



LIQUID LEAK DETECTION SYSTEMS

Case Study

TTK WATER LEAK DETECTION SYSTEM AT NEW OFFICE BUILDING, LONDON, UK

ABOUT THE BUILDING

The new headquarters of this leading financial services company is situated in the City of London. This world-class office building, completed in 2016, provides over 700,000ft² (66,890m²) of new space across 12 floors.



PROJECT OVERVIEW

Project New HQ office building of a blue-chip financial services company*
*: Due to client confidentiality, the client name has been removed from this project study.

Location London city, 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 Autumn 2016

Technology FG-NET Web Interface;
FG-NET digital monitoring unit;
FG-BBOX satellite devices;
FG-EC and FG-ECS addressable water sensing cables;
FG-ECP addressable point sensors



FG-EC addressable water leak detection cable with embedded microprocessor



FG-ECS water leak detection cable



FG-ECP addressable water leak detection point sensor

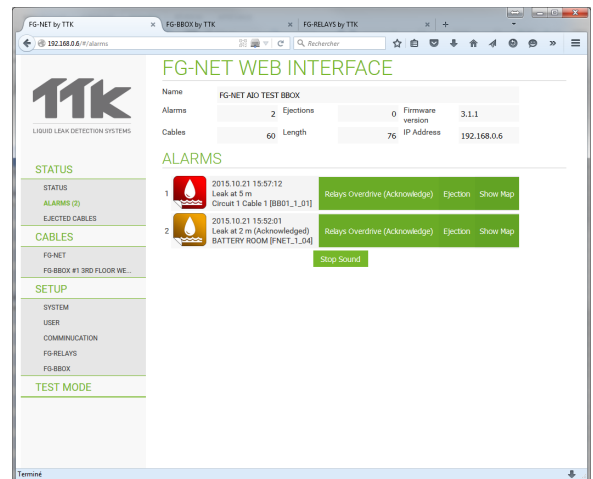
TTK's SOLUTION

Hardware:

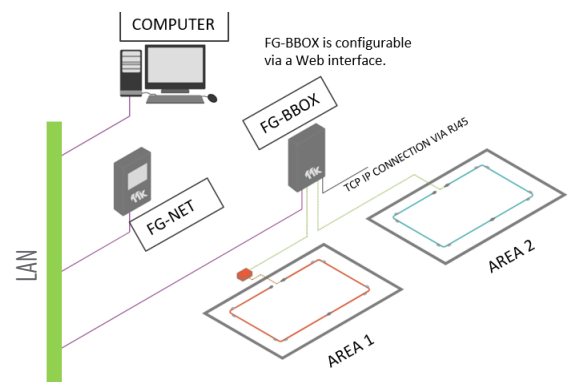
- To protect numerous technical environments in this massive building - 15 levels in total from the basement to the roof - 4.5 km of water sense cables are installed. Two FG-NET monitoring panels (located in the Building Management office) and ten FG-BBOX satellite panels (located on five levels) supervise these sensing cables. They alert and pinpoint alarms on the maps in the case of a leak occurring.
- Some examples of areas protected by the TTK water leak detection system are: corridor pipework, CRAC room, manifold box, plant room, vend area, hub room, pantry, toilet corridor, business lounge, and welfare room.
- Both linear and sector mode water sense cables (FG-EC and FG-ECS) as well as point sensors (FG-ECP) are installed, some being around the perimeter and others in a straight layout, depending on the specific area to be protected.

Software:

- To ensure efficient 24/7 monitoring of leak detection in the building, a monitoring computer and web interface browser (located in Technician's Room) are also used.
- The FG-NET digital panel can be fully configured individually via its touch screen and, in the case of multiple panels and satellite panels (FG-BBOX and FG-RELAYS) being installed, all configuration can be carried out on a centralized computer via the FG-NET Web Interface.
- All information regarding the site's panels (such as the panel name, number of connected cables, number of alarms, total length of detectors and IP addresses) can be viewed and controlled remotely from this same centralized computer. For example, the real-time alarms on all FG-NET and FG-BBOX panels can be viewed and quick actions relating to the alarms put in place, such as "acknowledge alarm", "stop sound" or "eject the concerned cable".



FG-NET Web Interface showing the real-time alarms on the FG-NET and FG-BBOX panels



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

