

DIESEL OIL LEAK DETECTION SOLUTIONS FOR GENERATORS



DIESEL OIL LEAK RISKS

On many facilities, emergency generators are the last line of defense when there is a utility failure or a catastrophic event. Non-detected diesel oil leakage on generators (which are often located in areas without daily inspection) can be extremely detrimental with potentially severe consequences, especially in data centres, health care sites, airports, or critical mission facilities.

The TTK diesel oil leak detection solutions for generators are specially designed and developed to protect diesel generators and their supporting diesel system as storage tanks and diesel distribution pipes.

TTK IN RESPONSE WITH THE LATEST INNOVATIVE TECHNOLOGIES

TTK, liquid leak detection manufacturer and leader of the market for 30 years, offers tailored solutions with innovative technologies. From forward-thinking design to prototype testing and improvement, innovative materials and patented products, TTK's dynamic R&D team undertakes on-going research to discover and deliver better solutions than existing conventional ones.

THE BENEFITS OF TTK









and products Made in France



Holder of 4 industrial patents in 7 countries







IS09001 certified compagny

THE ESSENTIALS OF TTK DIESEL LEAK DETECTION SYSTEMS

TTK diesel oil leak detection system consists of two essential parts: addressable sense cables/ point sensor and digital leak monitoring panel.

Diesel Sense Cable - The addressable cable provides fast and selective detection of diesel leak upon contact, along the entire length, standard length sense cable provided with built-in plug-socket connector.

Diesel Point Sensor - Fast response to diesel, re-usable and easy to install and remove. Suitable to be installed at low points or inside the storage tank containment tray (if any).



Addressable diesel nil sense cable: FG-OD

Unique address



Addressable diesel oil point sensor: FG-ODP

ADVANTAGES OF SENSE CABLES & POINT SENSORS











FAST RESPONSE

Examples of detection time: Diesel oil: 25-35 min (*) Gasoline: 3-6 min (*).

SELECTIVE DETECTION

Response to diesel, insensitive to water, pressure or dust

ACCURATE LOCATION

Microprocessor embedded in each sense cable gives a unique address allowing accurate leak

RE-USABLE

The silicone jacket swells quickly by absorbing liquid hydrocarbon. This process is reversible enabling re-use after cleaning.

Digital Leak Monitoring Panel - They are designed to collect and transmit information from the sense cables (or point sensors) to local panel and/or remote Building Management System via JBUS/MODBUS protocol.

TTK offers a range of monitoring panels to suit different installation scales and situations.



FG-NET range of high capacity digital leak monitoring panel



Four (or Eight) zones leak monitoring panel (FG-ALS4/8-OD)

As soon as in contact with diesel oil, the silicone jacket element on the sense cable swells quickly by absorbing diesel oil.

Electrical resistance increase as consequence of the induced swelling.

When the electrical resistance reaches a factory pre-set value, the electronic module with unique address sends the alarm to the monitoring panel.



The leak alerted and repaired. Since the diesel absorption process is reversible, the sense cable can be cleaned and reused

The leak monitoring panel triggers alert and displays the leak location; shut off the flow of diesel oil (if configured); reports to LAN connected BMS, sends alerts by email and SNMP traps.

ADVANTAGES OF TTK DIESEL LEAK DETECTION SYSTEMS

- Early detection with accurate location of leaks (precision to section length).
- Reliable detection, not affected by water or pollution.
- Multiple leaks can be detected thanks to the unique address of each sense cable.
- Truly versatile system: both diesel and water sensing cables can be connected on a single FG-NET monitoring panel.

- Flexible solutions available for monitoring small, medium and large areas.
- Cost savings with re-usable oil sensors.
- TCP/IP connection, MODBUS integration.
- Easy installation and extension; plus friendly maintenance.
- Can be used in hazardous areas with explosive atmosphere (ATEX "Zone 0").



TTK addressable diesel leak detection system allows reliable and fast detection at a very early stage of oil leaks on any diesel generator

LEAK DETECTION SYSTEM INSTALLATION EXAMPLE IN A GENERATOR ROOM























