



WAVELET HYDROSTATIC CSO KIT

Model No. WA2220 - SE00012

SUMMARY

Wavelet Hydrostatic Combined Sewage Overflow (CSO) Kits are comprised of a submersible hydrostatic sensor, Wavelet data-logging and telemetry platform, and data management system all fused into a single streamlined solution. The Hydrostatic CSO Kit is designed for tank liquid level measurement of both water and wastewater applications.

Some cities have a combined sewer system, where wastewater and rainwater are mixed. CSO is the common term used when a significant amount of storm water causes the sewage to overflow, causing pollutants to enter varying water bodies. Real-time awareness of CSO events is critical for public health and safety, and compliance with the EPA CSO Control Policy. Management of these time-sensitive conditions is aided by the Wavelet's automatic SMS and e-mail alerts when an emergency event occurs.

WAVELET PLATFORM FEATURES

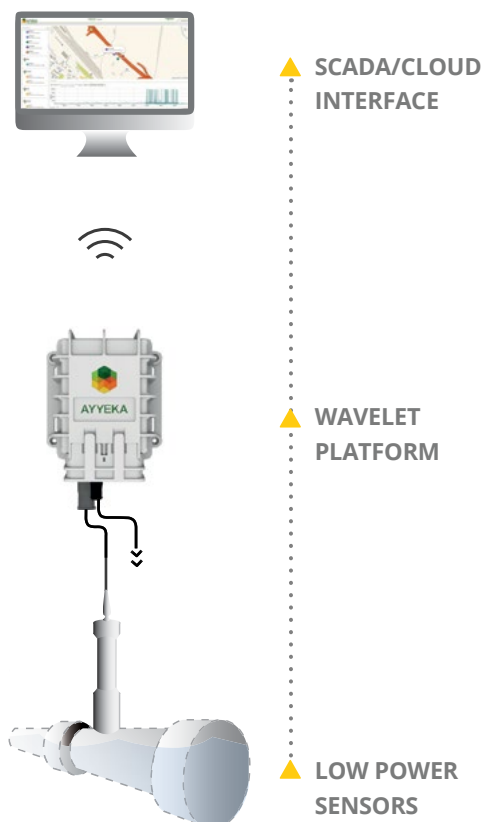
- ▶ PLUG-AND-PLAY
- ▶ BUILT-IN SCADA INTERFACE
- ▶ CYBER-SECURITY
- ▶ USER-FRIENDLY DATA VISUALIZATION
- ▶ CLOUD-BASED DATA STORAGE
- ▶ REMOTE NETWORK MANAGEMENT
- ▶ GLOBAL GSM CELLULAR SERVICE
- ▶ PROGRAMMABLE THRESHOLDS
- ▶ E-MAIL & SMS ALERTS
- ▶ GPS TIME & LOCATION SYNC
- ▶ LOW POWER CONSUMPTION
- ▶ AUTONOMOUS OPERATION



THE WAVELET PLATFORM

Wavelet brings together end-to-end, turnkey solutions that cover all of your continuous remote monitoring needs. Starting from the smart sensors, across the transmission platform, through data management, we have created unique monitoring kits to measure and monitor a range of water supply, water quality, wastewater and hydrologic parameters. Wavelet Kits are all designed to help facilitate more effective water network management.

Ayyeka's Wavelet Kit features a fully integrated, plug-and-play monitoring solution that fits seamlessly onto any water infrastructure and sends the data securely to you. Our Kits provide you with total visibility of your networks. The Kits are easy to setup and use, and will save valuable time and money.



HYDROSTATIC LEVEL SENSOR SPECIFICATIONS

Accuracy	≤0.5% of span
Max. Submersible Depth	137.2 m (450 ft)
1-year Stability	0 to 1,379 bar (20,000 psi)
Temperature Compensation Range	-17°C to 54°C (0°F to 134°F)
Temperature Effects on Zero and Span	≤0.025% CS/°C at 21°C (≤0.025% FS/°F at 70°F)
Dimensions (L x Ø)	143 mm x 29.2 mm (5.63 in. x 1.15 in.)
Electrical Protection	Built-in lightning and surge protection against reverse polarity, surge per IEC 61000-4-5
Housing	316L SS

SENSOR HIGHLIGHTS

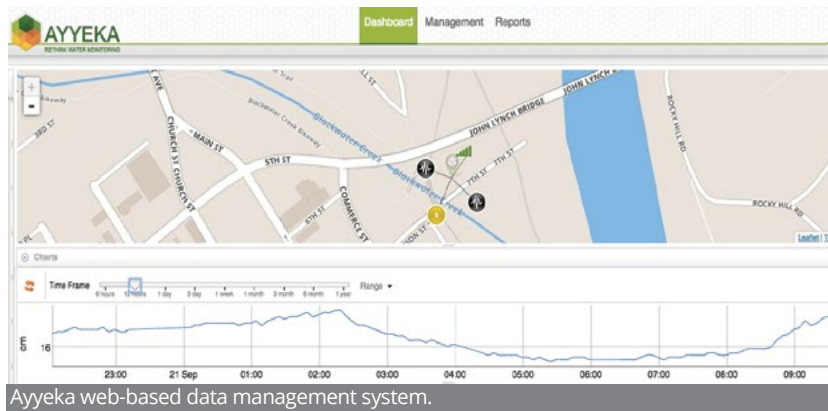
- ▶ Rugged design features durable transducer face.
- ▶ Built-in lightning protection is standard feature on every hydrostatic sensor model.
- ▶ Safe design for Class 1, Div 1/Zone 0 (4-20mA only).
- ▶ Easily adjust the zero point in the field.



The hydrostatic sensor delivers accurate level measurements.

CASE STUDY

- ▶ **Description:** A municipal utility was charged fines on several occasions when heavy rainfall events led to sewage overflow and contamination of a nearby river.
- ▶ **Solution:** A network of Wavelet Hydrostatic CSO Kits provided automated e-mail and SMS alerts to the utility to identify red zones in real-time and dispatch field technicians to take preventative measures to abate future CSO events.



Ayyeka web-based data management system.

WAVELET PLATFORM SPECIFICATIONS

▶ DATA & SOFTWARE

Ayyeka Data Server	Ayyeka Private Cloud and/or Customer On-Premises Server
User Interface	Web-Based, Tablet & Mobile
Data Export Options	Excel, CSV
SCADA & 3rd Party Integration	OPC/DNP3/API
Data Encryption	AES 256
Internal Memory	32 GB

▶ CONNECTIVITY & INTERFACE

Cellular Network	Multi-Cellular Carrier: 2G, 3G and CDMA (Verizon)
Data Transmission Profiles	Periodic, Data Dependent
Event Driven Alerts	SMS, E-mail, API
Configuration & Upgrades	Remotely Over-The-Air, USB PC Connection
Antenna	Internal or External
SIM Card	Included

▶ POWER

Primary Power Supply	Internal Lithium Battery
Operational Run Time	3,500+ Transmissions per Battery Pack, Field Replaceable Battery
External Power Supply (Optional)	4.5V-28V, Automatic Power Source Switching
Battery Level Notifications	Included

Ayyeka provides cyber-secure, plug-and-play, remote monitoring solutions designed for various markets. Founded in 2011, Ayyeka has an installed base in challenging locations and earned a reputation for excellent customer service. Bringing together a state-of-the-art hardware and cloud-based software package, Ayyeka's solutions are leading the infrastructure monitoring sector into the future.