

WATER LEAK MONITORING HELPS PRESERVE RARE BOOKS

T&D WIRELESS BASE STATION DETECTS ISSUES EARLY



CAS DataLoggers provided a water leak monitoring and detection system for a library housing several rare books and documents in their basement record storage area. The library's director needed a wireless device to detect when water entered the basement during the seasonal rains or in the case of a plumbing failure. The system had to provide the capability to give her instant email notification and text messages so her staff could take action at the earliest opportunity. The director called CAS DataLoggers to find a low-cost, wireless water leak detection alarm which could also operate without the need of a support PC.

INSTALLATION

The library director installed a [T&D RTR-500AW Wireless Network Base Station](#) on the wall at the bottom of the stairs and connected it to an Antx MS-2800 moisture sensor which CAS DataLoggers also provided. The base station featured built-in wireless communication and [LAN](#) capabilities using a WiFi interface.

USAGE

The wireless base station continually monitored for water leaks using its external alarm input terminal for connection with the moisture sensor, which was placed flat on the basement floor. The sensor had an open contact switch and 2 contact points on its underside. The switch closed whenever water created a bridge/connection between the 2 points, which then triggered the base station's alarm. In this way, the sensor could detect water getting into the basement at levels as shallow as 1/16th

of an inch. Connecting the open/close sensor enabled the base station to detect ON/OFF electric signals from outside to create an effective warning system. Whenever an ON signal was detected indicating a water leak in the basement, the base station automatically sent a warning report email via the network to the director's email address and a text message alarm to her smartphone.



BENEFITS

The library's wireless base station formed an effective yet low-cost water leak monitoring system. A single device performed all the monitoring, and the base station's email and text message alarms let staff keep on top of leaks as soon as they happened. If more leaks were found over time, it would be easy to add a few more water sensors for larger floor coverage. Additionally, the wireless base station was ideal for use in the basement which lacked a network connection or PC.

For more information on our wide range of [T&D Data Loggers](#), water leak monitoring or to find the ideal solution for your application-specific needs, contact a CAS DataLogger Application Specialist at **(800) 956-4437** or www.DataLoggerInc.com.