

# Ozone Monitor and Controller



## Product No: G09-O3

Ozone Monitor and Controller  
1X analog and 1X dry contact outputs  
RS485 interface with Modbus RTU



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- Real time detection and monitoring ambience ozone level
- Electrochemical ozone sensor inside
- 3-color backlight LCD indication and buzzer alarm optional
- Provide 1x relay dry contact outputs and 1x analog output
- Modbus RS485 communication Interface

## Features

- Design for real time detecting and monitoring ambience ozone and temperature, optional humidity monitoring
- Electrochemical ozone sensor with high sensitivity and stability
- Particular LCD display with three color backlight (Green/Yellow/Red for three ozone
- Optional ozone measuring range: 20~1000ppb or 20~5000ppb.
- 1xOn/Off dry contact output to control an ozone generator or a fan  
1X analog output (0~10VDC/4~20mA selectable)
- RS485 interface with Modbus RTU. 15 KV antistatic protection, individual IP address
- Temperature measurement and display
- Humidity measurement and display optional
- Multiple application, with wall mounting and desktop type



## Specifications

|                         |                                                                                                                           |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------|
| Gas Sensing             | Ozone electrochemical gas sensor                                                                                          |
| Sensor lifetime         | >3 years                                                                                                                  |
| Temperature & RH Sensor | High-precision capacitive sensor                                                                                          |
| Power Supply            | 24VAC/VDC (power adaptor optional)                                                                                        |
| Power Consumption       | 2.8W /Ave.                                                                                                                |
| Response Time           | <60s @T90                                                                                                                 |
| Signal Update           | 1s                                                                                                                        |
| Warm up Time            | <60 seconds                                                                                                               |
| Ozone Measuring Range   | 20~1000ppb ( 40~1996.6 ug/m <sup>3</sup> @20℃) default<br>20~5000ppb ( 40~9.81 mg/m <sup>3</sup> ) optional in purchasing |
| Display Resolution      | 1ppb                                                                                                                      |
| Accuracy                | ±10ppb + 10% reading                                                                                                      |
| Nonlinear               | <1%FS                                                                                                                     |
| Repeatability           | <0.5%                                                                                                                     |

|                                      |                                                                                                                        |
|--------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Alarm                                | Buzzer sounds and Red backlight display                                                                                |
| Display                              | <b>Green</b> – <30%      ozone range<br><b>Orange</b> – 30%~70%      ozone range<br><b>Red</b> – >70%      ozone range |
| Temperature/humidity Range           | 0℃~60℃ (32℉~140℉) /0~80%RH                                                                                             |
| Analog Output                        | 0~10VDC(default) or 4~20mA linear output selectable                                                                    |
| Analog Output Resolution             | 16Bit                                                                                                                  |
| Relay dry contact output             | Max switching current 3A (220VAC/30VDC), resistance Load                                                               |
| RS485 Communication Interface        | Modbus RTU protocol with 19200bps(default)<br>15KV antistatic protection                                               |
| Working Condition/Storage Conditions | 5℃~60℃ (41℉~140℉) / 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                                                                                                     |
| Housing and IP class                 | PC/ABS fireproof plastic material, protection class: IP30                                                              |
| Compliance                           | EMC Directive 89/336/EEC                                                                                               |

## Models

### **G09–O3–X111-Y**

1x 0~10VDC output  
1x dry contact output  
RS485 interface

### **G09–O3–X211-Y**

1x 4~20mA output  
1x dry contact output  
RS485 interface

**X:** 2- Ozone and temperature detection  
3-Ozone and Temp.&RH detection

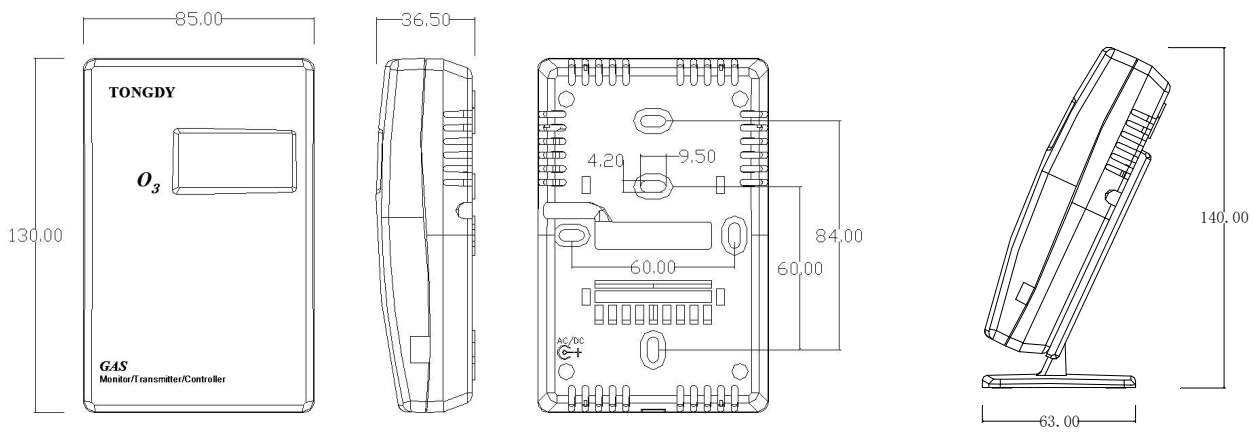
**Y**—Ozone range

B10- 20~1000ppb (default)

B50- 20~5000ppb

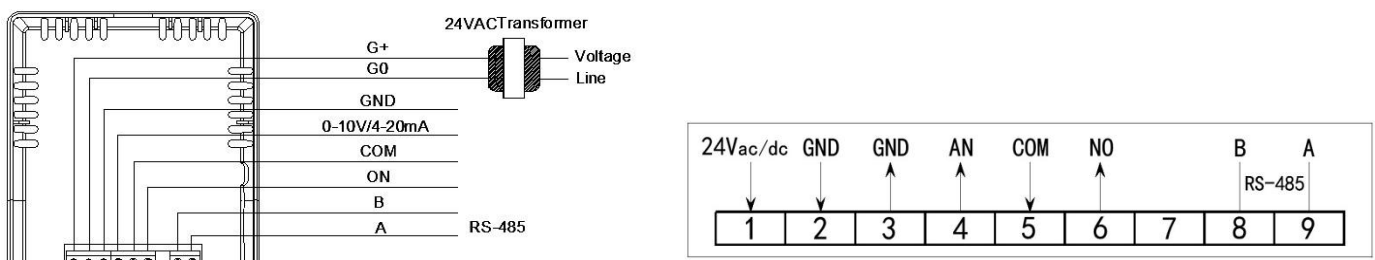


# Mounting and Wiring Diagrams



Wall mounting

Desktop placement



Wiring diagram

