

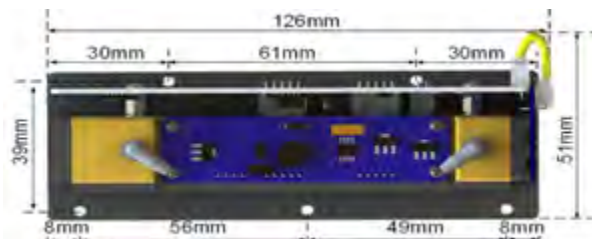


## EOC-GDM-XXX Non-dispersive Infrared (NDIR) Gas Sensors

EOC's NDIR-XXX sensors are designed using Non-dispersive Infrared (NDIR) technology for the detection of the gases listed below. Each specific sensor with minimized cross-sensitivities from other gases.



### Product Dimensions



Top View



Side View

All dimensions in mm

### NDIR Gas Modules:

CF <sub>4</sub>	Carbon Tetrafluoride (Tetrafluoromethane)
CH <sub>2</sub> F <sub>2</sub>	Difluoromethane
CH <sub>3</sub> OH	Methanol
CH <sub>4</sub>	Methane
CHCl <sub>3</sub>	Chloroform
CO	Carbon Monoxide
CO <sub>2</sub>	Carbon Dioxide
C <sub>2</sub> H <sub>2</sub>	Acetylene
C <sub>2</sub> H <sub>4</sub>	Ethylene
C <sub>2</sub> H <sub>5</sub> OH	Ethanol (C <sub>2</sub> H <sub>6</sub> O)
NH <sub>3</sub>	Ammonia
SF <sub>6</sub>	Sulphur Hexafluoride
VCM	Vinyl Chloride Monomer
VOC	Volatile Organic Compounds

### Electrical

Supply voltage	9 ~ 24 VDC
Working current	< 150 mA at 9 V
Power consumption	< 1.0 W Average < 1.5 W @ peak
Warm-up time	3 min (±0.1%vol ± 5% True Value) 60 min (±0.1%vol ± 3% True Value)
Output voltage	0.4 ~ 2.0 VDC (0.3 ~ 0.4 V for Negative Reading)

### Mechanical

Optical path	gilt stainless steel
Weight	208 grams

### Environmental

Temperature range	0°C ~ +40°C
Pressure range	1 atm ± 50%
Humidity range	0 % ~ 85 % RH non-condensing

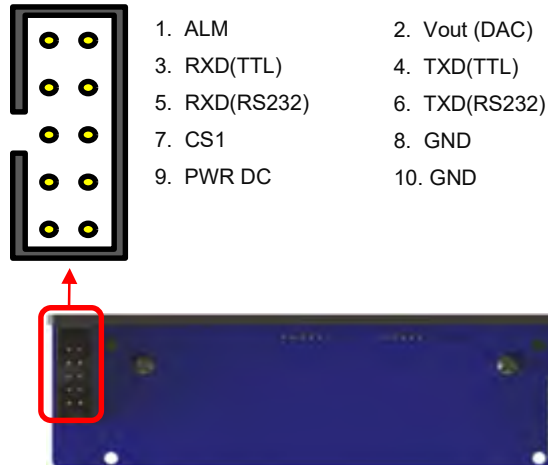
### Lifetime

Storage temperature	-40 °C ~ 50 °C
Operating lifetime	> 5 years
Storage life	> 5 years
Warranty	18 months

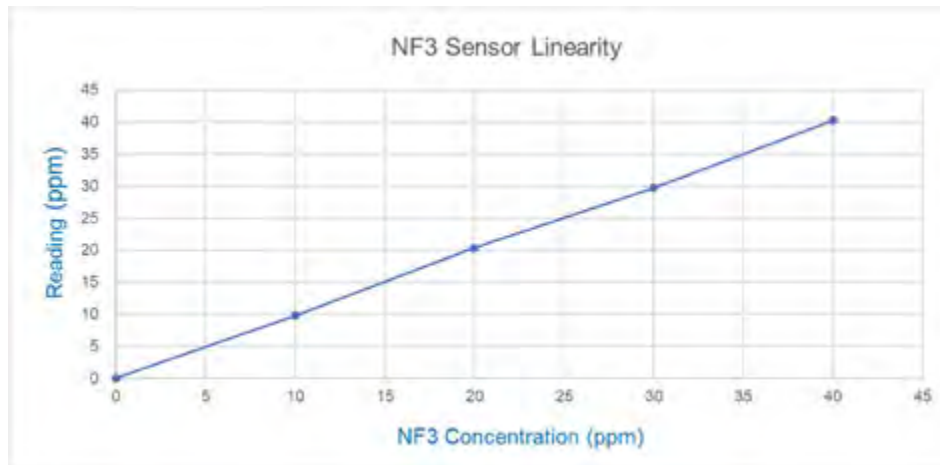
## Caution

Inappropriate use of the pins in product design will affect the sensor functionality. Exposure to high concentrations of solvent vapors should be avoided under any condition. Mechanical overstress may cause deformation of the sensor enclosure and damage the internal components.

## Pinout Details



## Linearity Data



## Cross-Sensitivities

SF6  $\approx$  -9.3%    CF4  $\approx$  0    IPA  $\approx$  -7.6%    Alcohol  $\approx$  3.2%    Water vapor  $\approx$  0.016%

## Safety Note

If the sensor is used in certain instruments for life critical applications, it is required to read the instrument user's guide carefully and comply with the calibration procedures by using the certified target calibration gas before each use. Failure to do so may cause serious injury and/or fatality. It is highly recommended for customers to validate the sensor performance using this document as a reference for their product designs or applications.