



WAVELET TEMPERATURE PROFILE KIT

Model No. WA2350 - SE00026

SUMMARY

The Wavelet Temperature Profile Kit offers an end-to-end solution for real-time measurement and monitoring of temperature transients in reservoirs, lakes, streams, water tanks, coastal waters, and can also be used for sewer water applications. The Kit includes a 3-ft temperature string with one sensor node, but is scalable up to 4,000-ft in increments of 1.5-ft to 150-ft cables.

Monitoring thermal stratification offers insights on various parameters and dynamics associated with water temperature, including: water quality, evaporation, flood control, and ecosystem health. Ayyeka's streamlined, cyber-secure solution provides GPS and time-synced data to water network operators, regulators, and decision makers and supports better resource management.

WAVELET PLATFORM FEATURES

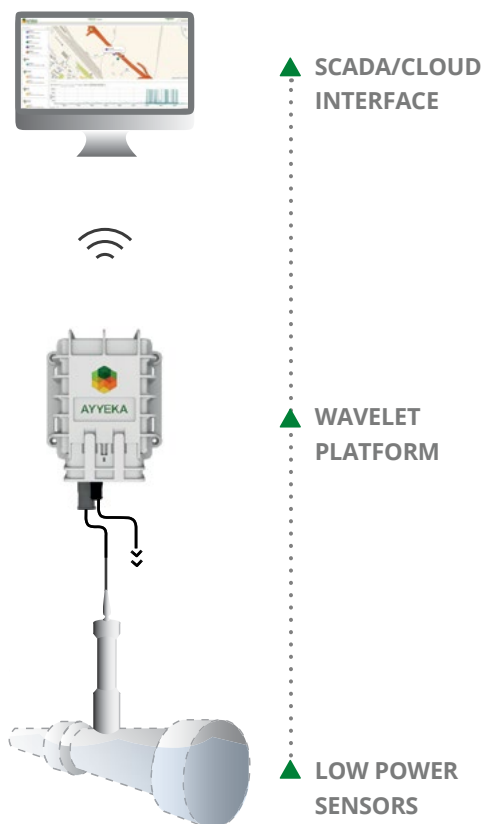
- ▶ PLUG-AND-PLAY
- ▶ BUILT-IN SCADA INTERFACE
- ▶ CYBER-SECURITY
- ▶ USER-FRIENDLY DATA VISUALIZATION
- ▶ CLOUD-BASED DATA STORAGE
- ▶ REMOTE NETWORK MANAGEMENT
- ▶ GLOBAL GSM CELLULAR SERVICE
- ▶ PROGRAMMABLE THRESHOLDS
- ▶ E-MAIL & SMS ALERTS
- ▶ GPS TIME & LOCATION SYNC
- ▶ LOW POWER CONSUMPTION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



TEMPERATURE STRING SENSOR SPECIFICATIONS

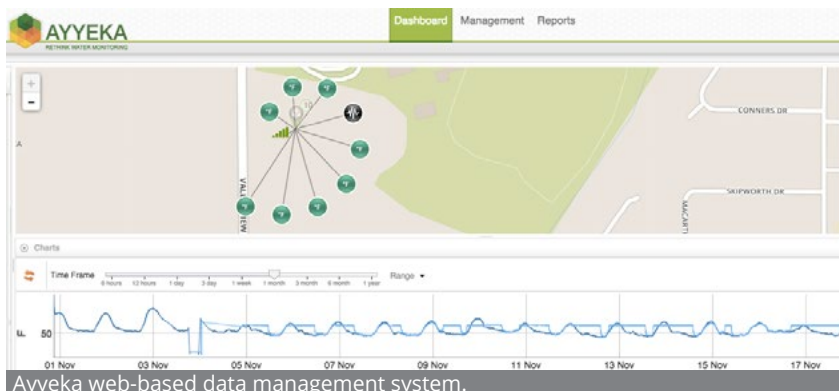
Standard Operating Range	0°C to 45°C (32°F to 113°F)
Temperature Accuracy	±0.075°C (±0.135°F)
Resolution	0.01°C (0.018°F)
T90 Response Time	60 seconds
Refresh Rate	2 seconds
Max. Sensors on String	250
Max. Length	1,219 m (4,000 ft)
Dimensions (L x Ø)	7.62 cm x 3.3 cm (3 in. x 1.3 in.)



The temperature string provides accurate measurements to profile thermal stratifications.

CASE STUDY

- ▶ **Client:** Regional Water Authority
- ▶ **Application:** Water Tank Temperature Profiling
- ▶ **Description:** A regional water authority was looking for a cost-effective, autonomous solution for temperature profiling in a large water supply tank that undergoes mixing. The client's current solution required manual sampling, which is inefficient and costly.
- ▶ **Solution:** Ayyeka furnished the client with a Wavelet Temperature Profile Kit containing a temperature string with 10 sensors. The pre-integrated, cyber-secure Kit was installed and initiated in a matter of minutes, providing a stream of data in real-time.



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.