TTK

LIQUID LEAK DETECTION SYSTEMS

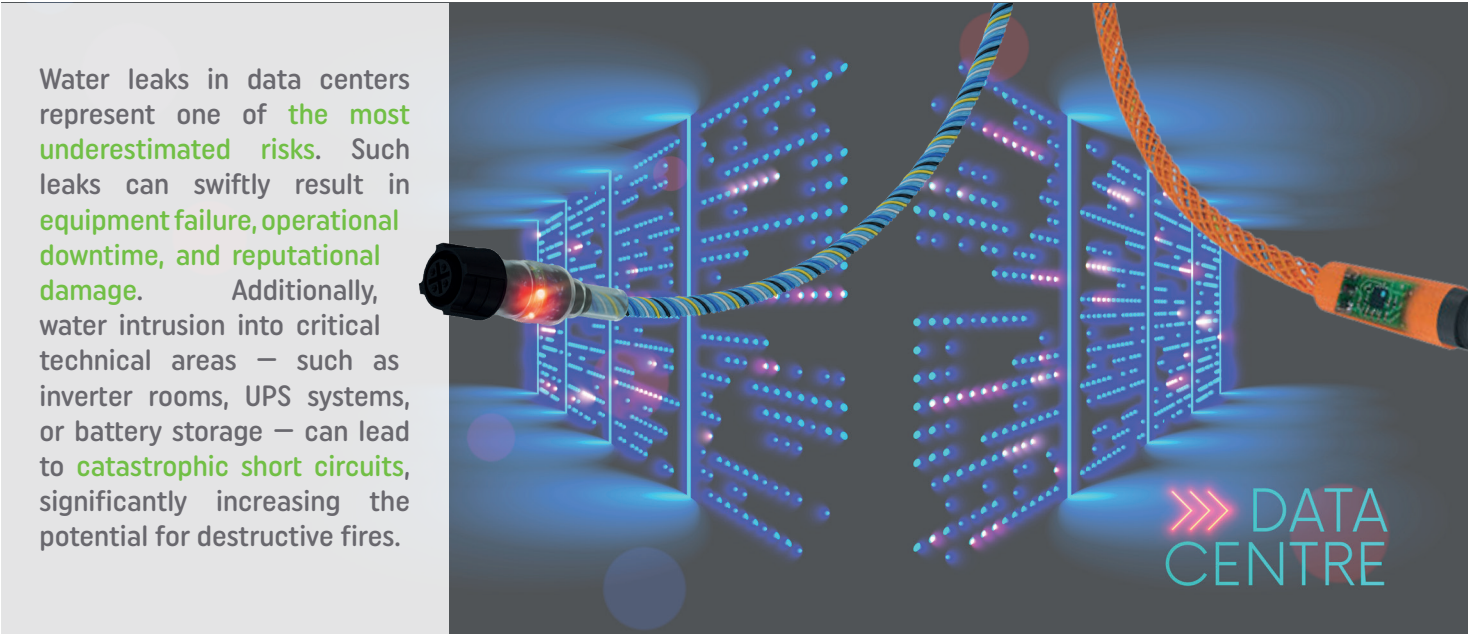# WATER AND OIL LEAK DETECTION SOLUTIONS FOR DATA CENTERS

TTK solutions enhance your data center's uptime and efficiency with versatile, intelligent digital liquid leak detection systems, helping you significantly reduce equipment and maintenance costs.

TTK CONTINUOUSLY MONITORS WATER, OIL AND ACIDS LEAKS IN A DATA CENTER 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

Water leaks in data centers represent one of the most underestimated risks. Such leaks can swiftly result in equipment failure, operational downtime, and reputational damage. Additionally, water intrusion into critical technical areas — such as inverter rooms, UPS systems, or battery storage — can lead to catastrophic short circuits, significantly increasing the potential for destructive fires.

DATA CENTRE

## LEAK DETECTION SOLUTION FG-NET:
THE INTELLIGENT DIGITAL SYSTEM

TTK offers a digital detection system FG-NET, developed and designed for data centers.
- **Versatile** – Capable of detecting water, hydrocarbon, and acid leaks simultaneously within a single detection unit.

