



# WAVELET LIFT STATION KIT

Model No. WA2211 - SE00012

## SUMMARY

The Wavelet Lift Station Kit provides information to operations, maintenance, collections and modeling groups within a wastewater utility. The Kit includes a submersible hydrostatic sensor along with two digital inputs for monitoring of critical parameters of pump run time, power availability, and flow.

Management of pump failures and other time-sensitive conditions is aided by the Wavelet's automatic SMS and e-mail alerts. Operators can also track the daily cumulative run time between two identical pumps and generate alerts when a divergence between the run time ratio of the two pumps occur. The Kit optimizes energy efficiency and collects critical lift station information for increased operational efficiency.

## WAVELET PLATFORM FEATURES

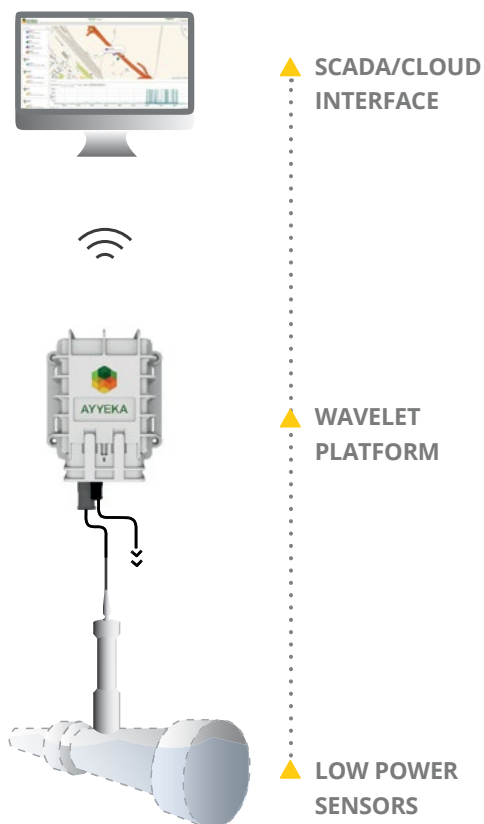
- ▶ PLUG-AND-PLAY
- ▶ BUILT-IN SCADA INTERFACE
- ▶ CYBER-SECURITY
- ▶ USER-FRIENDLY DATA VISUALIZATION
- ▶ CLOUD-BASED DATA STORAGE
- ▶ REMOTE NETWORK MANAGEMENT
- ▶ GLOBAL GSM CELLULAR SERVICE
- ▶ PROGRAMMABLE THRESHOLDS
- ▶ E-MAIL & SMS ALERTS
- ▶ GPS TIME & LOCATION SYNC
- ▶ LOW POWER CONSUMPTION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



## 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	-17°C to 54°C
Compensation Range	(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



This durable highly accurate sensor is essential for lift station monitoring in order to prevent hazardous and expensive Sanitary Sewer Overflows (SSOs).

## CASE STUDY

- ▶ **Client:** Wastewater Authority
- ▶ **Application:** Lift Station Sensing
- ▶ **Description:** The local wastewater authority could not continuously obtain data because of the lift station's remote location, requiring remote monitoring systems to collect real-time data in order to identify network failures and prevent overflow events.
- ▶ **Solution:** Ayyeka provided the client with Wavelet Lift Station Kits to monitor the lift station's water level in real-time and analyze data trends in order to improve wastewater network operation.



## 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.