

LIFT STATION MONITORING WITH DIGI

Remote Management of Lift Stations

Lift stations are a critical part of wastewater collection and treatment systems. Depending on the size of the communities they serve, municipal wastewater utilities might need to monitor and maintain dozens to hundreds of lift stations in remote areas, both expensive and time-consuming. As legacy landline and radio-based telemetry systems reach the end of life, utilities should upgrade to wireless monitoring systems that provide better access to data and are less costly to install and maintain.

Case Overview | OPTIMIZING LIFT STATION PERFORMANCE

A major wastewater utility with several dozen lift stations scattered through their municipality reached out to an OEM client of RTO for help updating their communications infrastructure. With aging hardware and constant data gaps, they were in serious need of an upgrade.

They needed solutions that to ensure and maintain the efficiency of their water treatment operations and work to actively prevent system failures. At all times, their internal operators need to know if remote pumps are working properly without the need of constant site visits.

Challenges Faced

Minimize Failures

From pump failures to power outages and even act of vandalism, a lift station failure of any kind can result in sewer overflows, contaminated water or damage to the environment that come with hefty fines. Digi wireless connectivity enables real-time alarm and flow data so that operators can address problems before they become catastrophes.

Improve Performance

Cellular solutions from Digi make it possible to collect data for historic trends to help engineers better understand variables affecting lift station performance and make adjustments to optimize operations.

Reduce Costs

For many utilities, the cost of maintaining copper wiring has become prohibitive. Implementing Digi wireless connectivity reduces expenses and eliminates the need to deploy truckrolls to remote stations to manually monitor equipment and sensors. Additionally, Digi wireless solutions make it easier to comply with the guidelines and requirements of the Critical Infrastructure Protection (CIP) Act and avoid fines.

Withstand Conditions

Our lift station solutions are designed to withstand the most demanding applications and environments to ensure long-lasting performance, and Digi backs them up with expert technical support.





RTO can provide your organization the business-critical IoT connectivity solutions it needs to deploy real-time monitoring and control systems for wastewater lift stations.



Digi Connect Sensor+ and IX10 Routers

With its flexible power options and weatherproof enclosure, the Digi Connect Sensor+ (DCS+) is ideal for deployment to rugged and remote areas, including lift stations, sewers, and more. The DCS+ wirelessly reports data from level, flow, pH and other commonly used sensors by the water and wastewater industry.

The Digi IX10 is a flexible and reliable 4G LTE router designed for the challenges of water and wastewater management. Digi Remote Manager (DRM) lets you monitor, manage, and control devices from a single central, secure platform. Utilizing the IX10 and DRM, RTO can help SCADA engineers quickly deploy a complete 4G LTE solution to connect their assets, gather and integrate data, and remotely manage network devices.





Shipped Ready and Delivered "Hot"

OEM and resale clients regularly employ the experts at RTO to pre-configure all their clients' devices prior to shipment. RTO worked with Digi to build templates to meet their exacting needs and contacted Verizon to activate every device on their network.

Accordingly, every device we delivered was ready for immediate installation within their controller housings, ready to be plugged in and powered on. After install, each router and antenna pair enabled nearly instant connectivity to Verizon's private network.

With the addition of signal boosting antennas from Mobile Mark, their client saw overnight improvement to lift station monitoring systems - remotely managing their systems in real-time.

Why Choose RTO?

For 15+ years RTO has provided IoT connectivity solutions to organizations that manufacture solutions for water management agencies. We help our OEM customers engineer and provide solutions to clients by delivering them top-tier cellular equipment from only the most trusted manufacturers worldwide.

Our DevProv+ services team configures, provisions, kits and ships your devices hot and ready for immediate use. And our installation teams ensure your devices are functioning securely, reliably, and at peak performance.

Reach out to RTO today to rapidly deploy cellular solutions that meet your clients' exacting lift station monitoring needs.



CONTACT RTO TO ENGINEER YOUR CONNECTIVITY SOLUTION TODAY



By Phone: (919) 442-0038 By Email: info@realtimeops.com