



# ECHODD™

*Advanced Monitoring Solutions*



RELIABILITY



DATA INTEGRITY



MANHOLE VISIBILITY



AFFORDABILITY



Monitoring Solutions You Can Trust

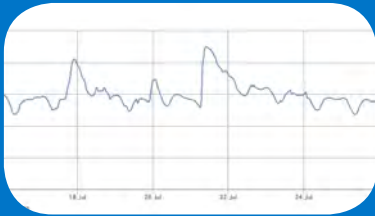
## Higher Levels of Performance for Complete System Assurance

The ADS® ECHO™ advances water and wastewater monitoring with higher levels of performance, wider range of use, and lower acquisition and operating costs. Its patented, narrow-beam ultrasonic sensor provides users with up to 20 feet of manhole depth visibility. That innovation coupled with a fixed-position sensor allows the ADS ECHO to deliver consistent, quality data that is used for critical engineering, operations and

maintenance applications. For reliable connectivity, the ADS ECHO now features communication via the LTE-M network which is designed and optimized for the Internet of Things (IoT). Finally, to make informed decisions the ADS ECHO's cloud-based software and advanced analytics platform provides fast, easy access and exceptional insights into the collection system's behavior.

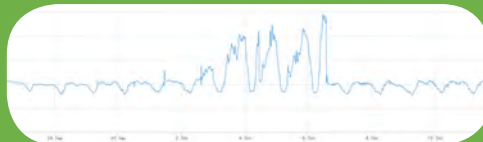
## Wide Ranging Applications Means Better Value

### Hydraulic Monitoring



The ADS ECHO captures remote site data in a cost efficient manner, enabling wider deployment of sensors that can continuously feed and update hydraulic models.

### Efficient Cleaning Process



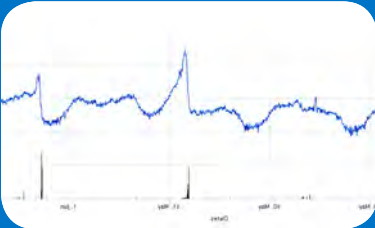
The ADS ECHO enables utilities to employ the latest cleaning practices. Continuous remote monitoring with advanced visibility assures that cleaning is performed only when needed.

### Lift/Pump Station Backup



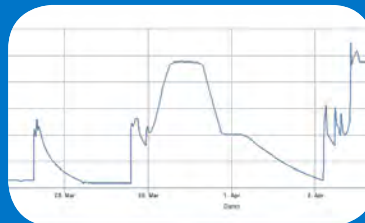
The ADS ECHO adds redundancy for monitoring critical wastewater pump stations, eliminating power outages and pump concerns.

### I&I Scouting



The ADS ECHO enhances I&I studies, specifically when coupled with the ADS TRITON+ flow monitor.

### CSO Data & Reporting



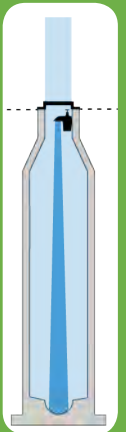
The ADS ECHO makes CSO reporting easier with automated data capture and reporting tools.

### SSO Mitigation

Uniquely providing 20 feet of visibility below the unit and up to eight feet above it, the ADS ECHO always knows the water level in a manhole and provides multiple configurable alarms for advanced warning.

### Bypass Monitoring

The ADS ECHO monitors bypass sites providing 24/7 protection against SSOs.



### Who Uses ECHO

- Field Operations
- Engineering
- Planning
- Consultants
- Construction Contractors
- Cleaning Contractors

### Where ECHO is Used In Wastewater

- Manholes
- Wastewater Pump Stations
- Siphons
- Bypasses
- Combined Sewer Regulators

