

AG-4-CO-M5042 (D)

Features

- ✓ High selectivity to carbon monoxide
- ✓ UART RS232 digital output
- ✓ No electrolyte leakage risk
- ✓ Environmentally friendly
- ✓ pre-calibrated before leaving the factory

Product Description



The AG-4-CO-M5042(D) is an embedded type module equipped with the Figaro's carbon monoxide gas sensor TGS5042, for accurately detecting carbon monoxide (CO) gas concentrations in various environments. The module has been precalibrated before leaving the factory and has good stability and selectivity. It uses digital communication (UART bus output) for gas concentration, which allows users to easily and quickly integrate the module into various systems, making it suitable for both indoor and outdoor air quality detection, as well as industrial gas detection.

Technical Specification

Item	Specification	
Model Number	AG-4-CO-M5042(D)	
Target Gases	СО	
Sensing Principle	Electrochemical	
Detection Range	0-1000ppm	
Resolution	1ppm	
Measurement Error	< ±5% FS	
Operating Voltage	3.2 - 5.5V DC	
Operating Current	≤ 500uA@5V	
Output Signal	UART (+3.0V TTL)	
Temperature Range	-10°C - +55°C	
Humidity Range	0% -90%RH	
Pressure Range	900.0 to 1120 mbar	
Storage Temperature	-10 to +40°C	
Size	L*W*H=53mm*27mm*26mm	
Expected Life	≥ 10 years	



Typical Application

- Residential and commercial CO detectors
- CO monitors for industrial applications
- Ventilation control for indoor parking garages
- Fire detection

Product Appearance and Dimensions



Pin Configuration

The module reserves a 3P + 4P pin header with a pitch of 2.54 mm as the electrical interface. Pin descriptions are as follows:

Pin Number	Name	Functional Description
1	VIN	Power supply, 3.2 - 5V DC
2	GND	Signal ground
3	RXD	Serial port input, Connected to the host TXD
4	TXD	Serial port output, Connected to the host RXD
5	VOT	Module onboard 3.0V reference power output
		(maximum output capacity 50mA)
6	FAT	Fault signal output pin (reserved)
7	ALM	Alarm signal output pin (reserved)

Note:

- 1) After being powered-on, the module needs approximate 30s to warm up. Once the process is complete, the module enters into normal monitoring state.
- 2) After being powered-on, the module's serial port outputs a frame of data containing status and concentration values every 1 second.