inovonics®

Tech note

Water Detection Using Inovonics Devices

Introduction

The purpose of this document is to provide compatible methods for using Inovonics transmitters to reliably detect the presence of non-distilled water. Typical applications include:

- Leaking hot water heaters or other appliances.
- Standing water from overflowing sinks, tubs and toilets.
- Monitoring sump pumps.
- Protecting critical infrastructure, such as computers rooms or storage areas, from water damage.

Inovonics Water Detection Overview

For more information about the Inovonics EN1751 water detector or the EN1210 and EN1215 series universal transmitters, please see www.inovonics.com

Water detectors usually send an alarm based on the conductivity generated from dissolved solids in the water. Most are incapable of detecting distilled water because it contains no solids. The level of dissolved solids is measured in millisiemens per meter (mS/m), and can vary widely depending on place and even time of year.

Inovonics took the variability of dissolved solids into account when we designed our built-for-purpose water detection solution: The EN1751 water detector. Using one of the approved probes noted in the *EN1751 Water Detector Installation Instructions*, the EN1751 water detector will send an alarm in the presence of as little as one-quarter of an inch of non-distilled/tap water with dissolved solid levels as low as 5 mS/m. Because typical tap water in the U.S. contains 10 mS/m, Inovonics considers this appropriate for the entire nation.

However, the EN1751 water detector is not the only water detection solution available to Inovonics customers. An Inovonics EN1210 or EN1215 series universal transmitter can also be paired with a built-for-purpose water detector.

Using Inovonics Universal Transmitters for Water Detection

When the Inovonics EN1210 or EN1215 series universal transmitter is connected to a built-for-purpose water detector, it will transmit an alarm to an Inovonics receiver connected to a security panel when it detects non-distilled water.

Off-the-shelf probes and sensors are designed to work with specific detectors based on conductivity levels. As such, mixing and matching water detectors with non-specified probes can lead

to unreliable solutions. Inovonics discourages the use of off-the-shelf water sensors and probes with Inovonics transmitters.

Inovonics recommends only the water detectors included in this tech note for use with Inovonics universal transmitters; non-specified probes can be unreliable.

The following built-for-purpose water detectors are compatible with Inovonics universal transmitters.

- The G.R.I. 2826 and 2826FS liquid level sensors are both built-for-purpose water detectors specifically designed to work with wireless transmitters, including Inovonics universal transmitters.
- The Winland Electronics line-powered WB-200 and battery-powered WB-350 WaterBug electronic water detection devices are both built-for-purpose water detectors designed to be wired directly into a security panel, which can also be wired to Inovonics universal transmitters.

Conclusion

With the properly installed, built-for-purpose solutions described in the tech note, Inovonics provides multiple alternatives to reliably detect non-distilled water.

For more questions about Inovonics installations, contact Inovonics technical services:

- E-mail: support@inovonics.com.
- Phone: (800) 782-2709; (303) 939-9336.