Technical Information

FLD-MXM

ERBUS-compatible Acquisition Module with Intelligent Thresholding

Description

FLD-MXM is an intrinsically safe high-performance multiplexed acquisition module designed for detecting leaks of refined products, crude oils or organic solvents in extreme environmental conditions. This device is based on the best available on the market leak sensing technology from EVTeam for building a complete and very reliable leak detection system in refineries, tank farms, airports, commercial buildings, Oil&Gas facilities, etc. The device is engineered for outdoor installation in challenging environmental conditions. The measurement frontend is designed for interfacing with reusable, fully passive hydrocarbon sensor cables and sensing probes manufactured by EVTeam Corp. The multiplexed architecture of the acquisition module allows up to 16 individual sensor sections not exceeding 25 m / 82-ft each to be monitored by FLD-MXM. Advanced measurement techniques and data treatment algorithms are used to provide intelligent thresholding for eliminating the nuisance alarm due to the presence of motor/lube oils, greases, residues of old leaks, etc. This acquisition module is monitored through the EVTeam ERBUS proprietary field bus allowing reliable communication over distances exceeding 10 km. Please contact EVTeam for additional information on suitable monitoring devices.

FLD-MXM is approved for installation in classified locations according to Atex, IECEx and the North American regulations.

Photos and illustrations are not contractually binding and are subject to change without notice.

Classified locations approvals:

IECEx LC19.0012X

ExNB 20 ATEX 0036 X

c LC us

LISTED

Features and Benefits

- Detects reliably viscous hydrocarbons at very low temperatures
- True multi-leak capability
- Real-time transmission of sensor contamination
- Intelligent thresholding
- Low power consumption for reliable remote monitoring over very long distances
- Very wide operating temperatures range
- Able to detect the vapors diffused in the soil after spill from underground pipes

Typical Applications

- Leak detection in Oil & Gas facilities
- Monitoring of Military and Scientific fuel depots, generators and pipeworks in demanding environments
- Leak detection in refineries, tank farms, mainline pipe sections
- Monitoring of airport hydrant systems
- Leak detection in commercial buildings, downstream and fuel retail facilities

Typical Detection time at 20°C with FLD-HSC sensor cable

Unleaded Gasoline	1 min 30 seconds
Diesel, Jet fuel	2-3 minutes
Light Crude Oils	6-8 minutes
Heavy Crude Oils	12-16 minutes
Motor/Hydraulic/Silicone Oils	16-19 minutes
Bunker C oil	45-55 minutes

Technical Data

Dimensions	145 x 65.8 x 40 mm (5.709 x 2.592 x 1.575 in.)
Weight	345 g (0.76 lb.)
Fire Rating	UL94-HB
Ingress Rating	IP67/NEMA4X - suitable for outdoor/direct burial
Operating Temperature Range	-40°C to +80°C
Power Supply Voltage Range	12 - 20 VDC
Power Consumption	20mA max.
Mounting	Wall-mounted with external mounting brackets
Hazardous Locations Classification	**IS/ I/ 1/ CD/ T4 ; I/ 0/ AEx/ ia IIB T4 ; Class I, Zone 0, Ex ia T4** **Class I, Div. 1, Groups C,D; T4** Ex **II 1 G Ex ia IIB T4 Ga**

Warning! This is an agency-approved product. It shall be installed according to the corresponding hazardous location certificates. Any deviation from the conditions of use defined in the Control Drawing is strictly prohibited.

Product Codes

FLD-MXM-8-xxx	Acquisition module for up to 8 sensors (monitoring by ERBUS proprietary bus)
FLD-MXM-16-xxx	Acquisition module for up to 16 sensors (monitoring by ERBUS proprietary bus)

EVTeam Corp. is ISO-9001:2015 registered company.