

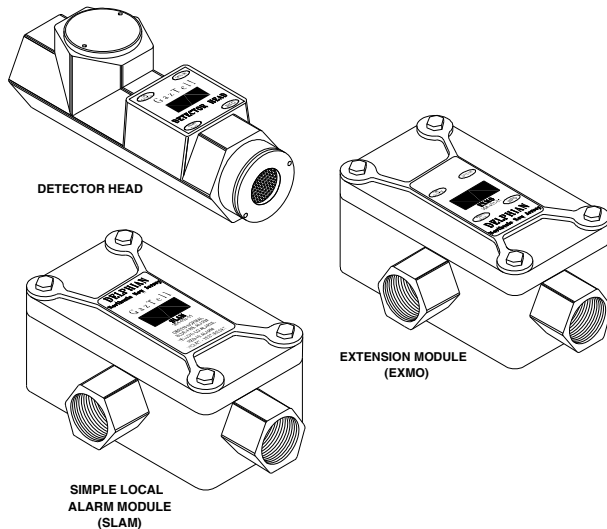
# GazTell

## Fixed Point Ethylene Oxide Electrochemical Detector Head with EXMO and SLAM

Reference:

Quotation No:

Date:



### Assembly Design

- Modular component design: detector head can be used alone or with the EXMO (extension module) which will display all the information from the detector head and perform all of its functions. The optional SLAM has relays for Fail, Low and High alarms and has a multi-color LED for system alerts.
- 100% quality tested.
- The detector head (and extension module) shows system warnings and failures.
- Built-in selftest continuously monitors hardware and software.
- Calibration required infrequently.
- RFI and surge protection circuits built in.
- Options include Splash/Dust Guard, Ported Adaptor, Reclamation Adaptor, Collection Cone, Wye Pipe Adaptor, Duct Mounting Plate, Lightning Arrestor and MODBUS RTU Communications Module (COMO).

### Construction

- Stand-alone. Modular construction which makes wiring easy and permits rapid replacement of components.
- Sensor and conduit box are explosion proof.
- The internal sensor components and all connectors exposed to the atmosphere are gold plated.
- All connectors are unique and are keyed to prevent incorrect connections.
- The detector electronics are encapsulated to prevent deterioration from dust and humidity.
- No moving parts.

### Specifications

<b>Dimensions:</b>	Detector Head	5"L x 2"W
	EXMO	6"L x 3.5"W x 2"H
	SLAM	6"L x 3.5"W x 2"H
<b>Shipping Weight:</b>	Detector Head	.875 lbs (.4 kg)
	EXMO	1.25 lbs (.6 kg)
	SLAM	1.25 lbs (.6 kg)
<b>Power:</b>	Detector Head	40mA max;
	EXMO	16mA max;
	SLAM	56mA max

**Output Signal:** Range 4-20mA or 1-5mA (4 - 20mA is default)

Output is linear and proportional to the gas scale.

Load (maximum resistance) 300 Ohms

#### Measurement Range:

0 - 10 ppm (0 ppm = 4.0mA, 10 ppm = 20mA), over range to 22mA (11.2 ppm)

**Cell Operating Range:** 0 - 20 ppm

**Saturation (Maximum Overload):** 100 ppm

#### Temperature Range:

Continuous Operating Temperature Range: -20°C to +50°C (-4°F to +122°F)

Storage Temperature Range: 0°C to +20°C (+32°F to +68°F)

#### Interfering Gas Equivalent ETO Signal in %

Carbon Monoxide	20%
Ethanol	55%
Toluene	20%
Methyl-ethyl-ketone	10%

**Blocking Gases:** Ethylene Oxide is oxidized at the anode; reducible gases such as  $\text{ClO}_2$ ,  $\text{Cl}_2$  and  $\text{NO}_2$  create an opposite reaction and can cause some blocking of the Ethylene Oxide reaction. *Not all interfering and blocking gases have been tested.*

**Poisoning Gases:** High concentrations of solvent vapors, alcohols, phenols, pyridine, ketones, amines, acetylene and chlorinated solvents can attack the cell. Never use these chemicals to clean near the detector head.

**Expected Operating Life in Air at 70°F:** >24 months

**Operating Pressure Range:** Atmospheric +/- 10%. The sensor may give a transient response to a step change in pressure

**Operating Relative Humidity Range:** 15 - 90% RH (relative humidity) non condensing (continuous). A step change in humidity may cause a transient zero drift.

**Response Time:**  $T_{90} \leq 30$  seconds

**Recovery Time:** Recovery time to 10% of final value is <100 seconds.

**Accuracy:**  $\pm 15\%$  of reading.

**Repeatability:**  $\pm 15\%$  of reading.

**Resolution:** ~0.1 ppm

**Long Term Drift:** < 20% per year

**Warm-up Time:** Less than 1 minute to operational.

**Stabilization Time:** Initial stabilization time to specification may take from 4 to 12 hours depending on ambient conditions. The detector head's calibration should be checked after 12 hours of operation.

**Warranty Period:** 12 months in Air at S.T.P. (from date of shipment)

**SLAM Relays:** 6 amps @ 120 volts

**SLAM Response Time:** Less than a second from the time the Detector Head sees sufficient gas to trigger an alarm to the relay operating.

**EXMO Response Time:** Less than a second from the time the Detector Head sees gas to the EXMO displaying that gas concentration.



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NOTICE: The information in this document is subject to change without notice. Not all possible interfering, blocking or poisoning gases have been tested. This document is provided in good faith but without warranty of any kind. It could include technical inaccuracies or typographical errors. The GazTell Owners Manual should be consulted if more information is required.