Tongdy Sensing Technology Corporation

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G09-O3 Series

Ozone Monitor and Controller

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

with desktop bracket

wall mounted

- Real time detection and monitoring ambiance 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 ambiance 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/m³) /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 ambiance 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.

Add: Building #8, Courtyard #9, Dijin Road, Haidian District, Beijing, 100095, China Tel: (86 10) 59738930/31/32 Fax: (86 10) 59738935 E-Mail: info@tongdy.com



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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 ³) 0~1000ppb
Display Resolution	1ppb (0.001ppm) (0.01mg/ m ³)
Accuracy	\pm 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℃~60℃ (41°F~140°F)/0~80%RH
Analog Output	0 \sim 10VDC(default) or 4 \sim 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 85mmx85mm or 2"×4" wire box
Interface Connection (Max)	9 terminals
Wiring Standard	Wire section area<1.5mm ²
Manufacturing Process	ISO 9001 Certified

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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 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



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