



OPEN-PATH IR GAS DETECTION SYSTEM SPECIFICATION – SAFEYE 800 SERIES

Line-of-sight gas system, comprising of separated source and detector in stainless steel, explosion- proof enclosure with heated optical window. Intrinsically-safe plug interface connection to PC for diagnostics.

DESCRIPTION	PRODUCT OFFERED			
Manufacturer	MSA			
Model Number	SafEye 800 Series Flammable Gas Detector			
Principle Of Operation	Infrared Open Path Gas Detection			
Detected gases	Simultaneous detection of C1-C8 hydrocarbon gases			
Detection Range	Dist (m)	4-20	15-70	50-120
Misalignment tolerance	+/-1° of rotation			
Body Material	Stainless Steel (316) with passivation coating			
Electronics	Conformally coated			
Dimensions	Detector: 9.7"x 6.1"x 6.0"(246 x 145 x 154 mm) Source:11"x 5.6"x 6.1" (279 x 142 x 154 mm) Tilt-mount: 4.7"x 4.7"x 5.5" (120 x 120 x 140 mm)			
Weights	Source = 14.3 pounds (6.5 Kg) Detector = 12.8 pounds (5.8 Kg) Tilt mount = 4.2 pounds (1.9kg)			
Range	0-5 LEL meters as standard or 0-2 LEL meters			
Connection	2 x M25 x 1.5 mm ISO or ¾ "-14 NPT conduits			
Power Consumption	Detector: 100 mA without heated optics (200 mA Peak with heated optics) Source: 220 mA without heated optics (300 mA Peak with heated optics)			
Mounting	Stainless-steel heavy-duty tilt mounts			
Output 4-20 mA	4-20 mA = 0-5 LEL.M. Current output sink or source - resist loop 100-600 ohms. 0mA=Fault, 1mA=Zero Calibration, 2mA = non-critical fault, 3mA=maintenance call, 4mA=Zero (no gas), 4-20mA=continuous gas reading, 21mA=over scale			
Output Relays	Relay			
Output RS-485	ALARM	Type	Normal position	Max rating
	FAULT	SPST	N.O	5A @ 30 VDC or 250 VAC
	Serial communication for full control with maintenance and trouble shooting facility can be integrated for a network of 64 detectors.	SPST	N.C	5A @ 30 VDC or 250 VAC
Power Supply	18-32 vdc required			
Protection	IP 66/X7			
Operating Temp Range	-40 to +55 °C			
Humidity range	RH to 95%			
FM Approval	Class I, Div 1, Groups A, B, C, and D Class I, Div 2, Groups A, B, C, and D			
Haz Area Cert	ATEX approved for hazardous location			
Accessories	Commissioning kit, hand-held diagnostics unit, remote access kit			
Warranty	3 years entire system, 10 years Xenon flash source bulb			
MTBF	11.76 Years (Basic FR = 9.7036 f/million hrs)			

OPEN PATH GAS DETECTOR ACCESSORIES – SAFEYE 800 Series

Remote Access Kit: The SAFEYE 800 Detector is equipped with an I.S approved data-port, which connects in the field to I.S. approved hand-held diagnostics unit.

I.S Hand-Held Diagnostics Unit: All-in-one Diagnostic / Calibration / Interrogation plug-in unit (ATEX I.S. approved). A General purpose version of the hand-held kit is also available

The hand-held unit is used for: Detector function programming on site and alteration to the detector set-up. During installation, the hand-held unit will display all the detector's parameters, zero calibrate and verify that the installation has been completed successfully.
Maintenance and Trouble Shooting – The hand-held unit will provide recommendation of maintenance action to overcome and optimize the detector's performance.

Commissioning Kit includes:

- Function Test filter
- Alignment telescope
- Tools in carrying case