



LIQUID LEAK DETECTION SYSTEMS

# Case Study

## TTK WATER LEAK DETECTION SYSTEM AT A LEADING BANK OFFICE, LONDON, UK



### ABOUT THE BUILDING

This high-rise office building, occupied by a global leader in financial services, is located in Canary Wharf, London's major financial district. The landmark building offers more than 170,000 m<sup>2</sup> of office space across 43 floors, designed to meet the highest standards of performance and security.



### PROJECT OVERVIEW

#### Project

Landmark office building of a leading financial services company\*

\*: Due to client confidentiality, the client name has been removed from this project study.

#### Location

Canary Wharf, London  
The United Kingdom

#### Application

Corporate & Institutional Building

#### Project Type

New Project

#### Project followed by

TTK UK (London)

#### Contract Scope

TTK supply, install, test and commissioning the leak detection system

#### Completion Date

end of 2026

#### Technology

FG-NET digital monitoring unit;  
FG-BBOX satellite devices;  
FG-EC and FG-ECS addressable water sense cables;  
FG-ECP addressable point sensors

### PROJECT REQUIREMENT

Within this modern and highly technical environment, the client required a reliable, high-performance leak detection system capable of covering a very large area, while delivering fast and accurate alarm response to ensure maximum protection of critical infrastructure.



# TTK's SOLUTION

## Protected Areas

TTK leak detection solutions protect the following areas across 40 levels of the building:

- UPS rooms
- Hydration stations
- Comms rooms
- Critical plant rooms
- Corridor pipework
- Vending areas
- Hub rooms
- Business lounges
- Welfare rooms

## Monitoring Panels

To meet the extensive coverage requirements of this large-scale project, TTK UK implemented an integrated digital monitoring architecture combining FG-NET control panels with FG-BBOX satellite devices.

This centralized solution enables efficient supervision of long distances and multiple protected zones, while ensuring precise leak localization and rapid alarm transmission. All panels are fully integrated into the client's Building Management System (BMS) via Modbus TCP/IP, allowing operators to instantly receive leak information, including time and exact location, for swift and informed decision-making.

## Sense Cables & Point Sensors

Both linear and sector water sense cables (FG-EC and FG-ECS), along with point sensors (FG-ECP), are strategically installed either along perimeters or in straight layouts, depending on the area's configuration.

Thanks to TTK's patented sensor and cable design, the system effectively eliminates false alarms caused by dust, condensation, or contact with metal surfaces, ensuring reliable detection even in challenging environments.

## Project Scale

The installation includes 2 km of water sense cables and more than 150 point sensors.

A total of 13 FG-NET monitoring panels, installed in the BMS risers, and 5 FG-BBOX satellite panels supervise the system. In the event of a leak, alarms are immediately detected, located, and displayed on BMS for rapid intervention.



FG-NET monitoring control panel



FG-BBOX satellite device



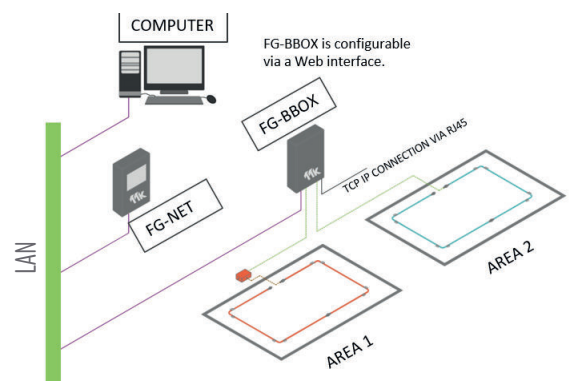
FG-EC addressable water leak detection cable



FG-ECS water leak detection cable



FG-ECP water leak detection point sensor



Connection diagram of FG-NET, FG-BBOX and a PC in a Network

