

LEADER IN
OPTICAL FLAME AND
OPEN PATH GAS DETECTION



Product Catalog



Over 30 years of industrial experience

Spectrex pioneered key industry standards such as patented IR3 in optical flame detectors and patented Xenon Flash designs in OPGD detectors

Also pioneered by Spectrex is the SAFE, the world's fastest and efficient automatic fire detection and suppression systems for US Army and Marine armored vehicles

Over 30,000 vehicles worldwide, including 13,000 MRAP (Mine-Resistant Armored Personnel) are protected

Strong R&D with continual development of new, constantly improving technologies and products

Over 105,000 units of the IR3 in service worldwide – in extreme environments such as the Antarctic, Alaska, India, Australia, GOM, SA, and the Middle East

Every detector is 100% tested

Less than .01% failure rate

SharpEye™

40/40 Series

- Explosion proof optical flame detectors
- Large field of view: 100°H, 95°V
- Multiple output options for maximum flexibility and compatibility
 - Relays (3) for Alarm, Fault and Auxiliary
 - 0-20mA (stepped)
 - HART Protocol for maintenance and asset management
 - RS-485, Modbus Compatible
- 5 Year Warranty
- Heated window for operation in harsh weather conditions



40/40I

Long distance detection to hydrocarbon fires, with highest false alarm immunity



40/40M

False alarm immune, long distance detection of hydrocarbon and hydrogen fires



40/40UV/IR

Accurate detection of hydrocarbon-based fuel and gas fires, with optional model for hydrogen and hydroxyl fires

The most durable, weather resistant and reliable flame detectors ever made



Applications

- Offshore
- Onshore
- Chemical plants
- Petrochemical plants
- Storage Tank farms
- Aircraft hangars
- Power Generation facilities
- Pharmaceutical Industry
- Printing Industry
- Warehouses
- Automotive
- Explosives & Munitions
- Waste Disposal facilities



40/40UFL

Highly reliable and high speed flame detector, detecting fires within 20msec for hydrocarbon, hydrogen and hydroxyl fires



40/40UV

Detects hydrocarbon-based fuel and gas fires, invisible hydrogen flames, and fires from hydrides, ammonia, silane and other organics



40/40UFI

Detects hydrocarbon fuel and gas fires at long distances and explosive 1 ft (0.3m) diameter gas cloud explosion in max. 50 msecs at 66 ft (20m) with the highest immunity to false alarms

Accessories



Flame Simulator



Air Shield



Weather Protector



USB RS485
Harness Kit



Tilt Mount



Duct Mount



U-Bolt / Pole
Mount

HAZARDOUS AREA EX



RELIABILITY

SIL2

PERFORMANCE

EN54-10 FM3620



SharpEye™

20/20 Mini Series

Compact, light weight, high performance at low cost

- Long distance Flame Detection: up to 140ft / 43m
- Highest immunity to false alarms
- Output options:
 - Alarm and Fault relay outputs (4 wire)
 - Stepped mA output (3 wire source)
- Low Power Consumption
- High-Speed Response
- Large Field of View (100° horizontal / 90° vertical)
- Standard 4-Wire Connection
- 4-20mA Sink or Source (3-4 wires) Configuration
- RS-485 Modbus Compatible



20/20MI

High performance featuring lower cost, lower power and more compact design



20/20ML

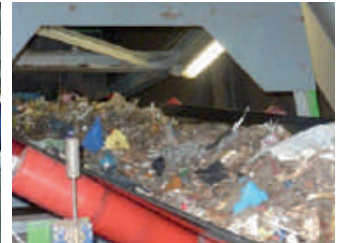
Compact, lightweight and rugged UV/IR detector providing accurate detection of hydrocarbon-based fuel and gas fires, hydrogen and hydroxyl fires



20/20MPI

The 20/20MPI is a compact, lightweight, high performance IR3 detector, based on industrially proven IR3 technology. Provides detection up to 140ft (43m)

Applications



Gas station • Chemical factory • Aircraft Hangars • Waste Handling • Marine Vessels Engine Rooms • Unmanned Gas Stations • Chemical industry • Burners • Office Areas and Atrium Areas • Boilers and heaters • Automotive parts manufacturing • Storage areas • Nuclear power plants • Power generation – pumps • Car parking towers and garages • Generators and unmanned stations • Recreational and sports arenas (facilities)

Accessories



Flame Simulator



Air Shield



Protective Cover included with each new detector



Tilt Mount included with each new detector



Tilt Mount



Rain Cover



Quasar 900 Series

The most reliable gas detector in all weather conditions

- Detection of hydrocarbon combustible gases
- High reliability
- Immunity to false alarms
- Performance in all weathers
- Failsafe
- Built-in data logger
- Gas library
- Minimum detectable level – 0.15 LEL m
- Simple to align and commission
- Complete Access in the Field or Safe Area
- 0-20mA analog output with HART capability
- RS485 Modbus, where up to 256 detectors can be linked



QUASAR 900

The SafEye Quasar 900 is an open path detection system which provides continuous monitoring for combustible hydrocarbon gases. It employs “spectral fingerprint” analysis of the atmosphere using the Differential Optical Absorption Spectroscopy (DOAS) technique.

