in the air, it become really cost to monitor every single kind of air. It is recommended that CO and IAQ be monitored at home, and CO<sub>2</sub>, CO and VOCs in classroom and office.

G02-VOC monitor is specially designed to detect indoor air quality in offices and home environments. Its internal mix gases sensor has high sensitivity not only to VOC's such as toluene and formaldehyde from wood finishing and construction products but also to other air contaminants which are emitted by cigarette smoke, ammonia, hydrogen sulfide etc. It's also sensitive to carbon monoxide, alcohol, disinfectant and other bad smells. So it is more suitable for monitoring IAQ than any other sensor that for a single kind of gas.

## □ Application

- ◆ Ambiance air quality detection and alarm
- ◆ Ventilation systems
- ◆ Air cleaning systems.
- ◆ Installation place such as bedroom, sitting room, study and dinner room, kindergarten, classroom, office, car, restaurant, and other public places.

## □ Specifications

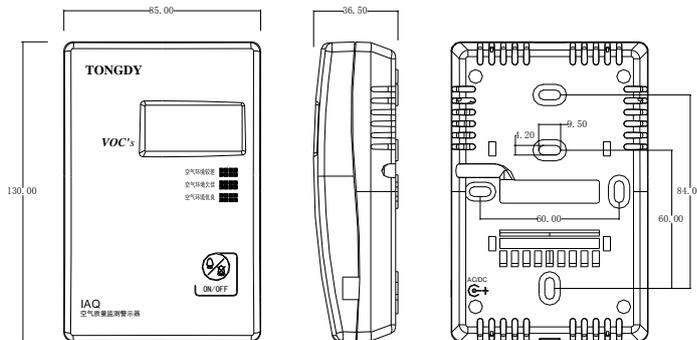
Gas detection	Highly sensitive to many harmful gases, such as harmful gases from construction and decoration materials, VOCs (like toluene and formaldehyde); Cigarette smoke; Ammonia and H <sub>2</sub> S and other gases from household wastes; CO, SO <sub>2</sub> from cooking and burning; Alcohol, Natural gas, detergent and other bad smells etc.	
Sensing element	Semiconductor mix gas sensor of long working life and good stability	
Signal update	1s	
Warm up time	72 hours (first time), 1 hour (normal operation)	
VOC measuring range	1~30ppm (1ppm= 1 part per million)	
Display resolution	0.1ppm	
VOC setting resolution	0.1ppm	
Temperature & Humidity Sensor	Temperature	Relative Humidity
Sensing element	NTC 5K	Capacitive sensor
Measuring range	0~50°C	0 -95%RH
Accuracy	±0.5°C (25°C, 40%-60%RH)	±4%RH (25°C, 40%-60%RH)
Display resolution	0.5°C	1%RH
Stability	±0.5°C per year	±1%RH per year
Output	1xRelay output to control a ventilator or air-purifier, max current 3A resistance (220VAC)	
Warning alarm	Inner buzzer alarm and also three colors backlit switch as well	
Buzzer alarm	Alarm starts when VOC value above 25ppm	
LCD backlit	<b>Green</b> —optimal air quality <b>Orange</b> —moderate air quality <b>Red</b> —poor air quality	► enjoy the air quality ► ventilation suggested ► ventilation immediately

RS485 interface (option)	Modbus protocol with 19200bps
Operation condition	-20℃~60℃ (-4°F~140°F)/ 0~ 95% RH
Storage conditions	0℃~50℃ (32°F~122°F)/ 5~ 90% RH
Net Weight	190g
Dimensions	130mm(L)×85mm(W)×36.5mm(H)
Installation standard	Desktop or wall mount (65mm×65mm or 85mm×85mm or 2"×4" wire box)
Wiring standard	Wire section area <math><1.5\text{mm}^2</math>
Power supply	24VAC/VDC, 230VAC
Consumption	2.8 W
Quality System	ISO 9001
Housing	PC/ABS fire-proof, IP30 protection
Certificate	CE

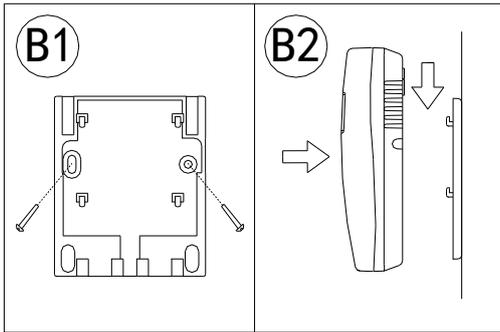
### □ Models

Model	Name	Description	Power	Type
G02-VOC-B320A	IAQ, temperature and humidity monitor/alarm	Three-color backlit LCD, buzzer alarm	230VAC	Wall mounting
G02-VOC-B332C	IAQ, temperature and humidity monitor/alarm	Three-color backlit LCD, buzzer alarm	24VAC/VDC, with DC socket and a power adaptor	desktop, with a bracket
G02-VOC-B340A	IAQ, temperature and humidity monitor/controller	Three-color backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation	230VAC	Wall mounting
G02-VOC-B310C	IAQ, temperature and humidity monitor/alarm	Three-color backlit LCD, buzzer alarm. Modbus RS485 interface	24VAC/VDC	Wall mounting
G02-VOC-B380A	IAQ, temperature and humidity monitor/alarm	Three-color backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation Modbus RS485 interface	230VAC	Wall mounting
921	Wall mounting plate	Accessory for wall mounting.		
921+922	Desktop bracket	As be the desktop type (just for G02-VOC-B332C)		

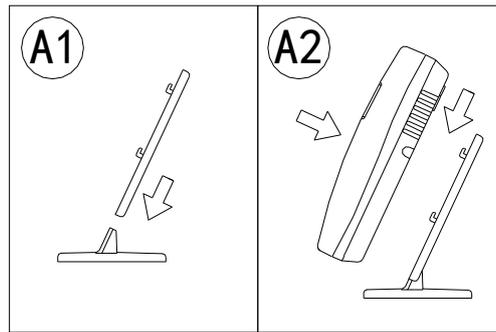
### □ Mounting and Dimensions



Wall mount wiring



Wall mount plate-921



Desktop bracket -921+922

(just for G02-VOC-B332C)

### □ Wiring Diagrams

