

OZONE (O3) GAS TRANSMITTER

User Guide for SRAQ-G201



Product Description >>

The SRAQ-G201 gas sensor module is used to detect the presence and concentration of carbon dioxide gas. It has good sensitivity and selectivity to CO_2 , which makes it less affected by temperature and humidity. The SRAQ-G201 can be mounted to a wall or panel, as well as to a DIN rail. This device requires a 12V DC power supply and has a detection range from 0 to 10000 ppm.

Features >>>

- High sensitivity
- Wide detection range 350 10000 ppm
- Analog output
- Heat resistant ceramic base
- Wall or DIN rail mountable

Applications >>

- Air Quality Control System
- Process Control
- Laboratory CO₂ monitoring
- Indoor air quality
- Greenhouse gas monitoring

Thank you for choosing L-com product. To ensure safe, accurate performance and product longevity, please take a moment to familiarize yourself with this manual before powering the device. Please keep it handy for future reference. In case of any questions regarding the installation or use of product, please call us at 800.341.5266.

Reach out to us at customerservice@l-com.com and visit our website at www.l-com.com

Technical Parameters >>>

Detection Range	350 – 10000 PPM				
Working Voltage	12 VDC ± 0.2 V				
Working Current	≤200 mA				
Output Mode	0 – 2 V (Non-linear)				
Working Temperature	-20~65 °C				
Working Humidity	<95% RH (Non condensing)				
Storage Temperature	-10~50 °C				
Storage Humidity	0 – 65% RH				
Preheating Time	Not less than 2 hours, full warm-up time is 48 hours				

Electrical Diagram >>

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C. C.		1 - 2 - 4 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5				8	VCC GND Signal ground
E					Ξ		Analog signal output Temperature compensation signal output TTL high / low signal output
77	=	=	0	=	=	5	

Notes >>>

- 1. If the module is not used for a long time, warm-up time the module for 24 hours before it is used again.
- 2. The indoor CO₂ concentration is generally between 400 ppm and 700 ppm. So, take the minimum value of 400 ppm for the calculation standard.
- According to the sensitivity characteristic curve in the figure below, it is seen that EMF value corresponding to 400 ppm is 325 mv. Then preheat the sensor for a long time, the output of Aout should be: 1.04 V. (Calculation method: 0.325 V * 3.2 = 1.04, this algorithm is for 0-2V output of the module. 3.2 is the actual magnification of the module)

Typical Sensitivity Curve

The ordinate in the figure is the resistance ratio of the sensor (Rs/R0), and the abscissa is the gas concentration. Rs represents the resistance value of the sensor in different concentrations of gas, and R0 represents the resistance value of the sensor in clean air.



Mounting Diagram >>>

- 1. Wall mount, hole diameter 4 mm, pitch 36 mm
- 2. DIN 35mm rail mount

