A Customizable Fire and Gas Safety System

Flame Detection

2. X3302 Multispectrum IR Flame Detector—Detects hard-to-see hydrogen flames and other non-carbon-based flames. Its specialized detection in the infrared (IR) band reduces false alarms encountered with traditional detection techniques. Available with HART option and SIL 2 certification.

3. X3000 Single Frequency IR Flame Detector—Detects IR radiation of hydrocarbon fires. Patented signal processing enables the detector to see fires while rejecting most false-alarm sources. Available with HART option and SIL 2 certification.

4. X5200 UVIR Flame Detector—Detects hydrocarbon flames by correlating signals from both an ultraviolet (UV) sensor and an IR sensor. Disregards UV radiation sources such as arc welding and lightning. Available with HART option and SIL 2 certification.

5. X2200 UV Flame Detector—Responds to many types of fires quickly and reliably by detecting the UV radiation emitted by most fires. Unique optical design ensures solar immunity. Available with HART option and SIL 2 certification.

6. GT3000 Electrochemical Gas Detector with FlexVu® Universal Display—Reacts accurately to toxic gases. Users can change sensors while the detector is powered. Can be paired with the FlexVu Universal Display, which provides local or remote calibration, communications using protocols such as HART and Modbus, and is immune to most parasitic.

7. NITMOS Gas Sensor with FlexVu® Universal Display—Applies nanotechnology (NT) to a Metal Oxide Semiconductive (MOS) sensor to accurately detect low levels of hydrogen sulfide in under six seconds. Tolerates extremes in temperature and humidity.

8. PHR9400 PointWatch™ IR Gas Detector with FlexVu® Universal Display—Provides accurate point detection of combustible hydrogen gases. The IR sensor measures in the lower flammable limit (LFL) range. Provides continuous self-testing and is immune to most parasitic.

9. PIECEL PointWatch® IR Gas Detector—Provides accurate point detection of combustible hydrocarbon gases and measures in the LFL range. In addition to providing continuous self-testing and being immune to most parasites, PIECEL is HART enabled, offers a SIL 2 option, and uses stainless steel construction for maximum strength.

Safety System Components
10. OPCEL Open Path Eclipse® IR Gas Detector—Detects combustible hydrocarbon gas clouds in large open areas and measures in the LFL-range meter. Offered with an integrated LON output interface.

11. Catalytic-Bead Gas Detector with FlexVu® Universal Display—Detects hydrocarbon and non-hydrocarbon combustible gases and allows one-piece, non-intrusive calibration.

12. UDI10 DCU Universal Display—Can be used with various 4-20 mA gas detection devices, with or without HART. The unit provides display, output and control capabilities for the gas detector.

13. FlexLight™ LS1200 Line-of-Sight (LOS) IR Gas Detector—Continuously monitors for gas clouds in large open areas and measures in the LFL-meter range up to 120 meters. Provides rock-solid mounting, stainless steel construction, and easy installation.

14. FlexSonic® Acoustic Gas Leak Detector—Monitors for the distinct ultrasound emitted by pressurized gas leaks across a wide spectrum of frequencies. Is a non-contact gas leak detector suitable for harsh outdoor applications, unmanned operations and extreme environments, and it is unaffected by fog, rain, and wind.

15. Analog (4-20 mA) Input Module—Responds to many types of fires quickly and reliably by detecting the UV radiation emitted by most fires. Unique optical design ensures solar immunity. Available with HART option and SIL 2 certification.

16. Addressable Smoke and Heat (ASH) Module—Provides continuous supervision of system input/outputs between Apollo smoke/heat detectors and the EQP controller. Enables non-hazardous areas (heating, ventilation, and control rooms) to be monitored by the same safety and process system. Monitored inputs/outputs from other gas detectors. May be used with X-Series flame detectors. Available with SIL 2 certification.

17. Local Operating Network/Signaling Line Circuit (LON/SLC)—Provides a fault-tolerant digital network that expands to meet future needs. Reliable communication is arranged as a loop that starts and ends at the EQP controller. Enables non-hazardous areas (heating, ventilation, and control rooms) to be monitored by the same safety and process system. Monitored inputs/outputs from other gas detectors. May be used with X-Series flame detectors. Available with SIL 2 certification.

18. Safety System Software (5)—Provides a user-friendly, accurate interface to configure, monitor, and maintain the safety system. Drives available include Emerson® AMS™ and Open Platform Communications (ODC).

19. Eagle Quantum Premier® (EQP) Safety System Controller—Manages, maintains, monitors, and controls loop devices. This multi-channel programmable controller has the logic needed to meet NFPA 72-2010 requirements and performs the functions of a fire and gas detection/releases system. Available with redundancy and SIL 2 certification. Multiple protocols/protocols that communicate with DCS, PLC, and SCADA systems:
   - RS-232 Modbus RTU
   - RS-485 Modbus RTU
   - ControlNet™
   - Ethernet / Modbus TCP/IP

20. Enhanced Discrete I/O Module (EDIO)—Superior I/O provides eight channels that can be configured as: initiating device, two-wire heat/sensor detection, notification appliance, and releasing circuits. Supports Class A and B input and output wiring. Available with SIL 2 certification.

21. Relay Output Module—Provides eight channels of relay output points programmed for supervised operation.

22. Signal Audible Module (SAM)—Provides two supervised circuits to control 24 Vdc polarized audible/visual indicating appliances.

Comprehensive Support and Expertise
With over 40 years of systems design expertise, our dedicated project support personnel provide engineering services from the first conversation to future maintenance and support. Det-Tronics works with you from start to finish of your project and beyond.

- Project Definition
- Project Engineering
- Systems Integration
- Formal Training and Field Service