The Quasar 900 consists of a Xenon Flash infrared transmitter and infrared receiver, separated over a line of sight from 23 ft (7m) up to 660 ft (200m) in extremely harsh environments where dust, fog, rain, snow or vibration can cause a high reduction of signal.

Applications



Offshore platforms & FPSOs • Petrochemical plants • Chemical processing plants • Gas filling and distribution terminals • Gas transport and pipelines • Large storage areas & buildings • Perimeter monitoring

Accessories



Stainless steel sunshade Tilt Mount Pole Mount



HART Hand-Held Diagnostic Unit



Commissioning Kit

HAZARDOUS AREA (ZONE 1)



PERFORMANCE (3rd PARTY)



RELIABILITY

SIL2



SafEye™

Quasar 950/960 Series

Toxic gas! detect it quickly and safely

- Long Range Toxic Gas Detection up to 200ft (60m)*
- Detection of toxic gases:
 - 950 Series detects H₂S
 - 960 Series detects NH₃
- 0-20mA
 - HART Protocol for maintenance and asset management
 - RS-485, Modbus Compatible
- Simple, one-person installation, alignment, and calibration
- Multiple output options for maximum flexibility and compatibility
- Programmable configuration via the handheld unit
- Fast connection to I.S. approved handheld diagnostic/calibration unit
- 3mA “maintenance call”
- 3 Year Warranty



QUASAR 950/960

The 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 200ft (60m).

Applications



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

Accessories



Stainless steel sunshade
Tilt Mount
Pole Mount



HART Hand-Held Diagnostic Unit



Commissioning Kit

HAZARDOUS AREA (ZONE 1)

EAC

RELIABILITY

SIL2

SafEye™

300 Series

Open Path Gas Detection Systems for Air Duct

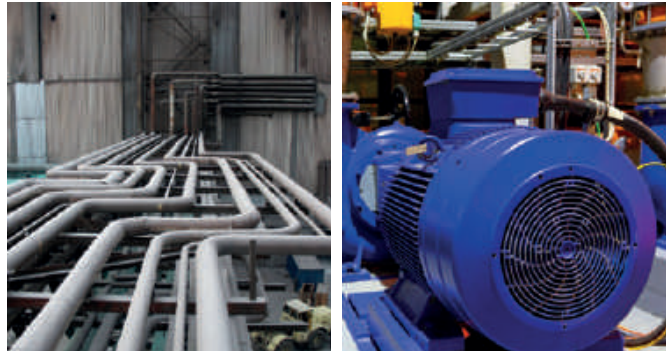
- High sensitivity
- Fast response
- Low maintenance
- Proven technology
- Specially designed to perform in harsh environments
- Standard interface options:
 - 4-20mA
 - RS-485



AIR DUCT

The Duct SafEye Open Path Detectors monitor ingress of hazardous flammable gas concentrations into air intakes of turbine engines and HVAC air ducts. Duct applications require that the small path across an air inlet responds with a very high sensitivity, full scale of 1 LEL.m for 2-6.6ft (0.6-2m) wide inlet and full scale of 2.5 LEL.m for 6.6-23ft (2-7m) wide inlet.

Applications



HVAC ducts in accommodations • Areas • Air ducts in process areas • Stacks and exhaust towers • Compressors and generators enclosures • Curing ovens and drying equipment, printing equipment • Engine & Turbine air intake and exhaust • Air intakes of safety enclosures

Accessories

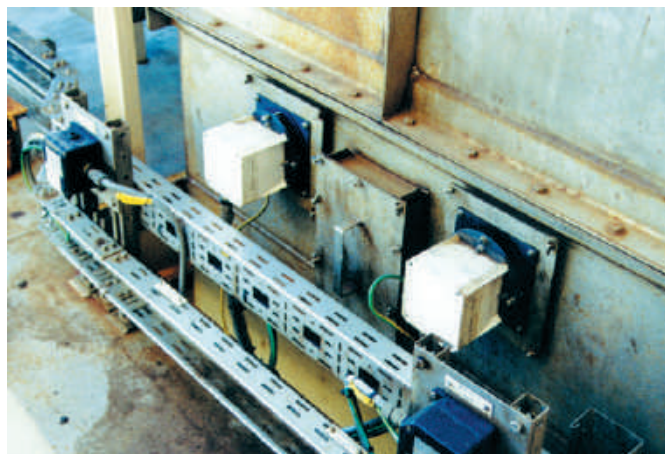
The following optional accessories designed for the SafEye system are available.

Duct Mounting

- Interfaces between the detector and the duct surface
- Enables the detector's alignment up to 3° in all directions

Commissioning / Alignment Kit for standard

- Required for commissioning and future maintenance checks
- One kit required per site
- Included with the kit:
 - Alignment telescope
 - Magnetic mode selector
 - Function check filter for system testing along with socket keys for access to units



Air Duct Installation on ETAP Platform in the North Sea



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