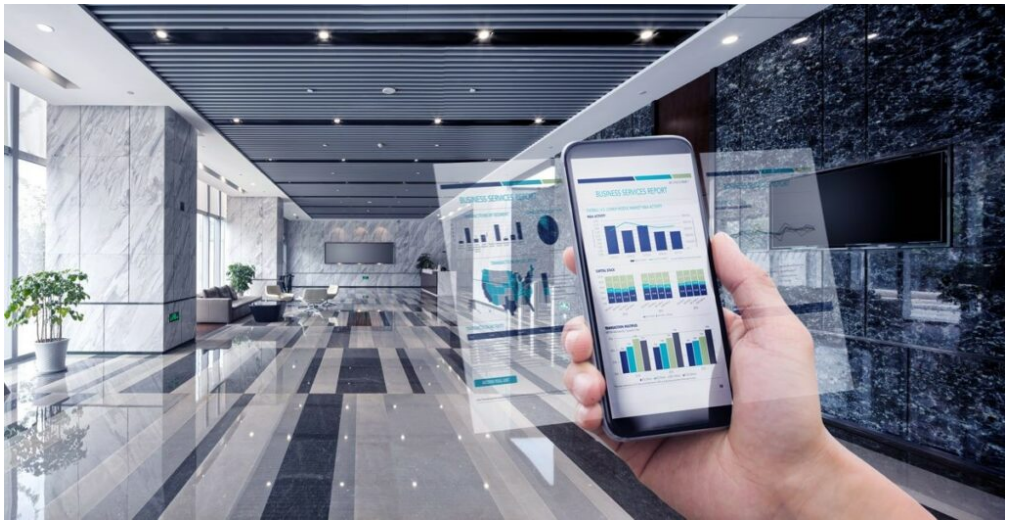
FMBusinessDaily

EnviroLogik launches smart building system to predict M&E equipment failure

3 years ago



EnviroLogik, in collaboration with Polyteck, has today launched smart building technology that predicts M&E equipment failure – removing the need for manual compliance checks and enabling businesses to monitor their energy efficiency.

The internet of things (IoT) system provides facilities managers full remote insight into a building's heating, ventilation, air conditioning and refrigeration (HVACR) equipment and offers an early warning of impending equipment failure.

Refrigerant leaks from HVACR equipment are common and expensive and, if left unchecked, a leak from a chiller can easily cost £5,000. If there is a subsequent compressor failure, this can easily amount to an additional £10,000.

The smart IoT Refrigerant Pressure Monitoring sensors are battery-powered and fit onto the service ports of any A/C or refrigeration system, connecting wirelessly to allow operators to monitor the system pressures remotely from any device.

Saving food waste and preventing lost sales are another benefit, and smart systems can also support FM businesses to monitor and reduce the carbon output.

Unlike other systems, using the global standard LoraWan network, it can communicate through basement and roof plant room slabs and walls and provides remote monitoring using a secure mobile network, enabling monitoring of key items, especially when a site isn't manned.

The systems can also provide individual tenants of multi-tenanted buildings the ability to monitor their own heating, cooling, electric and water consumption so they can validate any bills they receive. This is achieved by retrofitting non-invasive Ultrasonic Heat Meters to heating and cooling circuits including VRF

systems.

Other EnviroLogik sensors can manage multiple Indoor Air Quality conditions, crucially including CO, CO2, and volatile organic compounds (VOCs), and PM2.5 and allows data on room temperatures to be shared with occupants,.

Meanwhile, water leak sensors can also detect leaking sinks, urinals and toilets, saving thousands from damage to equipment and occupiers below.

The smart systems can either shut off a local water valve or alert site teams so that they can manually shut valves off.

The smart building system enables service teams to remotely diagnose failing systems and respond more quickly, allowing them to potentially fix problems before occupants are affected, minimising disruption and complaints; as well as prioritise jobs meaning they can send the right technician with the right parts, meaning less time on site.

Chris Gunn, sales and marketing director at EnviroLogik said: “With everyone aiming for net zero by 2050, we can assist as 80% of those buildings that will exist in 2050 have already been built so it makes sense to identify savings from the existing building stock We work on a collaborative basis with our clients to identify the short and long-term wins, to help reduce emissions by matching usage to actual occupancy.

“Keeping older building stock sustainable isn’t difficult to achieve, especially with smart sensors providing feedback. With legislation in place giving tenants the insights into their actual overall consumption, this will assist them in applying live energy savings matched to their staffing levels.”