# FC-CO-5000 Carbon Monoxide (CO) Gas Sensor

## Brief Introduction

The FC-CO-5000 carbon monoxide sensor from Prosense leverages proven fuel cell technology to directly measure CO concentration. It detects CO through an electrochemical reaction on the working electrode of the micro fuel cell, there the generated current is proportional to the CO concentration. By combining a solid electrolyte and a selective catalyst, the FC-CO-5000 achieves exceptional accuracy. Its low power consumption makes it ideal for battery-powered applications, as the fuel cell technology enables gas detection without requiring additional energy.




## Features

- Zero power consumption
- High precision & sensitivity
- Ultra Long life
- High stability & Fast response
- Excellent repeatability and selectivity
- Meets the requriements of UL 2034, UL 2075, CAN/ULC 588, EN 50291, EN54-26, EN 54-31, GB 15322, RoHS and Reach

## Applications

- Residential and commercial CO Detection, including but not limited to Battery-powered CO alarm, Portable CO Detection Device, Wearable CO Detection Device
- BESS CO Detector
- Industrial CO Detection
- Fire Detection(Multisensor fire detectors. Point detectors)
- Ventilation control for indoor parking garage

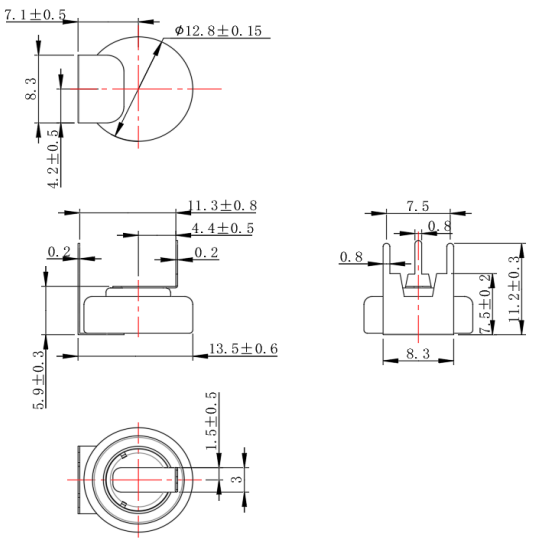
## Precautions

- The sensor shall be protected from exposure to organic solvents or corrosive gases.
- The sensor shall not be stored in dusty, dirty areas and anaerobic environments.
- The sensor must not be subjected to prolonged exposure to excessively high concentration of the target gas.
- Excessive shock or vibration shall be avoided to prevent potential internal internal damage.

**FC-CO-5000** is a cULus recognized component in accordance with the requirements of UL2075 and CAN/ULC 588. Please note that component recognition testing has confirmed long term stability in 15ppm and monthly sensitivity test at 0, 30, 70, 150, and 400 ppm of CO; other characteristics shown in this sheet have not been confirmed by UL as part of component recognition.

## Technical Specification

| Item | Specification |
|---|---|
| Principle | Micro Fuel Cell |
| Range | 0 ~ 5000ppm |
| Max Overload | 10000ppm |
| Sensitivity | 1.5±1(nA/ppm) |
| Response Time(T90) | < 30Sec |
| Detection accuracy | ±10ppm or ±20%, whichever is greater |
| Repeatability | 3% |
| Linearity | Linear |
| Temperature | -40℃ ~ 85℃ |
| Pressure | 1atm±10% |
| Humidity | 10% ~ 90% |
| Lifetime | 10 years |
| Warranty Period | 12 months |
| Weight | 3g |
| Output at 1000ppm alcohol | <10ppm |




**Notes: All dimensions are mm.**

**IMPORTANT NOTE:** Comprehensive effort has been made to ensure the accuracy of this document at the time of printing. The information provided is for guidance only and does not constitute a specification or an offer for sale.


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