

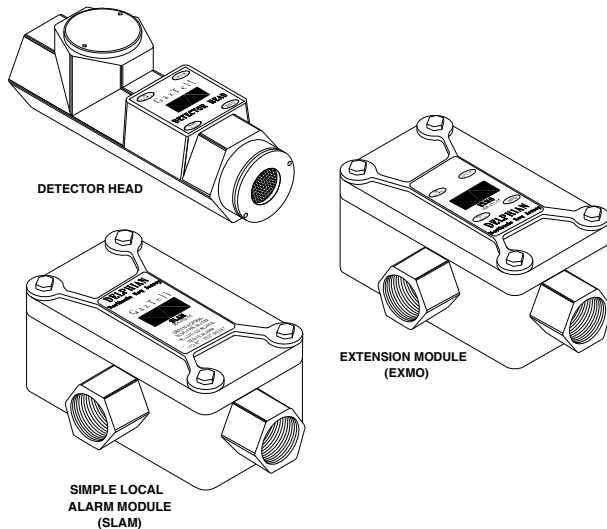
GazTell

Fixed Point InfraRed Carbon Dioxide Detector Head with EXMO and SLAM

Reference:

Quotation No:

Date:



Assembly Design

- Modular component design: detector head can be used alone or with the extension module (EXMO) which will display all the information from the detector head and perform all of its functions except detecting gas. The optional SLAM has relays for Fail, Low and High alarms and has a multi-color LED for system alerts
- 100% quality tested.
- Detector (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.

Patent: 7,996,159

Specifications

Dimensions:	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
Shipping Weight:	Detector Head	.875 lbs (.4 kg)
	EXMO	1.25 lbs (.6 kg)
	SLAM	1.25 lbs (.6 kg)
Power:	Detector Head	77mA max
	EXMO	16mA max
	SLAM	56mA max
	COMO	35mA max
Output Signal:	Range 4-20mA or 1-5mA (user selectable, 4-20mA is default)	
	Output is linear and proportional to the gas scale.	
	Load (maximum resistance) 300 Ohms	
Measurement Range:	0.02% Carbon Dioxide to 4.5% Carbon Dioxide by volume.	
Flooding:	Not flooded by high concentrations of gas.	
Humidity Range:	0-99% RH, non-condensing	
Temperature Range:	Operating: -40°F (-40°C) to +167°F (+75°C)	
	Storage: -58°F (-50°C) to +185°F (+85°C)	
	Detector head -20°C (-4°F) to +70°C (+158°F)	
	EXMO/SLAM/COMO to -20°C (-4°F) to +60°C (+140°F)	
Pressure:	The average sea-level pressure is 1013.25 mbar.	
	Normal pressure changes have a small effect on %VOL readings.	
IR Light Source:	Rated 70,000 hours	
Calibration Regulator:	Flowrate 1 LPM (liter per minute)	
Zero Calibration:	Every 6 months	
Span Calibration:	When monthly gas check shows need or annually.	
Mean Time Between Failures (MTBF@70F):	8 years (electronics)	
Response Time:	t(60) <12s	
Recovery Time:	t(10) <60s	
Accuracy:	+/-10% Measuring Range	
Repeatability:	+/-3% up to 4.5% by VOL	
Input Voltage:	Nominally 12 to 42 VDC.	
Warm up time:	45 seconds to operational. Up to one hour to specification depending upon ambient temperature.	
Zero Drift:	Less than 2% per month (estimated).	
Span Drift:	Less than 2% per month (estimated).	
Blocking Gases:	None known	
Poisons:	None known	
Interfering gases:	None known.	
Effect of low or high levels of Oxygen:	No effect	
Detector Head RFI/EMI Immunity:	Less than .04% change with 5w transceiver keyed within three feet.	
	RFI/EMI Protection complies with EN50270, EN61000-6-4	
Area Hazard Classification:	Class I, Divisions 1 & 2, Groups C, D	
Altitude Correction:	When span calibrated at point of use.	
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.	
Approval:	None applied for	
SIL (Safety Integrity Level):	SIL 2	
Warranty:	2 years from date of shipment.	



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