



LIQUID LEAK DETECTION SYSTEMS

# WATER AND OIL LEAK DETECTION SOLUTIONS FOR DATA CENTRES

TTK solutions contribute to the improvement of your data centre uptime while reducing your equipment and maintenance costs by offering versatile intelligent digital liquid leak detection systems.

## TTK CONTINUOUSLY MONITORS WATER, OIL AND ACID LEAKS IN A DATA CENTRE BUILDING

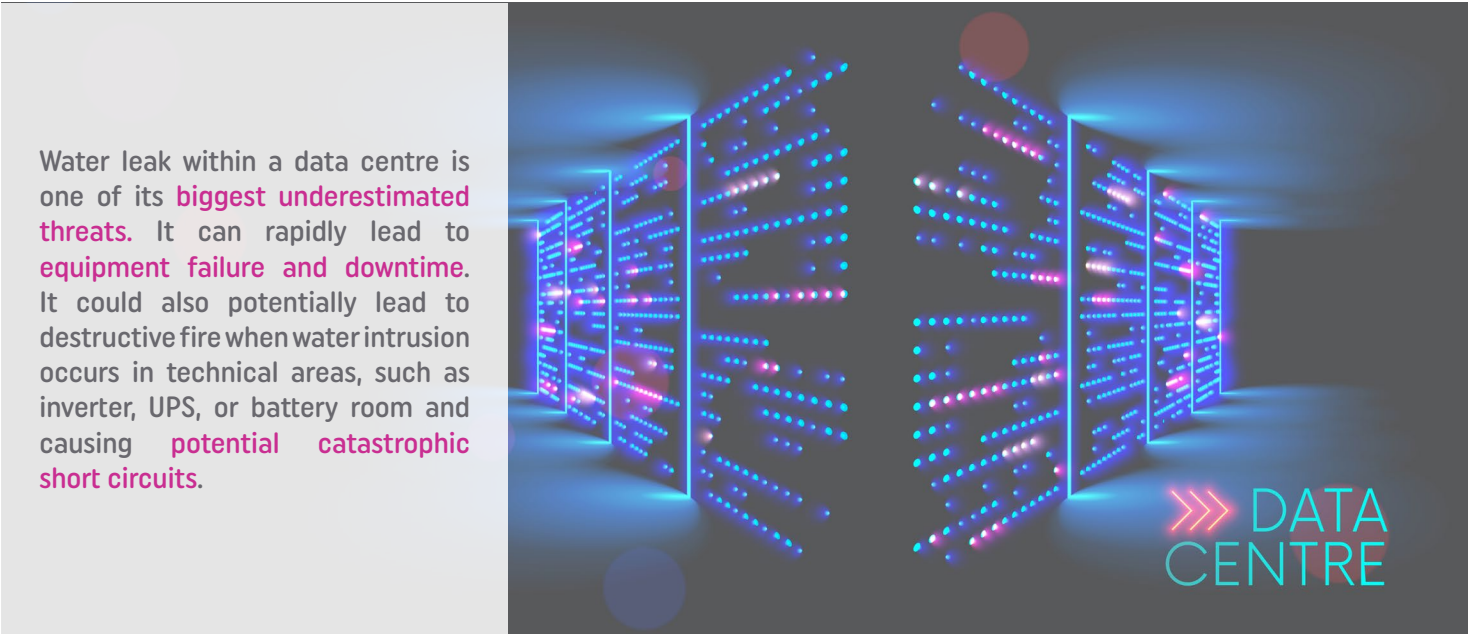
### CRITICAL AREAS/EQUIPMENT:

- Server rooms/Computer network
- Offices and archive rooms
- Chilled/hot water supply and return pipes
- HV/LV switch rooms
- Batteries rooms
- Plant rooms/mechanical rooms
- Basements/Generator sets
- UPS (Uninterruptible Power Supply) rooms
- Mains water supply room & related plumbing
- Local sprinkler and water treatment
- Service risers
- Lift pits





NEVER UNDERESTIMATE THE RISK OF WATER LEAKAGE IN A DATA CENTRE



Water leak within a data centre is one of its **biggest underestimated threats**. It can rapidly lead to **equipment failure and downtime**. It could also potentially lead to destructive fire when water intrusion occurs in technical areas, such as inverter, UPS, or battery room and causing **potential catastrophic short circuits**.

