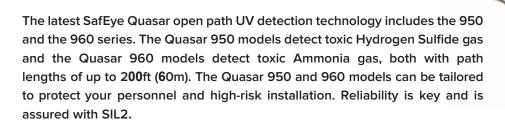


# SAFEYE QUASAR 950/960

H<sub>2</sub>S and Ammonia Open Path Gas Detectors



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.

#### **APPLICATIONS**

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

## **KEY FEATURES**

- Long Range Gas Detection up to 200ft (60m)
- · 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 Ex d e ib [ib Gb] IIB+H2 T4 Gb, Ex tb IIIC T135°C Db IP66
- Safety Integrity Level SIL2 (TUV)
- Inmetro (UL)
- TR CU/EAC

# SAFEYE QUASAR 950/960

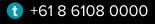
### **DETECTED GASES**

Model	951	961	952	962	953	963
Detection Range	<b>17-52</b> ft	1 <b>7</b> -66ft	<b>46-</b> 132ft	<b>46</b> -132ft	115-2 <b>00</b> t	115-263ft
	5- <b>16</b> m	5- <b>16</b> m	1 <b>4</b> -40m	1 <b>4</b> -40m	35- <b>6</b> 0m	35- <b>6</b> 0m
Detected Gas:	H <sub>2</sub> S	Ammonia	H <sub>2</sub> S	Ammonia	H <sub>2</sub> S	Ammonia

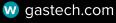
Specifications subject to change without notice
T90≤5 sec
Not influenced by solar radiation, hydrocar-
bon flames and other external IR radiation sources
200-300nm
0-500p.p.m. (standard)
0-200p.p.m. (by setting)
±1º
Long torm LEV of full cools
Long term ±5% of full scale
−67°F (−55°C) to 149°F (65°C)
Up to 95% non-condensing (withstands up to 100% RH for short periods)
24 VDC nominal (18-32 VDC)
Detector: 250mA (300mA peak)
Source: 250mA (300mA Peak)
30 sec for transmitter and receiver
$2 \times 3/4$ " – 14NPT conduits or $2 \times M25 \times 1.5$ mm ISO
According to MIL-STD -1275B
Sink (source option) configuration - maximum load of 500 ohm at 18-32 VDC Gas reading 4-20mA Obscuration/beam block 2mA Normal, zero reading 4mA Zero calibration mode 1mA Maintenance call 3mA Fault 0mA Misalignment 2.5mA

RS-485	RS-485 Modbus compatible communication link that can be used in computer controlled installations	
HART	Optional HART communications on the 0 -20mA analog current (FSK) - used for maintenance and asset management	
Visual Status	3 color LED: Green – Power on, Yellow –	
Indicator	Fault, Red – Alarm	
Hazardous Area	ATEX and IECEx Ex II 2 GD,	
Approval	(pending) Ex de IIB + H2 T4 Gb	
	Ex tb IIIc T135°C Db	
Reliability	SIL2 per IEC61508 (TUV)	
PART NUMBER	90-0950 & 90-0960	
Materials	The source and detector housings are	
	stainless steel 316L with electro polish	
	finish.	
	The 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 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	
weight	, 5,	
1	(2kg)	
Inmetro	Ex tb eb ib [ib Gb] IIB + H2 t4 Gb	
Environmental	Meets MIL-STD-810C for Humidity, Salt and	
	Fog, Vibration, Mechanical Shock, High and	
	Low Temperature.	
Water and Dust	IP66 and IP68 per EN60529, NEMA 250 6P	









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