



with desktop bracket



wall mounted

## G09-O3 Series

### Ozone Monitor and Controller

with Modbus interface and 1X analog +2X dry contact outputs

- ◆ Real time detection and monitoring ambience ozone level
- ◆ Electrochemical ozone sensor inside
- ◆ Preset two stage alarm points for ozone measurement
- ◆ Buzzer alarm and 3-color backlight LCD indication
- ◆ Provide 2x relay dry contact outputs and 1x analog output
- ◆ Modbus RS485 communication Interface
- ◆ Higher performance with lower price

### Features

- ◆ Design for real time detecting and monitoring ambience ozone level and temperature
- ◆ Electrochemical ozone sensor with high sensitivity
- ◆ Particular LCD display with three color backlights (Green/Yellow/Red)
- ◆ Maximum ozone measuring range:  
0~5000ppb (0~9.81mg/m<sup>3</sup>) /0~1000ppb  
Also reset the measurement range by end user
- ◆ 2xOn/Off dry contact outputs for two stages alarm device, or control a ozone generator or a ventilator
- ◆ Buzzer alarm and 3-color backlight LCD indication
- ◆ Provide 1X analog output (0,2~10VDC/4~20mA) (can be used as transmitter)
- ◆ Modbus RS485 communication interface, 15 KV antistatic protection, individual IP address
- ◆ Provide two easy ways for calibration and setup alarm points via an infrared remote controller or via the RS485 interface.
- ◆ Temperature measurement and display
- ◆ Humidity measurement and display optional
- ◆ Multiple application, wall mounting type and desktop type
- ◆ Great performance with high quality and low price

### Application

- ◆ Specially used for detecting indoor ambience quality
  - ◆ Real time measuring ozone level and analyzing: alarm when ozone level is over proof, control ozone concentrations by controlling related devices in order to reach a certain level in some special places
  - ◆ Portable type for real time measuring and analyzing
  - ◆ Anti-epidemic and disease prevention, sanitary inspection, environment protection, health protection, etc.
- G09-O3 series is the best device used to detect and analyze ozone concentration.

## Specifications

Gas Detected	Ozone
Sensing Element	Electrochemical gas sensor
Sensor lifetime	>2 years, removable
Temperature Sensor	NTC
Humidity Sensor	HS series capacitive sensor
Power Supply	24VAC/VDC (power adaptor selectable)
Power Consumption	2.8W
Response Time	<50s @T90
Signal Update	1s
Warm up Time	<60 seconds
Ozone Measuring Range	0~5000ppb (0-5ppm)( 0~9.81mg/m <sup>3</sup> ) 0~1000ppb
Display Resolution	1ppb (0.001ppm) (0.01mg/ m <sup>3</sup> )
Accuracy	±0.01ppm + 10% reading
Nonlinear	<1%FS
Repeatability	<0.5%
Zero Drift	<1%
Alarm	Buzzer and Yellow or Red backlight switch
Display	<b>Green</b> -normally, <b>Orange</b> – first stage alarm, <b>Red</b> - second stage alarm.
Temperature/humidity Measuring Range	5℃~60℃ (41°F~140°F)/0~80%RH
Analog Output	0~10VDC(default) or 4~20mA linear output selectable
Analog Output Resolution	16Bit
Relay dry contact Output	Two dry-contact outputs Max, switching current 3A (220VAC/30VDC), resistance Load
Modbus Communication Interface	Modbus RTU protocol with 19200bps(default) 15KV antistatic protection
Working Condition/Storage Conditions	5℃~60℃ (41°F~140°F)/ 0~ 80% RH
Net Weight	190g
Dimensions	130mm(H)×85mm(W)×36.5mm(D)
Installation Standard	65mm×65mm or 85mm×85mm or 2"×4" wire box
Interface Connection (Max)	9 terminals
Wiring Standard	Wire section area<1.5mm <sup>2</sup>
Manufacturing Process	ISO 9001 Certified

## Models Guide

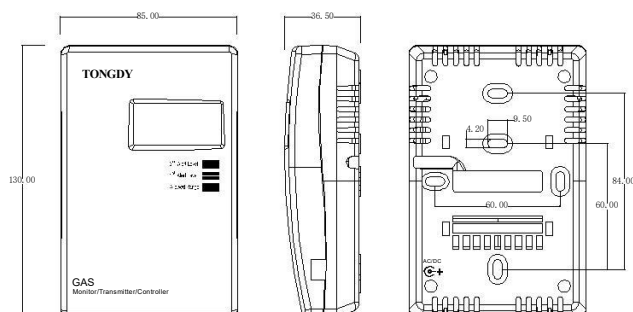
### G09-O3-ABC1-Y

- A**—LCD ( 2: with LCD, no humidity option, 3: with LCD and with humidity)  
**B**—analog output (0: no analog output, 1: 0~10VDC output, 2: 4~20mA output)  
**C**—dry contact output (0: no dry contact output, 1: 1Xdry contact output, 2: 2Xdry contact outputs)  
**1**—Modbus RS485  
**Y**—Ozone range (B10: 0~1000ppb, B50:0~5000ppb)

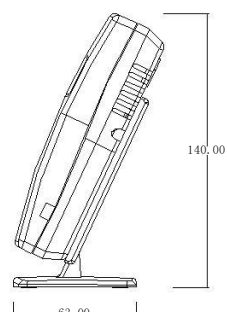
Example: G09-O3-2021-B50 indicates the ozone detector with 2X on/off dry contact outputs and a Modbus RS485 interface, and the ozone range: 0-5000ppb.

G09-O3-3101-B10 indicates the ozone detector with 1X 0~10VDC output and a Modbus RS485 interface, LCD display. Humidity option. ozone range: 0-1000ppb.

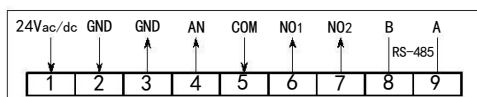
## Mounting and Wiring Diagrams



Wall mounting



Plane placement



Wiring diagram