LEAK DETECTION SOLUTION FG-NET:  
THE INTELLIGENT DIGITAL SYSTEM

TTK offers a digital detection system FG-NET, developed and designed for data centres.

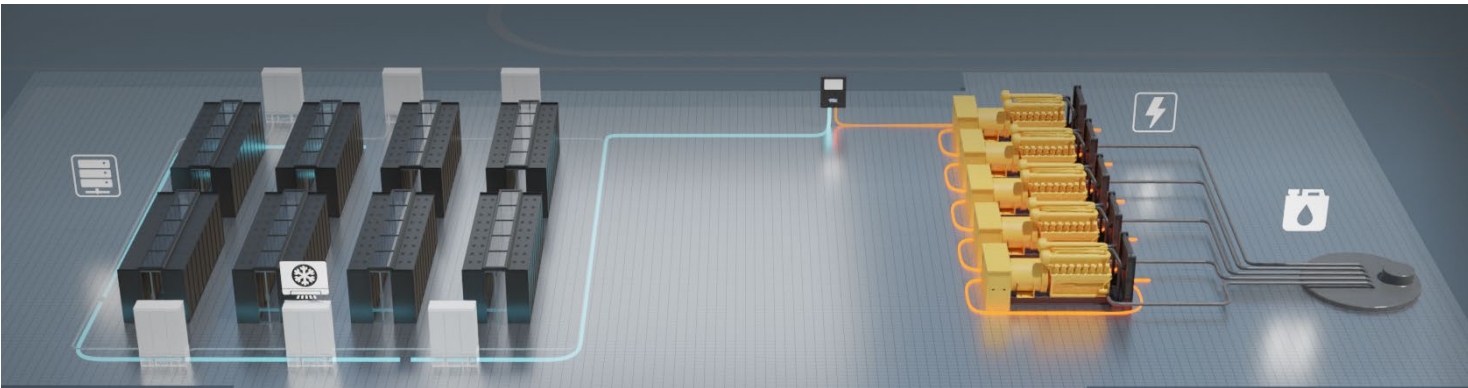
- **Versatile**, it can combine water, hydrocarbon and acid leak detection systems within a **single detection unit**.
- **Intelligent**, it offers **unique simultaneous localisation of leaks** within +/-1 metre, thanks to the digital communication provided by the **integrated microcontroller** on each individual addressable sensing cable.

The TTK leak detection system integrates multiple sensing cables monitored by a powerful detection unit.



ADVANTAGES OF THE FG-NET SYSTEM FOR DATA CENTRES

- Fast and reliable leak detection with fully mapped and accurate multiple simultaneous leak locations.
- Each individual cable can be managed independently (adjustable reaction time, relay configuration) by the control panel.
- Multiple communication interfaces: TCP/IP, MODBUS/JBUS, RS422/485.
- Sending the report to the BMS (Building Management System); sending email alerts.
- Extensible system thanks to a network of satellite panels.
- Easy operation and maintenance.



THE ADVANTAGES OF CHOOSING TTK



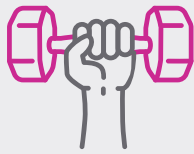
**Reduce Costs**  
on equipment and maintenance thanks to the versatile system and reusable sensing cables



