



LIQUID LEAK DETECTION SYSTEMS

# Case Study

## TTK LEAK DETECTION SYSTEM In a MAJOR FOOTBALL STADIUM, FRANCE



### ABOUT THE PROJECT

Stade de la Meinau is a major football stadium located in Strasbourg, France. Like many large sports infrastructures, the stadium includes underground areas and a sanitary void beneath the stands, housing water and drainage networks, electrical cabling, as well as key structural elements.

Due to its proximity to the Rhin Tortu, a nearby river and tributary of the Rhine, the stadium is exposed to potential water ingress and flooding risks, particularly during periods of heavy rainfall or rising water levels.

To protect the infrastructure and ensure operation continuity, a reliable early warning system was required to detect water ingress before any damage could occur.

### PROJECT OVERVIEW

Project	Stade de la Meinau
Client	Eurométropole de Strasbourg
Location	Strasbourg, France
Application	Football stadium
Project Type	New Project
Project managed by	TTK France
Contract Scope	Design, equipment supply and installation
Completion Date	December 2025
Technology	Locating monitoring unit FG-ALS8 with water sense cables FG-ECX



### PROJECT REQUIREMENTS

Key requirements included:

- Continuous monitoring of the sanitary void;
- Early detection of water ingress in normally inaccessible areas;
- Accurate localisation of leaks or water presence;
- Simple integration into the stadium's technical management systems.

# TTK's SOLUTIONS

TTK France recommended deploying its water leak detection and location system with 8-zone locating panel: FG-ALS8 and water sense cables FG-ECX specifically adapted to the stadium's underground environment.

## ■ 8-zone Locating Panel FG-ALS8

The FG-ALS8 is an effective solution for this project. Eight detection zones are available on this unit, it can control up to 100 metres of water sense cable per zone. A touch-screen gives clear indications of the system status. 9 relays are integrated and RS485 serial link with MODBUS / JBUS communication protocol for interfacing with BMS is available.

In the event of water presence or fault on the sense cables in any zone in the sanitary void, the FG-ALS8 will respond as follows:

- An audible alarm is triggered and a relay is activated.
- The touch screen of the panel displays the zone, the location of the leak (to the nearest 1 meter) and details of the fault (the type of fault leak or cable break).
- Event report is sent to the BMS via MODBUS / JBUS.



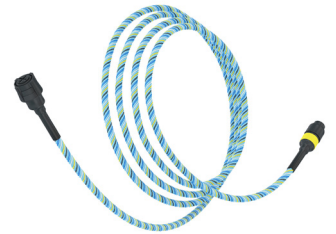
8-zone locating panel: FG-ALS8

## ■ Water sense cable FG-ECX

The FG-ECX sense cable detects the presence of conductive liquids at any point along its length. Its non-absorbant design can be reset in seconds after removal of the leak. Furthermore, each sense cable is manufactured with low-halogen materials, limiting flame spread and smoke production.

The FG-ECX sense cable was installed along the most exposed areas within the sanitary void. Upon contact with water on the cable, the system immediately detects and locates leaks to the nearest metre, allowing maintenance teams to react quickly and efficiently.

This solution provides the stadium operator with early warning, precise localisation, and improved risk prevention, helping to protect the infrastructure, avoid costly damage, and ensure uninterrupted operation of the stadium.



Analogue water sense cable: FG-ECX