- **Intelligent** - Precisely pinpoints multiple leaks at once, thanks to advanced digital communication enabled by integrated microcontrollers embedded in each individually 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 CENTERS

- 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.
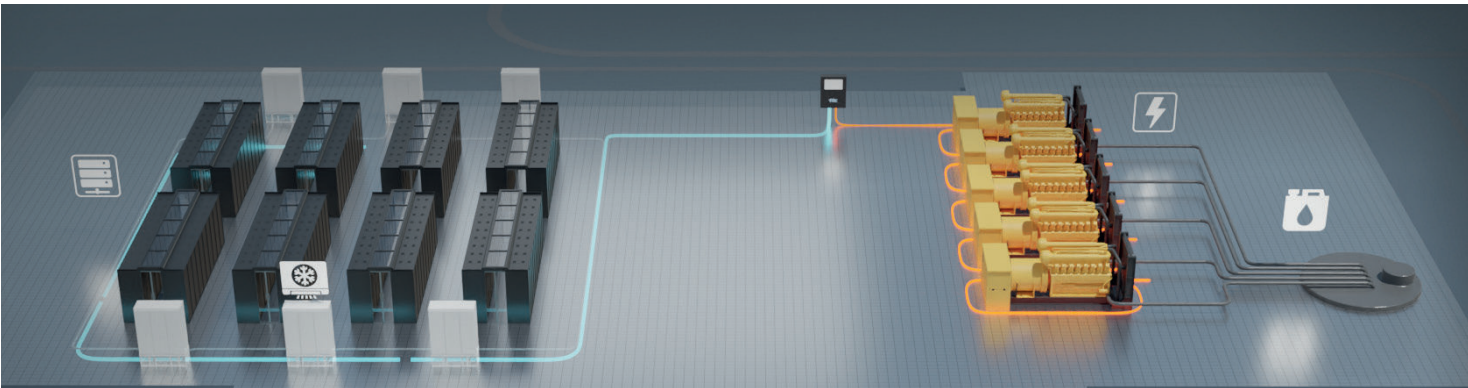
Cost Reduction
Lower equipment and maintenance expenses due to the system's versatility and reusable sensing cables

Modular Systems
capable to evolve with your future needs

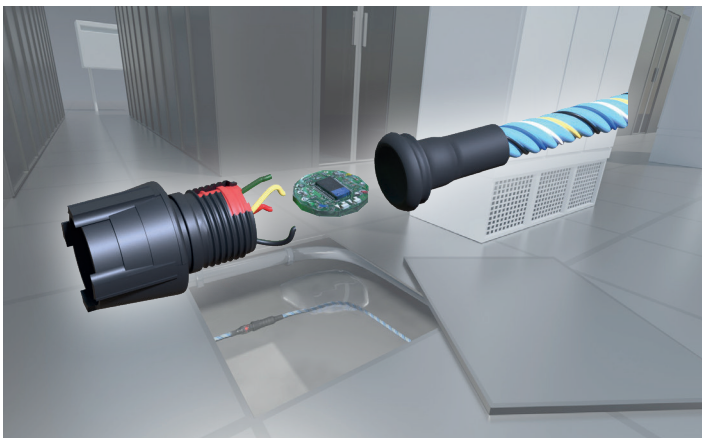### Simple and Flexible Design
ease of installation/extension/ upgrade

Exceptional Durability
and extended service life

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

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

BENEFITS OF TTK DIGITAL
WATER AND ACIDS CABLES

- **Instantaneous leak detection** with localisation to the **nearest meter**.

- **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 acids cable*.

*: depending on the composition of the liquids, temperature and environmental conditions.
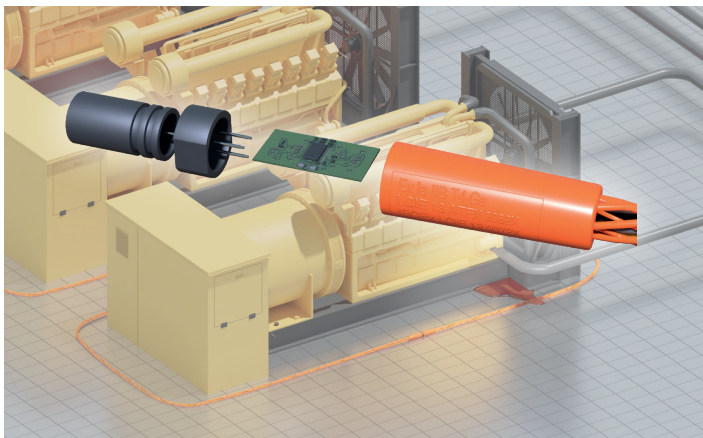
BENEFITS OF TTK DIGITAL
HYDROCARBON CABLES

- **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.

