Tongdy

Tongdy Sensing Tech.

Room IAQ Monitor / Alarm

Applications

- Ambiance air quality detection and alarm
- Ventilation systems
- Air cleaning systems
- Bas systems
- Offices, schools and other indoor spaces

Scan the QR code to visit our website

www.iaqtongdy.com

info@tongdy.com

Product No: G02-VOC

- 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 optional buzzer alarm
- Provide 1 xon/off output to control a ventilator
- 1x 0~10V/4~20mA linear output optional
- Modbus RS485 interface optional
- Excellent performance for indicating indoor air quality

Features

- Real time monitor ambiance air quality
- Semiconductor mix gases sensor with more than 5 year lifetime
- Gas detection: cigarette smoke, VOC such as formaldehyde and toluene, ethanol, ammonia, hydrogen sulfide, sulfur dioxide and other harmful gases
- Monitor temperature and relative humidity
- Three-color (green/orange/red) LCD backlit indicating air quality at optimal/moderate/poor
- Preset warning point of buzzer alarm and backlight
- Provide one relay output to control a ventilator
- Modbus RS485 communication optional
- High quality technics and elegant appearance, best choice for home   and office
- Four power supply types optional, and power adaptor available; desktop and wall mounting

G02-VOC monitor is specially designed to detect indoor air quality in offices and home environments. 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 CO2, CO and VOC in classroom and office.

The 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.

Applications
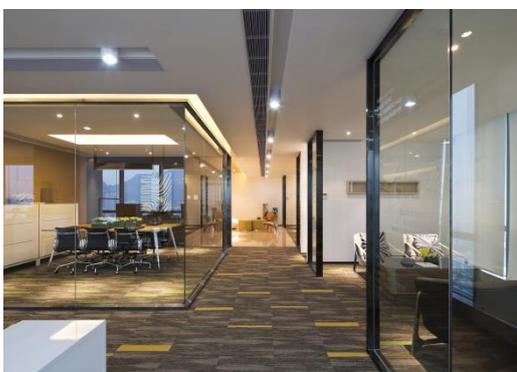
- Ambiance air quality detection and alarm
- Ventilation systems
- Air cleaning systems.
- BAS systems
- Offices, schools and other public places

Specifications

Gas detection	Highly sensitive to a lot of harmful gases, such as harmful gases from construction and decoration materials, VOC (like toluene and formaldehyde); Cigarette smoke; Ammonia and H2S and other gases from household wastes; CO, SO2 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	0.1～30ppm （1ppm= 1 part per million)	
Display resolution	0.1ppm	
Temperature & Humidity Sensor	Temperature	Relative Humidity
Sensing element	digital temperature and relativehumidity	sensor platform
Measuring range	0~50℃	0~100%RH
Accuracy	±0.5℃ (25℃, 40%-60%RH)	±4%RH (25℃, 40%-60%RH)
Display resolution	0.5℃	1%RH
Stability	±0.5℃per year	±1%RH per year
Relay output	1xrelay output to control a ventilator or air purifier, max current 5A resistance（220VAC）	
Analog output	1x0-10V(default) or 4-20mA 1x0~5V linear output	
Warning alarm	3- colors backlit and buzzer alarm when VOC value over 22ppm	
LCD backlit	Green—optimal air quality ► enjoy the air quality Orange—moderate air quality ► ventilation suggested Red—-poor air quality ► ventilation immediately	
RS485 interface (option)	Modbus RTU, 19200bps	
Operation condition	-20℃~60℃ (-4℉~140℉)/ 0~ 95% RH	
Storage conditions	0℃～50℃ (32℉～122℉)/ 5~ 90% RH	
Net Weight	190g	
Dimensions	130mm(L)×85mm(W)×36.5mm(H)	
Installation standard	Desktop or wall mount (65mm×65mm or 85mmX85mm or 2"×4" wire box)	
Wiring standard	Wire section area <1.5mm^2	
Power supply	12VDC; 24VAC/VDC 220VAC; 100～240VAC	
Consumption	2.8 W	
Quality System	ISO 9001	
Housing	PC/ABS fire-proof, IP30 protection	
Certificate	CE	