### Where ECHO is Used In Storm Water

- Storm Water Vaults
- Canals
- Stream Level
- River Level

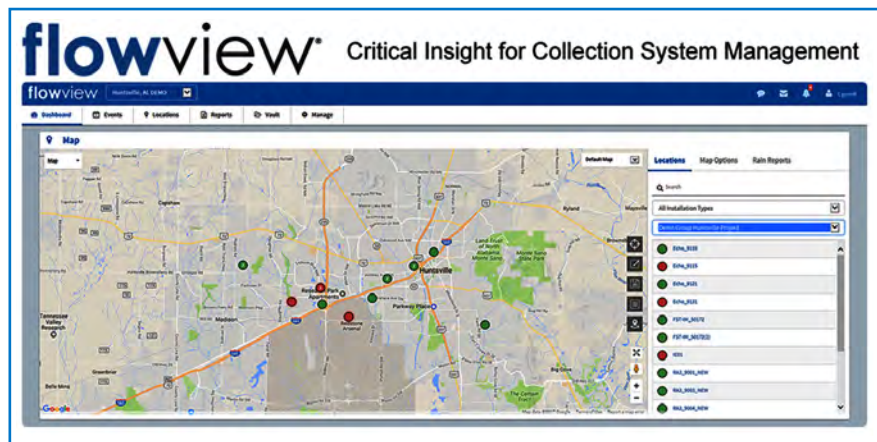
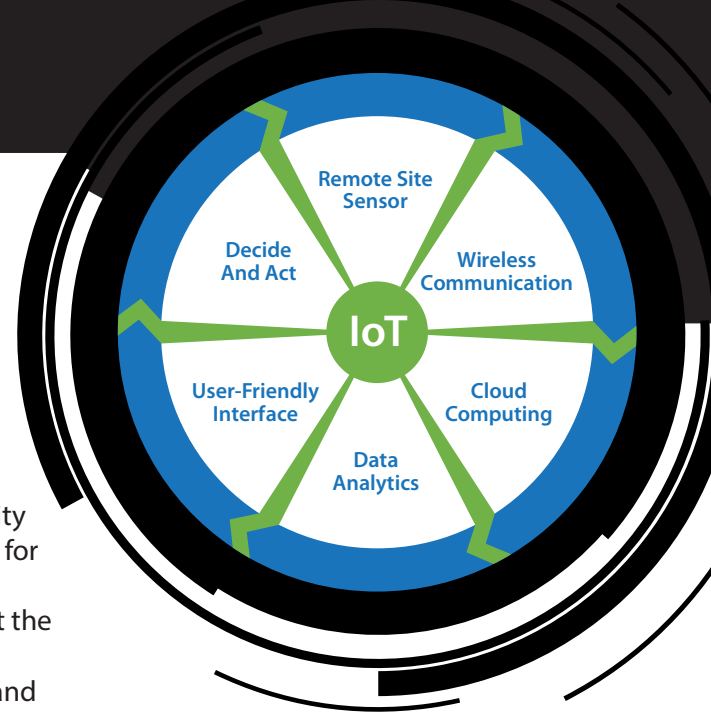
## Continuous Visibility into the Collection System

The ADS ECHO is part of the Industrial Internet of Things (IIOT) and monitors critical points where real-time data deliver meaningful value. It takes continuous measurements from remote sites and communicates wirelessly to a cloud-based system, where data is securely hosted. From there software analytics provide users with ongoing visibility into their water systems and drive decisions.

## FlowView: The Window into the Collection System

**FlowView** is comprehensive, cloud-based software providing visibility into the collection system. It provides users with the tools necessary for superior asset and operational management.

- Dashboard tools for real-time operational intelligence throughout the collection system
- Intuitive, insightful data analytics monitor network performance and assess the collection system

