

SafEye Quasar 900 Infrared Open Path Gas Detector

| Quasar 900 is totally immune to interference from sunlight or any other sources of radiation such as flare stacks, arc welding or lightning. | The high power xenon lamp will compensate for changing weather conditions, including rain, fog, mist, snow and makes it immune to influences from solar radiation, arc-welding, stack flares or vibration from machinery. | Quasar 900 is approved to SIL2 (IEC61508), equipped with heated optics and tolerates a very wide temperature range to provide reliable detection. | No unrevealed failures. In normal operation, the output signal is 4 to 20 mA, depending on the measured gas concentration. Sub-4mA signals includes indications for beam blockage (2mA), a fault (1mA) In addition

IMAGE



ACCESSORIES



Alignment Telescope
Magnetic Mode Selector
Function Check Filters (2)
Set of Socket keys for access to units



Sunshade(SUS)
Tilt Mount Pole
Mount(U-Bolt, 5 inch)

SPECIFICATION

※ Specifications are subject to be changed without prior notice.

GENERAL SPECIFICATIONS					
	Model	901	902	903	904
Detection Range	Feett	23-66	50-132	115-330	265-660
	Meter	7-20	15-40	35-100	80-200
	Detected Gas	C1-C8			
Response Time	3 sec.				
Immunity to False Alarm	Not influenced by solar radiation, hydrocarbon flames and other external IR radiation sources.				
Sensitivity Range	0-5 LEL.m Methane and Propane		0-8 LEL.m Ethylene		
Spectral Response	2.0 - 3.0μm				
Displacement/Misalignment Tolerance	±0.5°				
Drift	±7.5% of the reading or ±4% of the full scale (whichever is greater)				
Minimum Detectable Level	0.15 LEL.m				
Temperature Range	-67°F (-55°C) to 149°F (65°C)				
Humidity	Up to 95% non-condensing (withstands up to 100% RH for short periods)				
Heated Optics	To eliminate condensation and icing on the window				
Warranty	Safety system - 3 years		Flash source bulb - 10 years		

ELECTRICAL SPECIFICATIONS				
Power Supply	24VDC nominal (18-32 VDC)			
Power Consumption	Detector: 250mA (300mA Peak)			
(peak includes heated optics)	Source: 250mA (300mA Peak)			
Warm Up Time	30 sec for transmitter and receiver			
Electrical Connection (specify)	2 x 3/4" - 14NPT conduits or 2 x M25 x 1.5mm ISO			
Electrical Input Protection	per MIL-STD-1275B			
Electromagnetic Compatibility	EMI/RFI protected per EN50270			
OUTPUTS - INTERFACES				
0-20mA Current Output	Sink (source option) configuration			
	Maximum load	500 ohm at 18-32 VDC	Misalignment	2.5mA
	Gas reading	4-20mA	Obscuration/beam block	2mA
	Normal, zero reading	4mA	Zero calibration mode	1mA
	Maintenance call	3mA	ault	0mA
RS-485 Interface - Modbus Compatible	The RS-485 input/output provides complete data information to a PC and receives control commands from the PC or handheld unit			
HART	HART communications on 0-20mA analog current (FSK) - used for maintenance and asset management			
Visual Status Indicator	3 color LED: Green - Power on, Yellow - Fault, Red - Alarm			
MECHANICAL SPECIFICATIONS				
Hazardous Area Approval	ATEX / IECEx approved per	Ex d e ib [ib Gb] IIB + H2 T4 Gb Ex tb IIIC T135°C Db The detector or source units have a combination of approvals. Each is a single enclosure (Exd) with integral, segregated rear terminal section (Exe) and intrinsically safe (Exia) data-port for external in-situ connection to Hand-Held Diagnostic unit.		
	FM / FMC	Approved per Class I Div 1 Groups B, C and D / Class II,III Div 1 Groups E, F and G		
Performance	Approved per FM6325 and tested by FM per EN60079-29-4			
Reliability	SIL2 per IEC61508 (TUV)			
Enclosure	The source and detector housings are stainless steel 316L with electro polish finish. The circuit boards are conformal coated and protected from mechanical vibrations. The tilt mount is also stainless steel 316L.			
Dimensions	Detector/Source 10.5 x 5.1 x 5.1 inch (267 x 130 x 130mm) Tilt Mount 4.7 x 4.7 x 5.5 inch (120 x 120 x 158mm)			
Weight	Detector/Source 11lb (5kg) Tilt Mount 4.2lb (1.9kg)			
Water and Dust Tight	IP66 and IP68 NEMA 250 6P			
Environmental	Meets MIL-STD-810C for Humidity, Salt and Fog, Vibration, Mechanical Shock, High and Low Temperature			