



WAVELET SURFACE WATER LEVEL KIT

SUMMARY

The Wavelet Surface Water Level Kit provides a cost-effective solution for managing crucial resources in rivers, streams, lakes, canals, and other open water bodies. Tracking trends in surface water levels helps to ensure that these resources can continue to support our various uses of them without detrimental impacts on natural ecosystems.

Long-term and regular level measurements support evaluation of watershed management conservation efforts. This Kit can provide insights on the interconnected relationship between surface water and groundwater levels. Moreover, the high accuracy of data this Kit provides makes it an ideal solution for climatic analysis, especially monitoring sea level rise.

WAVELET PLATFORM FEATURES

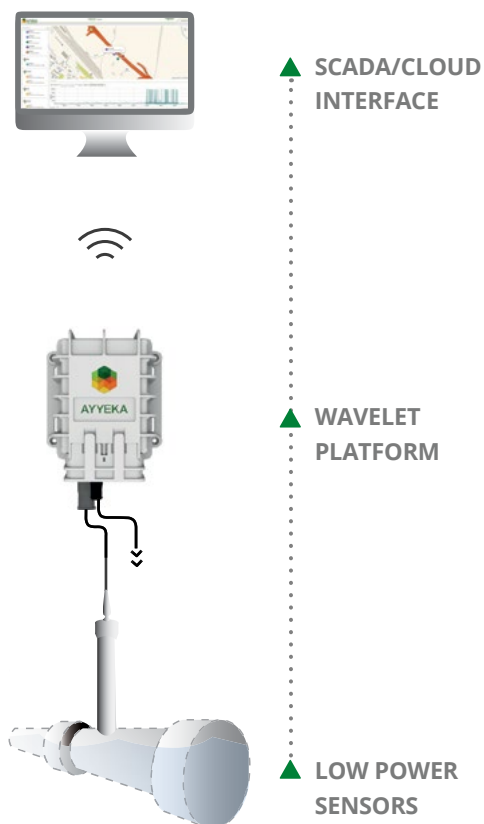
- ▶ PLUG-AND-PLAY
- ▶ BUILT-IN SCADA INTERFACE
- ▶ CYBER-SECURITY
- ▶ USER-FRIENDLY DATA VISUALIZATION
- ▶ CLOUD-BASED DATA STORAGE
- ▶ REMOTE NETWORK MANAGEMENT
- ▶ GLOBAL GSM CELLULAR SERVICE
- ▶ PROGRAMMABLE THRESHOLDS
- ▶ E-MAIL & SMS ALERTS
- ▶ GPS TIME & LOCATION SYNC
- ▶ LOW POWER CONSUMPTION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



NON-CONTACT WATER LEVEL SENSOR SPECIFICATIONS

Accuracy	±2.0 mm (0.08 in.)
Frequency	~26 GHz
Transmitting Power	<0.4 nW/m ²
Range	20 m (65.6 ft)
Max. Error Measurement	±4.0 mm (<1 m) 0.16 in. (<3.28 ft)
Beam Angle	10°
Operational Temperature	-40°C to 80°C (-40°F to 176°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Dimensions	Housing: 168 mm x 144 mm (6.61 in. x 5.67 in.) Horn: 80 mm, 115 mm x 137.9 mm (3.15 in., 4.53 in. x 5.43 in.)

The non-contact radar sensor offers unmatched accuracy to detect even the slightest changes in water level.



CASE STUDY

- ▶ **Client:** Research Institute
- ▶ **Application:** Surface Water Level Sensing
- ▶ **Description:** Given constraints on facility access and restrictions on using solar panels, the client required a battery-operated, low-maintenance solution for installing surface water level sensing devices on pipe crossovers owned and operated by a third party.
- ▶ **Solution:** Ayyeka delivered a fully-autonomous solution with extended battery life that greatly reduced the total cost of ownership for the client.



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.