# TTK: MUCH MORE THAN A MANUFACTURER
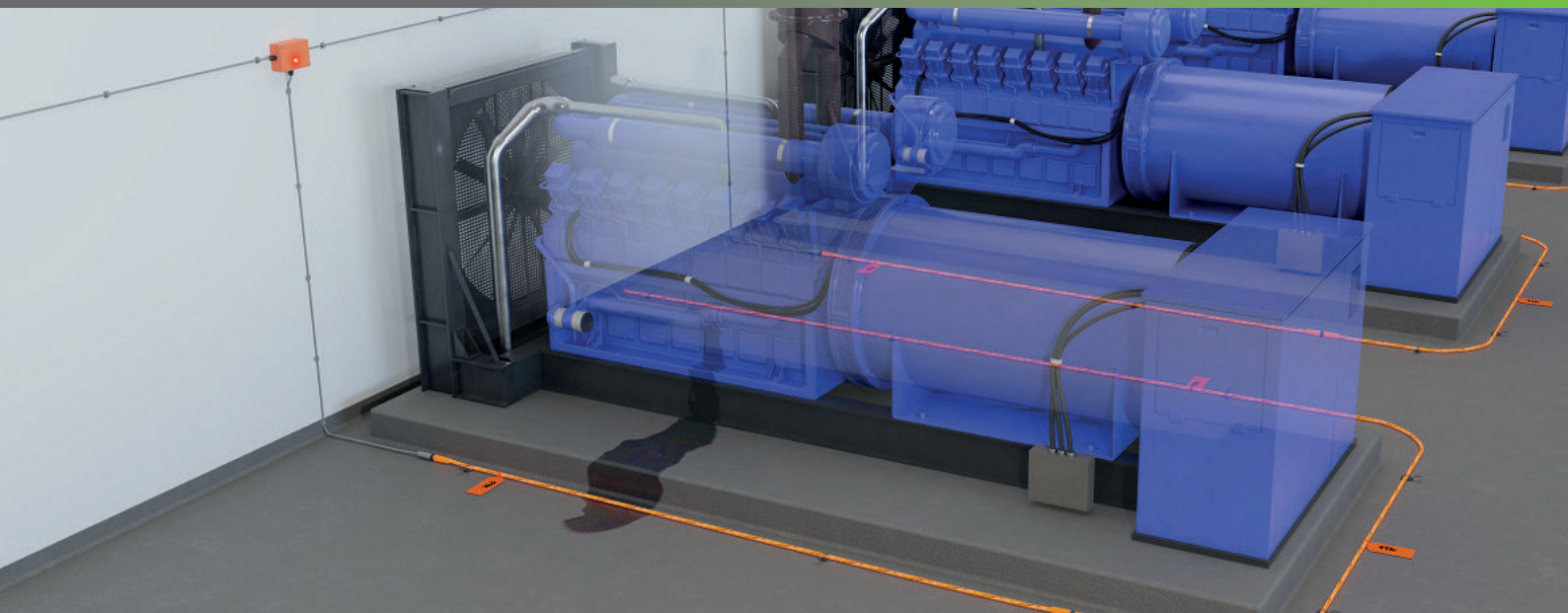
TTK is the world's leading manufacturer of liquid leak detection systems, serving the industry for over three decades. The largest data centers in the world are equipped with our latest generation systems.

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 center while reducing your costs.
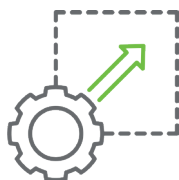
GOOD TO KNOW

The FG-NET digital monitoring unit as well as all TTK products, are covered by a **10-year manufacturer's warranty**.
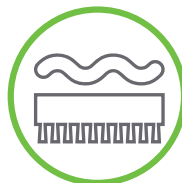
TTK acids sense cables have a proven high resistance to fire and abrasion. They have passed the most rigorous tests for **plenum cables, NFPA 262 / UL 910** and **UL 719** tests in 2007.

TTK's leak detection systems are truly **scalable and future-proof**, making them an **ideal choice for growing data centers.** This ensures long-term reliability and adaptability as infrastructure needs evolve.

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