Models

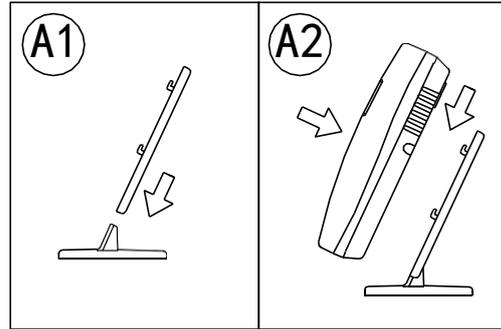| Model	Name	Description	Power	Type
G02-VOC-B320A	IAQ monitor	Three-color backlit LCD, buzzer alarm	220VAC	Wall mounting
G02-VOC-B332C	IAQ monitor	Three-color backlit LCD, buzzer alarm	24VAC/VDC, with DC socket and a power adaptor	desktop, with a bracket
G02-VOC-B340D	IAQ monitor/controller	Three-color backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation	100~240VAC	Wall mounting
G02-VOC-B310C	IAQ monitor	Three-color backlit LCD, buzzer alarm. Modbus RS485 interface	24VAC/VDC	Wall mounting
G02-VOC-B380D	IAQ monitor	Three-color backlit LCD, buzzer alarm; 1 on/off output; touch-key for operation Modbus RS485 interface	100~240VAC	Wall mounting
G02-VOC-B350C	IAQ monitor	Three-color backlit LCD, buzzer alarm. 1x analog linear outpur.	24VAC/VDC	Wall mounting
G02-VOC-B350G	IAQ monitor	Three-color backlit LCD, buzzer alarm. 1x 0~5VDC linear outpur.	12VDC	Wall mounting
G02-VOC-B370C	IAQ monitor	Three-color backlit LCD, buzzer alarm. 1x 0~10VDC/4~20mA linear outpur. Modbus RS485 interface	24VAC/VDC	Wall mounting
921	Wall mounting plate	Accessory for wall mounting type.		
922	Desktop bracket			

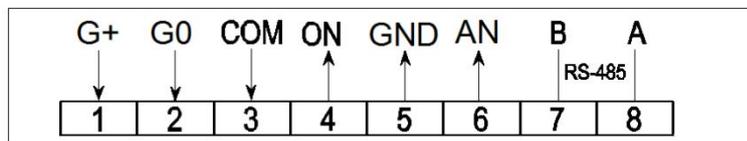# Mounting and Dimensions
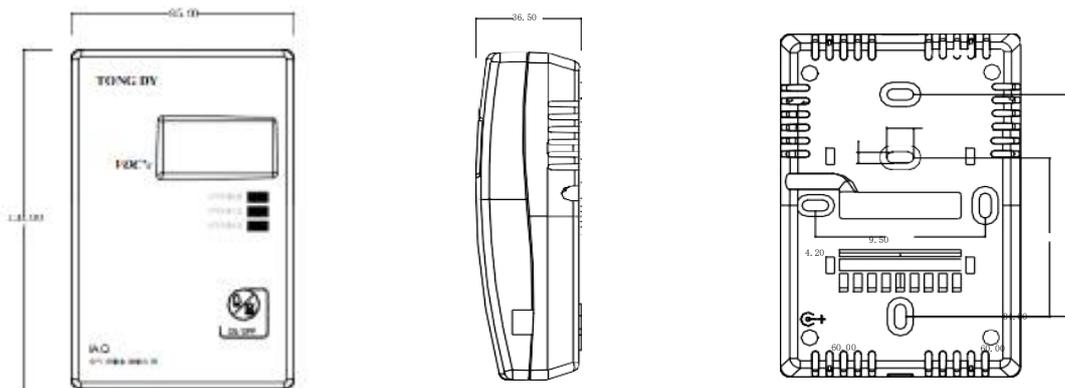
Wall mounting
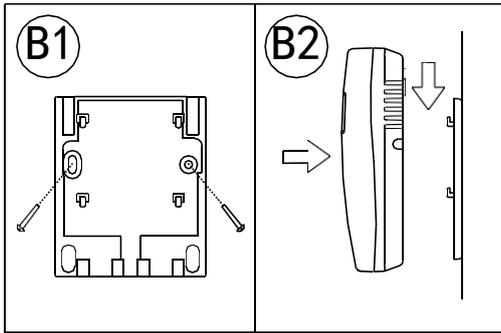
Wall mount with the backplane-921

Desktop bracket -922

Wiring Diagrams

G02-VOC-3XXA/D

L	N	COM	ON		B	A
					RS-485	
1	2	3	4		7	8

G02-VOC-3XXC/G

G+	G0	COM	ON	GND	AN	B	A
						RS-485	
1	2	3	4	5	6	7	8