



## Ozone Monitor and Controller

Model No: C/O3-5000-MC

O<sub>3</sub> + Temperature + Humidity

Monitoring, Control & Display

## User Manual

- Real time detection and monitoring ambient ozone level
- Electrochemical ozone sensor inside
- Preset two stage alarm points for ozone measurement
- Buzzer alarm and 3-colour 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 of ambient ozone level and temperature
- Electrochemical ozone sensor with high sensitivity
- Particular LCD display with three colour backlight (Green/Yellow/Red)
- Maximum ozone measuring range 0 ~ 5,000ppb (0 ~9.81mg/m<sup>3</sup>) /0 ~ 1,000ppb  
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-colour backlight LCD indication
- Provide 1X analog output (0,~ 10VDC/4~20mA) (Can be used as transmitter)
- Modbus RS485 communication interface, 15KV 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 odor 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	Green-normally, Orange-first stage alarm, Red-second stage alarm.
Temperature/humidity Measuring Range	5°C~60°C (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°C~60°C (41°F ~ 140°F)/0 ~ 80%RH
Net Weight	190g
Dimensions	130mm(H)x85mm(W)x36.5mm(D)
Installation Standard	65mmx65mm or 85mmx85mm or 2"x4" 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

## Modes Guide

### G09-O3-ABC1-Y

- A – LCD (2: with LCD, no humidity option, 3: with LCD and 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 (B 10: 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 1X0~10VDC output and a Modbus RS485 interface, LCD display. Humidity option. Ozone range: 0-1000ppb.

## Mounting and Wiring Diagrams

