Frequently Asked Questions

Q. What are flame detectors?
A.   Flame detectors sense a fire when it is very small to minimize damage. Flame detectors are typically used in hazardous locations where large volumes of combustibles are present.

Q. What is the MultiFlame FV-40 family?
A.   The FV-40 family of flame detectors provides multiple flame detector sensor technologies in a common housing and user interface. This universal family of detectors allows customers to install the most cost effective solution based on the application.

Q. What flame detection technologies are available within the flame detection family?
A.   Two types of sensors are utilized:
UV Sensor - An optical sensor with filters that detect UV energy in the (0.185-0.260μm) band. Energy in this wavelength is given off by hydrogen and hydrocarbon fires.

IR Sensor - An optical sensor with filters to sense CO_2 emissions in the 2μm (2.5-3.0μm) or 4μm (4.4-4.6μm) range enabling the detection of flames as a greater distance. 2μm tuned IR sensors are able to sense hydrogen or hydrocarbon flames. 4μm tuned IR sensors are only capable of seeing visible flames. Multi IR detectors employ two additional sensors with filters above and below the optimum sensing range to reduce the potential for false alarms.

Q. Can I integrate this solution into my existing flame detection system?
A.   The FV-40 family provides a variety of output options including analog 4-20ma, modbus, and relay contacts to integrate with any system and any wiring techniques.

Q. What is the SIL approval and what does it mean to me?
A.   The FV-40 line meets the high reliability European Safety Integrity Level IEC EN 61508 requirements. Although your particular project may not require products meet this standard, this is a testament to the products reliability. The FV-40's dual processor design was third party evaluated by TUV to verify reliability.

Q. What benefit can the FV-40 provide to you?
A.   The FV-40 product family provides a variety of flame detection options while maintaining a common housing and user interface to provide reduced training and maintenance requirements. Given the technology and feature options within the FV-40 family, customers can vary product configurations to meet their budget or application requirements.

Q. What HART Tools are compatible with the FV-40?
A.   The FV-40 was tested on HDC 625 by Hart Communications Foundation and the SMAR 401 and Emerson 375 devices are known to be compatible. Device descriptors (DD) are available for download at http://www.hartcomm.org.

Q. What accessories are available with the FV-40?

A. Tilt Mount - Allows accurate directional selection of the detector for optimum area coverage. The bracket allows movement up to 40˚ in every direction, thus ensuring maximum effectiveness of and accurate location of the detectors coverage area.

Weather Protector - Provides protection from the sun, rain, and snow to optimize response in all weather conditions.

Flame Simulator - Allows testing of optical flame detectors in areas where real fires cannot be ignited. Testing is also mandatory in some industries to "proof test" flame detector operation and to satisfy statutory requirements.

Laser Pointer - A commissioning tool to designate the optical flame detector's area of coverage (cone of vision) onsite at the specific installation. The accessory enables the installer to optimize the detector's location and actual detection area coverage of each detector. The device comprises two laser emitters with one emitter positioned on the central axis and the other positioned on a rotating lever.

Air Shield - Enables you to install the detector in dirty areas and to keep the window clean using compressed air. This prevents accumulation of dirt on the window and enables the detector to continue to operate under harsh conditions.

Q. How do I choose the right FV-40 solution?
A.

	FV-40 Single IR	FV-40 UV	FV-40 UV/IR 2 and 4	FV-40 Triple IR	FV-40 Multi IR
Aerospace		X	X	X	X
Chemical Processing			X	X	X
Chemical Storage	X		X	X	X
Explosives and Munitions		X	X		X
Offshore Crude Production			X	X	X
Onshore Crude Production			X	X	X
Petroleum Refining			X	X	X
Pharmaceutical Manufacture	X	X		X	X
Power Generation	X	X	X	X	X
Printing	X	X	X	X	
Water Disposal	X	X	X	X	X

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