



WAVELET GROUNDWATER LEVEL KIT

Model No. WA3320 - SE00023

SUMMARY

The Wavelet Groundwater Level Kit offers a cyber-secure, plug-and-play solution for managing water resources in perched, unconfined, and confined aquifers. Groundwater resources are vital to agricultural, municipal, and industrial end-users. In addition, effective resource management is required for protecting ecosystem health.

A systematic approach to groundwater level monitoring provides insights on the status of these resources and enables assessment and evaluation of groundwater and surface water interaction. This fully-autonomous Kit streamlines the process of delivering field data, eliminating the need for costly manual measurements and allowing for real-time data collection. The system is suitable for a wide range of applications, including resource management, climate and hydrological modeling, and regulatory compliance.

WAVELET PLATFORM FEATURES

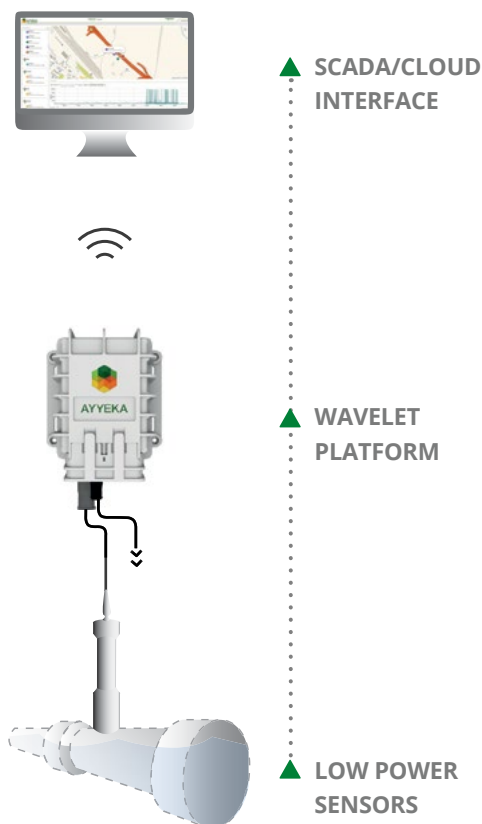
- ▶ PLUG-AND-PLAY
- ▶ BUILT-IN SCADA INTERFACE
- ▶ CYBER-SECURITY
- ▶ USER-FRIENDLY DATA VISUALIZATION
- ▶ CLOUD-BASED DATA STORAGE
- ▶ REMOTE NETWORK MANAGEMENT
- ▶ GLOBAL GSM CELLULAR SERVICE
- ▶ PROGRAMMABLE THRESHOLDS
- ▶ E-MAIL & SMS ALERTS
- ▶ GPS TIME & LOCATION SYNC
- ▶ LOW POWER CONSUMPTION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

Ranges	0 - 10 m (other ranges and custom cable lengths available upon customer request)
Accuracy	±0.05% at 25°C (77°F)
Operational Temperature	-5°C to 60°C (23°F to 140°F)
Material	Stainless steel
Dimensions (LxØ)	182 mm x 22 mm (7.17 in. x 0.87 in.)
Cable	Multicore transmission cable, screened with atmospheric pressure compensation tube



The hydrostatic sensor delivers accurate level measurements.

CASE STUDY

- ▶ **Client:** Environmental Regulatory Agency
- ▶ **Application:** Hydrological Modeling
- ▶ **Description:** The client required a solution for establishing a network of groundwater level monitoring nodes. Due to security protocols, data had to be transmitted directly to an on-premises server.
- ▶ **Solution:** Ayyeka delivered a cyber-secure solution that seamlessly connected directly to the client's database and bypassed intermediate cloud hosting.



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.