**Situation:** Houses of worship are frequently empty and more vulnerable to loss. Since clergy and staff can’t be in each building all the time, with some facilities empty for days, it’s often impossible to detect damage from potentially destructive incidents, like pipe bursts or water intrusion. The problem is significant, especially since severe weather incidents are increasing around the country. In years where there is high hurricane activity, intense winter storms, or extended periods of sub-freezing temperatures, there is a rise in claims. In one year with that type of increased activity, one insurance company serving houses of worship saw losses more than triple from pipe bursts alone, from approximately $9 million to over $30 million.

**Solution:** HSB sensor technology can monitor, predict, and prevent losses when you’re not present. HSB is providing its property insurers and insureds with an innovative, 21st century approach to reducing these risks through the Sensor Systems by HSB program, technology that is part of Internet of things (IoT) solutions for the insurance industry. By leveraging detailed data from sensors and local weather conditions, the program provides precise monitoring capabilities that can detect environmental changes and help to reduce or mitigate freeze and water losses.

To create a cost-effective program for houses of worship of varying sizes and construction, HSB develops customized IoT plans. Leveraging claims data from the applicable insurer, HSB pinpoints geographic locations that are more susceptible to risk. From there, a program is designed around the specific needs of the insurer.

For the insureds, the program includes sensor technology, a “virtual watchdog” system, comprised of sensors placed in strategic locations to monitor facilities 24/7. The sensors are easy to install and long lasting, up to 5 years on batteries. As they never sleep, they are always on duty to detect water, freezing temperatures, power outages, and more.

The sensors deliver alerts when critical adverse conditions are detected, such as dangerously low temperatures or the presence of water. HSB utilizes proprietary algorithms and live weather data to deliver accurate and actionable alerts.

Alerts are sent to a designated list of people when an adverse condition is detected. Sensors report conditions through a cellular gateway, without interfering with, or relying on, the policyholder’s Wi-Fi network, keeping messaging and data independent and secure. When a risk condition is detected, an alert is sent directly to sensor contacts through email, text or phone.
“If we had had something like this sensor program a few years ago, a lot of damage and time lost could have been avoided,” said one church trustee in Massachusetts.

Results: Millions saved through “virtual watchdog” technology.
In a two-year period, one program that had deployed Sensor Systems by HSB saw an estimated $9 million in losses prevented. During an active hurricane period, a single insurer avoided over $600,000 in claims.

What’s next? Future use cases and expanding capabilities.
With the data that can be gained and analyzed from this sensor system, insurance companies gain valuable insight to their customers’ businesses. It may improve risk modeling and enhance underwriting. In addition to water and freeze sensors, IoT technology will be able to monitor other environmental concerns, like humidity and motion, to help prevent losses, and vibration sensors which will help predict when equipment needs servicing.

HSB has sensors installed in 20 other types of use cases including schools, campuses, apartments and condominiums, restaurants and agriculture.

How it works

- IoT Hardware
  - Commercial grade quality
- DIY
  - No electrician or plumber needed
- Monitoring & Support
  - 24/7 professional staff
  - US based
- No Wi-Fi Needed
  - Cellular network, high security, long range and low power
- Mobile App
- Alerts
  - Help predict losses before they occur

Start implementing an HSB sensor program today by visiting, hsbconnectedtechnologies.com.