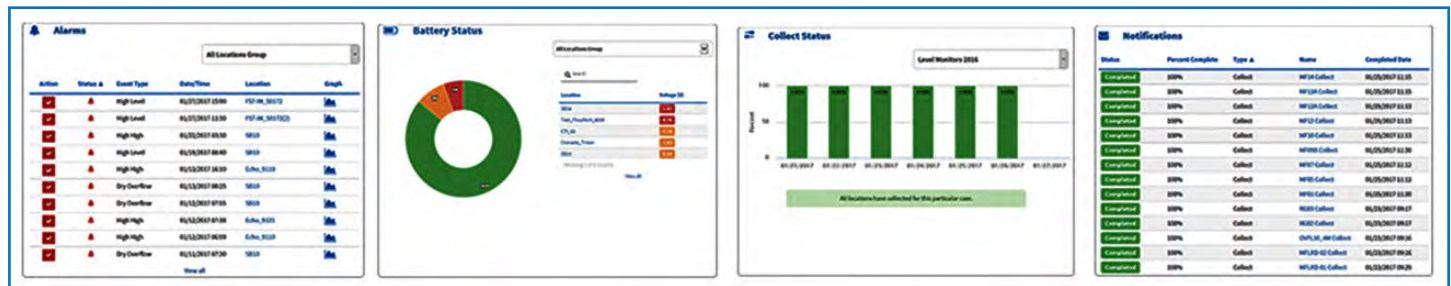


## System Map

- Map-based interface showing complete monitoring network and color-coded alarm status
- Quick access to site information including alarm acknowledgment
- Geographic Information System (GIS) layers and map-based rainfall reports
- Single click link to individual sites

## Configurable Dashboard

FlowView's Dashboard provides an overview of the monitor network. Drop down filters enable fast refinement of information.



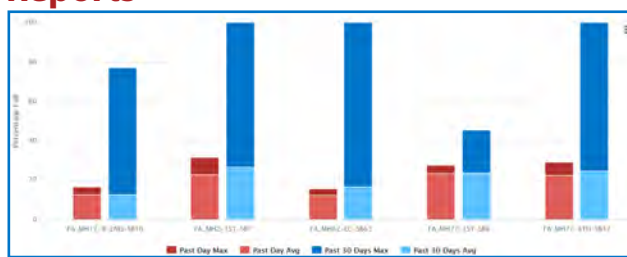
Alarm Summary

Battery Status

Communication Status

Network Notification Summary

## Reports



Generate reports and charts such as average water level

FlowView has dozens of standard, customizable reports and enables the viewing of key information through Excel, .csv, and .htm outputs.



## Alarms and Notifications

Users are notified of rain events, level abnormalities, data anomalies, and monitor status via email or text message.

# ECHO™ System Overview

## SPECIFICATIONS:

**System:** dual measurement sensors (ultrasonic and pressure), tilt alarm, battery powered, wireless communication

**Software:** cloud based with data storage, dashboard, analytics and reports

**Communications:** 3G/4G LTE-M

**Submersible:** meets IP68

**Manufacturing Quality Standard:** ISO-9001

**Intrinsically Safe:** CE, CSA, ATEX and IECEx certifications

## ECHO SYSTEM COMPONENTS:



## INSTALLATION OPTIONS:

ECHO with Tension Bar Installation



The ADS ECHO installs quickly making it easy to move from one location to another.

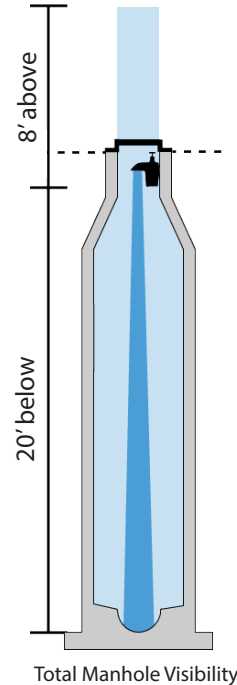
Wall Mount Bracket & Bar



Adjustable Tension Bar



## The ECHO Difference Means New Standards in Performance:



- **Total manhole visibility** – with more than 28 feet of measurement range, users have the information necessary to drive action
- **High quality data** – a fixed, in-place sensor assures consistent, accurate data with false alarms and data errors being eliminated
- **New LTE-M communications** enable secure antenna installation within the manhole with no drilling, allowing for very fast setups at many installations
- **Detect and identify blockages** days or weeks in advance
- **Multiple intrinsic safety certifications** set the ADS ECHO apart with an intense focus on safety
- **Two-year warranty** provides further assurance to the most reliable monitor in the wastewater marketplace
- **Four water level alarms** with auto-reset after the threat has passed

## TAILORED, AFFORDABLE PURCHASE PROGRAMS

### Purchase

The ADS ECHO can be purchased with options for added software and services. Every ECHO comes with a two-year product warranty.

### D-Site Equipment Leasing and System Maintenance

ADS cares for your monitoring network including equipment, software, and onsite maintenance through one low monthly fee.

### D-Site+: D-Site Equipment Leasing Plus Expert Data Analysis

D-Site+ provides the same base leasing package as D-Site and adds expert data analysis for a true full service offering.