

## SmartVault™ Water Intrusion Detection

SmartVault™ is the application of SmartCover to detect water intrusion in utility vaults. Utility vaults can become flooded from ground water intrusion, rainwater, or leaking conduits. Access to enable inspection of vaults can be difficult and expensive but without consistent visibility to manage conditions, water exposure can lead to infrastructure degradation, failures, reliability issues and regulatory action. Excessive lid weight and structural requirements to withstand tornadoes and other environmental extremes requires planning and coordination. A SmartCover system eliminates the necessity for time consuming visual vault inspection.

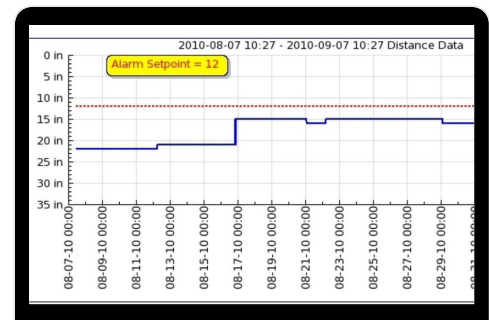


### How it Works

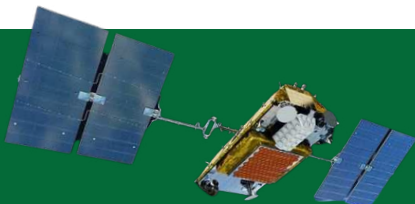
With the placement of a sensor inside the vault, the system measures and monitors internal water levels and if rising level is detected, notifications are issued.

Accessibility to vaults may be complicated by excessive lid weight and structural requirements to withstand tornados. This impedes easy, quick and frequent visual inspection of the vaults. SmartVault™ is an efficient, powerful monitoring system that relieves the necessity for visual vault inspection. It provides users with ongoing, desktop access to the conditions inside the vault with graphical information through a secure web browser where vault conditions are observed from a dedicated website.

*Graph shows water intrusion from a heavy rain event*



*X-axis: dates and times  
Y-axis: inches from top to bottom  
Can be configured with zero at bottom*



*With satellite based data transmission, your sewer status connection is maintained even during cell outages and the most severe weather.*

# SmartVault™ Water Intrusion Detection

## Where it Works

SmartVault can be used with:

- Air release valve (ARV) vault
- Pressure relief valve (PRV) vault
- Cable vaults

There are two standard approaches for installation.

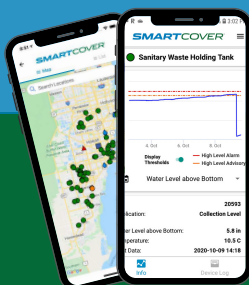
- 1 The lid mounting method installs to the underside using a bracket securing the remote filed unit components with the sensor positioned above the vault bottom. An antenna is attached to the top of the lid for data transmission.
- 2 The second method houses hardware in a NEMA enclosure box with the antenna mounted on top. The sensor is connected within the enclosure and installed at the desired monitoring location.



## Featuring

- Hardware components engineered to function in wet, humid, corrosive conditions
- Flexible patented sensor designs and deployment
- **NO CONFINED SPACE ENTRY\*** installation or service
- Reduces traffic management resources
- Secure, online dashboard with easy-to-read, visual reports
- Compact, long lasting battery
- Two-way communications permits remote settings management
- Fusion with rain, river and tide data
- Done-for-you analytics
- Works when there is no power
- Satellite coverage works with sites difficult to access and withstands cellular outages
- Variable timing options for data scan and notifications
- Built in tilt switch for real time entry detection
- Encrypted secure servers with redundancy
- Mobile app for iOS and Android
- API available
- Configurations for open channels, canals, holding tanks, lift stations, outfalls, reservoirs, and utility vaults

\*as defined by OSHA 29 CFR 1910.146b



*With the SmartCover mobile app, get the insights you want, when and where you need them. Available for both iOS and Android devices.*