



WAVELET WATER QUALITY KIT

Model No. WA2130 - SE00014

SUMMARY

Chlorine levels are highly regulated in most developed countries. While insufficient chlorination of water supply allows for growth of harmful bacteria and accumulation of excess minerals, over-chlorination causes unfavorable odors and taste and can even be carcinogenic.

The Wavelet Water Quality Kit is the perfect solution for autonomous and continuous chlorine monitoring in order to maintain health standards, customer satisfaction, and to stay in compliance with governmental protocol. Additionally, the sensor of the Wavelet Water Quality Kit not only monitors chlorine levels according to standard applications, but also includes advanced technology allowing for in-line monitoring of conductivity, pressure, and temperature.

WAVELET PLATFORM FEATURES

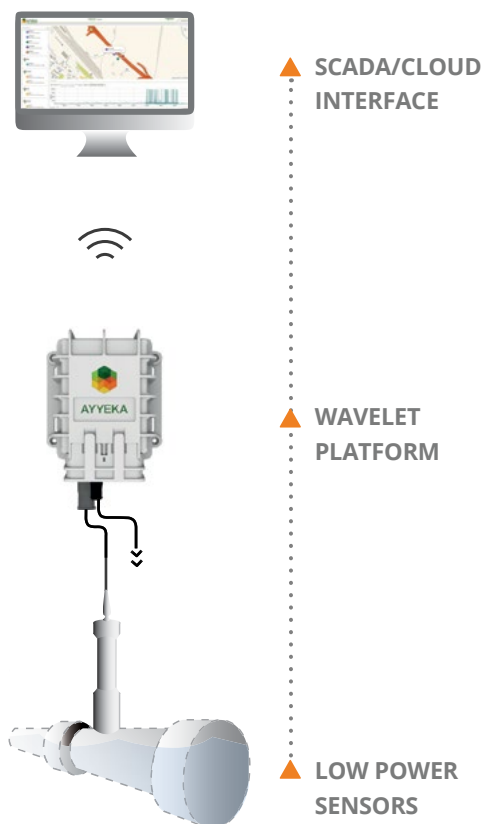
- ▶ PLUG-AND-PLAY
- ▶ BUILT-IN SCADA INTERFACE
- ▶ CYBER-SECURITY
- ▶ USER-FRIENDLY DATA VISUALIZATION
- ▶ CLOUD-BASED DATA STORAGE
- ▶ REMOTE NETWORK MANAGEMENT
- ▶ GLOBAL GSM CELLULAR SERVICE
- ▶ PROGRAMMABLE THRESHOLDS
- ▶ E-MAIL & SMS ALERTS
- ▶ GPS TIME & LOCATION SYNC
- ▶ LOW POWER CONSUMPTION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



MULTI-PARAMETER IN-LINE SENSOR SPECIFICATIONS

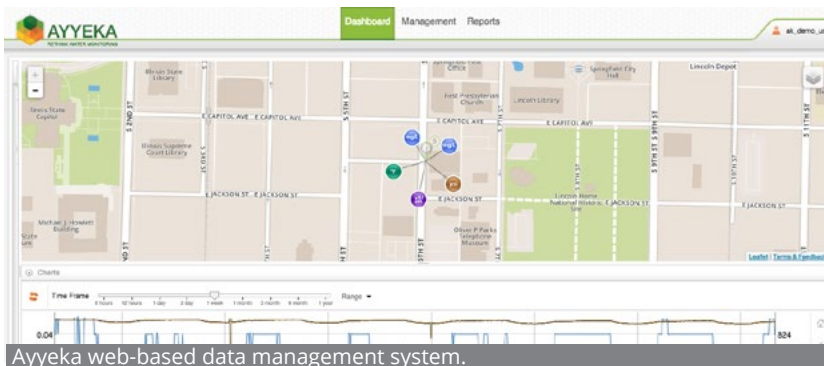
Operating Range	<ul style="list-style-type: none"> ▶ Chlorine: 0.01 – 2.0 mg/l (0.01 – 2.0 ppm) ▶ Conductivity: 50 – 1,000 μScm^{-1} ▶ Pressure: 0 – 10 bar (0 – 145 psi) ▶ Temperature: 0°C to 40°C (32°F to 104°F)
Cable Length	3 m (10 ft)
Probe Dimensions	<ul style="list-style-type: none"> ▶ Fits directly in a pipe of external diameter: D > 60 mm or 2" with a threaded fitting ▶ Max. pipe diameter: DN 300 for iron pipe and DN 250 for PVC/HDPE ▶ Probe length: 300 mm (11-¹³/₁₆ in.) ▶ Diameter of probe head, 35 mm Thread: 1"1/8 Gaz BSP ▶ Cylindrical
pH Range	<ul style="list-style-type: none"> ▶ 5 – 9 ▶ Lower pH than 5 can damage the sensor head irreversibly
Stability	▶ 1 year



Multi-Parameter probe can be installed in-line.

CASE STUDY

- ▶ **Client:** National Water Authority
- ▶ **Application:** Continuous Chlorine Monitoring
- ▶ **Description:** New legislation required chlorine monitoring for water conveyance connections serving more than 50,000 residents. Due to regulation, the National Water Authority was required to install continuous chlorine monitoring in numerous locations, most without any proper infrastructure for power and communication.
- ▶ **Solution:** Wavelet Water Quality Kits were deployed nationally at each connection point supplying more than 50,000 consumers. By using Ayyeka's remote monitoring solutions, the client was able to quickly, affordably and efficiently install new locations for continuous quality monitoring, stay compliant with evolving legislation, and in doing so save time and resources.



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.