

# MEC-toxic sensors

datasheet



## Description

The MEC toxic sensors utilise electrochemical cells. These cells are field replaceable with a long life expectancy, making the MEC an extremely cost effective choice for monitoring toxic gas.

The MEC toxic sensors have been designed to allow them to be easily integrated into larger gas management systems via a digital serial communications interface.

### Benefits of MEC - toxic sensors

- Sensor can easily be replaced
- Digital output for OEM integration

### Uses

- Compressed breathing air monitoring
- Submarine atmosphere monitoring
- Confined space monitoring
- Modified atmosphere packaging

## Specifications

**Sensor range and gas species:**  
(See overleaf)

**Temperature range:**  
Generally -20 to +40°C except  
HF: -20 to +35°C  
NH<sub>3</sub>: -20 to +30°C

**Humidity:**  
0 to 99% RH non-condensing

**Supply voltage:**  
4.5 to 5.5V DC

**Data output:**  
RS485 using Analox protocol

**Enclosure dimensions:**  
65 x 50 x 35mm

**Required gas flow:**  
Ambient monitoring or fit sample flow adaptor  
(flow rate 0.2 to 1.0 lpm)

**Operating life in air at standard temperature and pressure:**  
HCN, NH<sub>3</sub>, HF: 1 year  
All others: 2 to 3 years

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Gas	Symbol	Model	Ranges
Ammonia	NH <sub>3</sub>	MEC-NH <sub>3</sub>	0 to 50 ppm 0 to 100 ppm 0 to 200 ppm
Bromine	Br <sub>2</sub>	MEC-Br <sub>2</sub>	0 to 10 ppm
Carbon monoxide	CO	MEC-CO	0 to 20 ppm 0 to 100 ppm 0 to 200 ppm 0 to 500 ppm 0 to 1000 ppm
Chlorine	Cl <sub>2</sub>	MEC-Cl <sub>2</sub>	0 to 10 ppm 0 to 100 ppm
Chlorine dioxide	ClO <sub>2</sub>	MEC-ClO <sub>2</sub>	0 to 10 ppm
Ethylene oxide	C <sub>2</sub> H <sub>4</sub> O	MEC-C <sub>2</sub> H <sub>4</sub> O	0 to 20 ppm
Fluorine	F <sub>2</sub>	MEC-F <sub>2</sub>	0 to 10 ppm
Hydrogen	H <sub>2</sub>	MEC-H <sub>2</sub>	0 to 1000 ppm 0 to 2000 ppm
Hydrogen chloride	HCl	MEC-HCl	0 to 10 ppm
Hydrogen cyanide	HCN	MEC-HCN	0 to 10 ppm 0 to 50 ppm 0 to 100 ppm
Hydrogen fluoride	HF	MEC-HF	0 to 10 ppm
Hydrogen sulphide	H <sub>2</sub> S	MEC-H <sub>2</sub> S	0 to 50 ppm 0 to 100 ppm 0 to 500 ppm
Nitrogen dioxide	NO <sub>2</sub>	MEC-NO <sub>2</sub>	0 to 10 ppm 0 to 100 ppm
Nitric oxide	NO	MEC-NO	0 to 100 ppm 0 to 1000 ppm
Ozone	O <sub>3</sub>	MEC-O <sub>3</sub>	0 to 2 ppm 0 to 5 ppm
Phosphine	PH <sub>3</sub>	MEC-PH <sub>3</sub>	0 to 10 ppm
Sulphur dioxide	SO <sub>2</sub>	MEC-SO <sub>2</sub>	0 to 20 ppm 0 to 100 ppm

\* All ranges shown in ppm (parts per million).  
Analox has a policy of continuous improvement and we reserve the right to upgrade or change specifications without prior notice.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



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Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.