**Modular Systems**  
capable to evolve with your future needs



**Simple and Flexible Design**  
ease of installation/extension/upgrade



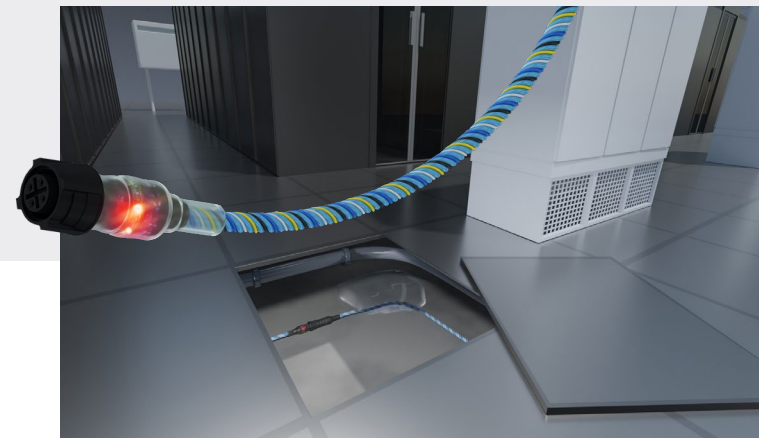
**Unfailing Solidity**  
and a long service life



**Powerful Solutions** developed and designed for **data centres of all sizes**



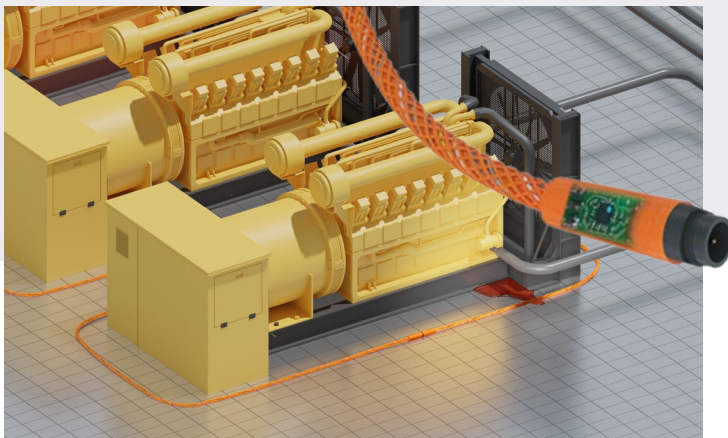
**Service and Support**  
for your projects by a team of engineers and experts



BENEFITS OF TTK DIGITAL  
WATER AND ACID CABLES

- **Instantaneous leak detection** with localisation to the nearest metre.
- **Strong resistance to dust**: effectively reduces nuisance alarms caused by the presence of dust and conductive residues from the environment.
- **Independent individual cable**, several faults can be simultaneously detected.
- **Cleanable and reusable cables**, even for acid cable\*.

\*: depending on the composition of the liquids, temperature and environmental conditions.



BENEFITS OF TTK DIGITAL  
HYDROCARBON CABLES

- **Early leak detection** with **precise location** on the section length.
- **Selective and reliable detection**: unreactive to inorganic pollutants, external loads (pressure) and water.
- **Cleanable and reusable cables**\* thanks to the reversible process of absorption of hydrocarbon by the silicone sheath.
- **Optimised for various indoor applications** such as **generator sets** and **technical rooms**.

\*: depending on the composition of the liquids, temperature and environmental conditions.



## TTK: MUCH MORE THAN A MANUFACTURER

TTK has become the world's leading manufacturer of liquid leak detection systems over three decades. The largest data centres in the world are equipped with our latest generation systems.

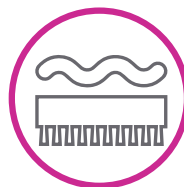
Much more than a manufacturer, TTK offers **turnkey solutions**, from the creation of tailor-made solutions to installation, commissioning and maintenance. TTK offers the certainty of having **a system that can grow with your future needs**, maximising the uptime of your data centre while reducing your costs.



## GOOD TO KNOW



The FG-NET control unit as well as all TTK products, are covered by a **10-year manufacturer's warranty**.



TTK acid sensing cables have a proven high resistance to fire and abrasion. They have passed the most rigorous tests for **plenum cables, NFPA 262 / UL 910 and UL 719** tests in 2007.



All TTK water sensing cables are manufactured exclusively with **Low Smoke and Halogen Free materials** (LSZH or LSOH) since 2019.



In addition to the FG-NET system, TTK offers ranges of cost-effective **digital and analogue detection systems** suitable for different scales and installation needs. No project is too big or too small for us.

