

Remote Integrated Monitoring of Water Supply Facilities

Wide Area Monitoring System

Are you having any problems like this?

Equipment

Water treatment plants, water intake facilities, distribution reservoirs, and other water supply facilities

Problems

Unmanned facilities are widely dispersed, making data collection difficult.



- ▶ The intake facility is located far from the water treatment plant, requiring regular trips to measure data at the intake site, which is time-consuming.
- ▶ Even offices located far from water treatment plants and intake facilities want to grasp the local situation, but they are unable to do so.
- ▶ Data is scattered across water treatment plants and intake facilities, making comprehensive integrated monitoring impossible and making it difficult to detect where anomalies are occurring.

Easy to start using! Wide Area Monitoring System solves remote monitoring issues



Facilities that exist in a wide area can be integrated and managed through remote monitoring.

The cloud can be used to reduce time and costs, and to efficiently build monitoring systems.

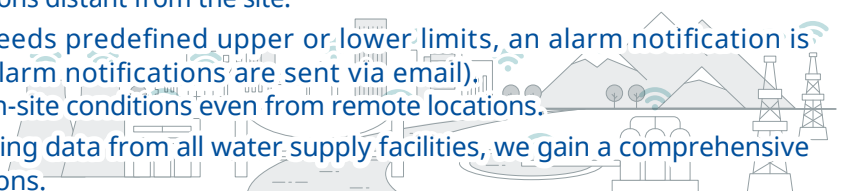


Value through problem solving

- ✓ By digitizing measured data from scattered intake points and distribution reservoirs and integrating it into a cloud-based monitoring system, operators can assess on-site conditions without physically visiting locations. This reduces the burden of operator rounds. Operational status can be verified remotely from locations distant from the site.

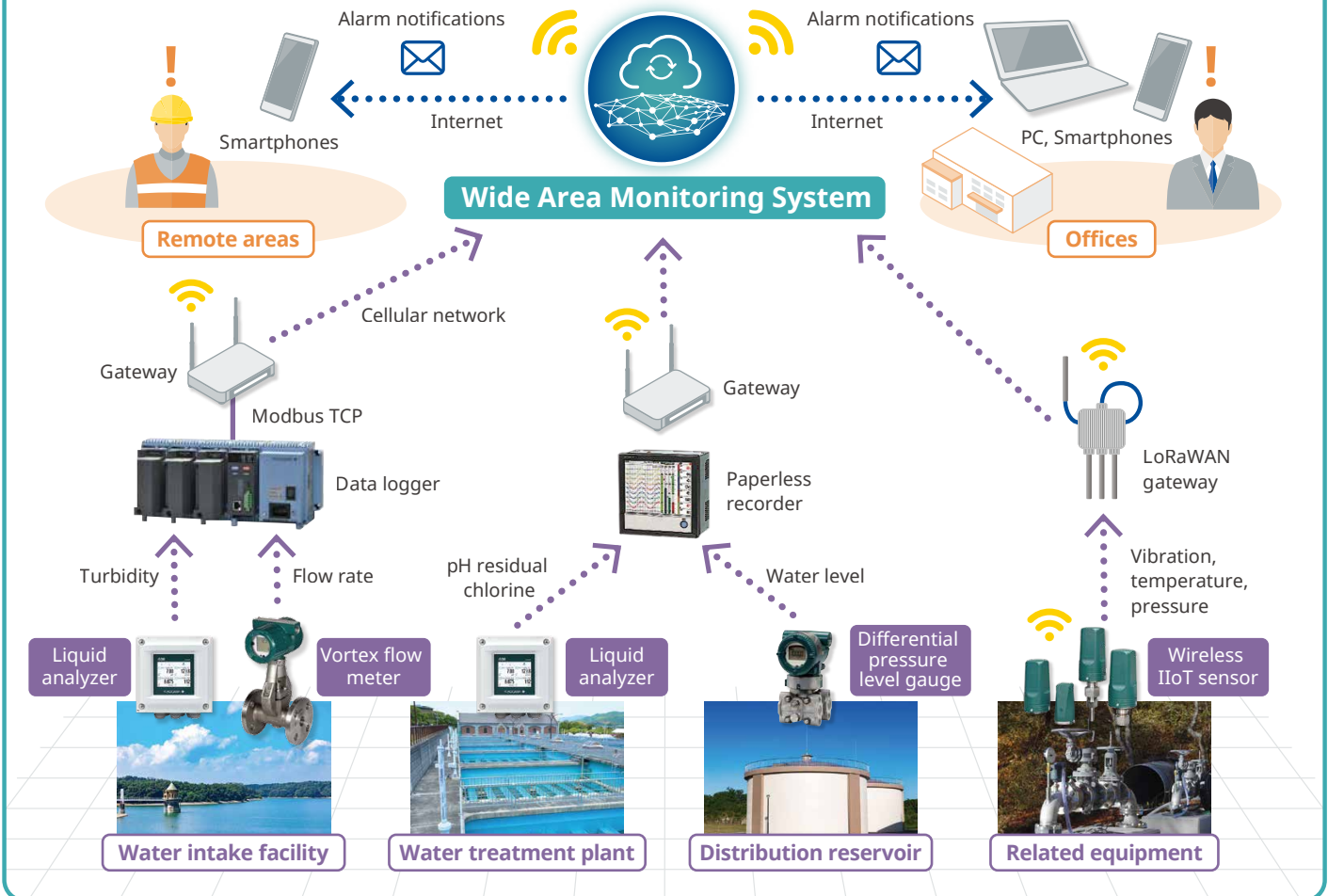
- ✓ When measured data exceeds predefined upper or lower limits, an alarm notification is automatically triggered (alarm notifications are sent via email). This allows monitoring of on-site conditions even from remote locations.

- ✓ By integrating and monitoring data from all water supply facilities, we gain a comprehensive overview of on-site conditions. This enables us to detect early signs of anomalies anywhere within the facility and take prompt action.



Proposed System Configuration

By centrally monitoring and managing water supply facilities such as water treatment plants, intake facilities, distribution reservoirs, and pumping stations through the cloud-based “Wide Area Monitoring System (WAMS),” we achieve operational efficiency and reduction in man-hours. This enables real-time monitoring of equipment status and water quality at remote locations from anywhere, allowing early detection of anomalies and rapid response through the visualization of monitoring data. Furthermore, it reduces the time and cost required for personnel to visit sites.



► Devices

Category	Product	Notes
Cloud	Wide Area Monitoring System	Data acquisition interval: 5 min. or more, 50 measured data*
Communication	Wireless Communication Connection License	
Comm. devices/ data acquisition	Data logger, Gateway, Recorder, Recorder gateway LoRaWAN gateway	
Sensor	Flowmeter, Analyzer, Differential pressure level gauge Sushi Sensor (Vibration, Temperature, Pressure)	

*With custom orders, collection cycles can be set to as short as 1 minute.

► Industries Water supply facilities

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