SafEye Quasar 950/960 H₂S and Ammonia Open Path Gas Detectors



The latest SafEye Quasar open path UV detection technology includes the 950 and the 960 series. The Quasar 950 models detect toxic Hydrogen Sulfide gas and the Quasar 960 models detect toxic Ammonia gas, both with path lengths of up to 263ft (80m). The Quasar 950 and 960 models can be tailored to protect your personnel and high-risk installation. Reliability is key and is assured with SIL2 (pending).

All Quasar 950/960 detectors incorporate heated windows to minimize any effects from condensation, icing, snow and are totally immune to interference from sunlight or any other sources of radiation such as flare stacks, arc welding or lightning. A range of outputs are available including 0-20mA, HART, Modbus RS485 to suit all control systems.

FEATURES & BENEFITS

- Long Range Gas Detection up to 263ft (80m)
- · Detection of toxic gases
 - 950 Series detects H₂S
 - 960 Series detects NH₃
- · High Sensitivity and fast response
- Heated optics to improve performance in ice. condensation and snow conditions
- Continuous operation in extreme and harsh environmental conditions
- · Solar blind and immune to industrial environments
- · Withstands extreme vibration conditions
- · Multiple output options for maximum flexibility and compatibility
 - 0-20mA
 - HART Protocol for maintenance and asset management
- RS-485, Modbus Compatible
- · Simple, one person installation, alignment, and calibration

- Programmable configuration via the handheld unit
- · Fast connection to I.S. approved handheld diagnostic/calibration unit
- 3mA "maintenance call"
- 3 Year Warranty
- ATEX & IECEx

Ex II 2 GD

(pending)

Ex d e ib [ib Gb] IIB+H2 T4 Gb Ex tb IIIC T135°C Db IP66

· Safety Integrity Level SIL2 (TUV) - pending

APPLICATIONS

Offshore platforms & FPSOs Petrochemical plants Chemical processing plants Gas filling and distribution terminals Gas transport and pipelines Perimeter monitoring



Detection Section S	CENTED AT CDECIFIC AT	TIONE							
Mode	GENERAL SPECIFICA								
Defection Range									
5-20m 5-20m 15-40m 15-40m 15-40m 15-40m 35-80m 35-80m 36-80m 16-80m 16									
Petected Gas	Detection Range								
Response Time Ti	Datastad Coa								
Spectral Response 200.300m			Ammon	іа н	₂ S	Ammonia	н ₂ 5	Ammonia	
Special Response 200.300mm O-500p,p.m. (by setting) O-200p,p.m. (b									
Displacement/Misalignment Tolerance									
D-200p.p.m. (by setting) D-200p.p.m. (by s	· · · · · · · · · · · · · · · · · · ·	0-500p.p.m. (standard)							
Displacement Misalignment 1° 1° 10 10 10 10 10 10	Scholling Range								
Tolerance	Displacement / Misalignment	11 ()							
Temperature Range									
Provided	Drift	Long term ±5% of full scale							
Detector: 250mA (300mA peak)	Temperature Range	-67°F to 149 °F (-55 °C to 65 °C)							
Departing Voltage	Humidity	Up to 95% non-condensing (with stands up to 100% RH for short periods)							
Departing Voltage	FI FCTRICAL SPECIFIC	ATIONS							
Detector: 250mA (300mA peak) Source: 250				. (5.6)					
Source: 250mA (300mA Peak)		, ,							
Marm up Time 30 sec for transmitter and receiver Electrical Connection (specify) 2 x 3/4" - 14NPT conduction or 2 x M25 x 1.5mm ISO	Power Consumption								
Electrical Connection (specify) 2 x 3/4" - 14NPT conduits or 2 x M25 x 1.5mm ISO	Warm un Timo								
Electrical Input Protection Electromagnetic Compatibility EM/RFI protected to EN50270	-								
COUTPUTS		,							
OUTPUTS O-20mA Current Output Sink (source option) configuration - maximum load of 500Ω at 18-32VDC Gas reading A-20mA Obscuration/beam block 2mA Normal, zero reading 4mA Zero calibration mode 1mA Misalignment 2.5mA Fault OmA Misalignment Misalignment OmA Misalignment 2.5mA Fault OmA Misalignment 2.5mA Fault OmA Misalignment 2.5mA Fault Communication link that can be used in computer controlled installations Visual Status Indicator 3 color LED: Green – Power on, Yellow – Fault, Red – Alarm MECHANICAL SPECIFICATIONS Materials - Source and detector housings are Stainless Steel 316L with electro polish finish - Circuit boards are conformal coated and protected from mechanical vibrations Mounting Stainless Steel 316L with electro polish finish Dimensions Detector / Source 10.5" x 5.1" x 5.1" (267 x 130 x 130 mm) Tilt Mount 4.7" x 4.7" x 5.5" (120 x 120 x 120 x 158mm) Weight Detector / Source 11lb (5kg) Tilt Mount 4.2lb (2kg) Environmental Standards Meets MilL STD-810C for Humidity, Salt & Fog, Vibration, Mechanical Shock, High Temp, Low Temp Water and Dust IP66 and IP68 per EN60529, NEMA 250 6P APPROVALS Hazardous Area ATEX and IECEX Ex II 2 GD, (pending) Ex de IIB + H2 T4 Gb Ex tb IIIC 1135°C Db Reliability SIL2 per IEC61508 (TUV) - pending Other GOST-K ACCESSORIES Tilt Mount P/N 888270 HART Hand-Held Harness Kit P/N 888815 Commissioning Kit P/N 888263 U-Bolt/Pole Mount (5") P/N 794079-8 Sunshade									
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