

Olea Meter Health - Bypass Valve Monitoring (Option)

Bypass Monitoring Use Case

Challenge

Water utilities in the United States lose an estimated \$3.9 Billion annually due to failed or poorly performing commercial and industrial water meters. It is estimated that 10-15% of this revenue is lost due to open bypass valves that direct water around the water meter.

Solution

Olea's unique and proprietary Bypass Valve Monitor Solution works with Olea's Meter Health Analytics (MHA) to monitor large commercial and industrial water meters and notify the utility if the bypass valve is open or has recently been opened. The provides utilities with unparalleled insights into meter accuracy and minimizes illegal consumption

Benefits

Olea's Meter Health Analytics solution (MHA) coupled with the new Bypass Valve monitoring solution allows utilities to bill for every drop of water delivered.

Business Challenges

Water is an increasingly scarce resource! Utilities are challenged by increasing bulk water costs due to scarcity, urbanization, and changing weather patterns. Aging infrastructure requires more than \$500 Billion investment and a complex political environment makes rate increases challenging.

Large commercial and industrial water meters can represent 40%-60% or more of a utility's annual revenue. The meters are not easy to maintain and visibility into the meters and valves usually requires physical inspection. *Olea's Bypass Valve Monitoring(BVM) Solution* coupled with Olea's MHA Solution gives quick reliable insight that can be monitored remotely.

Business Benefits

Olea's Meter Health Analytics (MHA) coupled with the new Bypass Valve Monitor(BVM) option is designed to monitor high-value water meters to help ensure utilities bill for every drop of water delivered. In addition, MHA with BVM provides:

- Achieve full Revenue Potential/*Minimize illegal consumption*
- Actionable Intelligence – *Identify if the bypass valve is open*
- Reduced OPEX – *Reduce truck rolls to inspect meters*
- Reduced CAPEX – *Manage meter revenue more accurately*
- Regulatory Compliance/*Improved water audit accuracy*

Proprietary Technology

Olea Smart Water Revenue System Bypass Valve Monitoring Solution is a patented solution available only from Olea. Patents include:

- Retrofit Device and Method of Retrofitting Flow Meter
- Analysis of Pipe Systems with Sensor Devices
- Portable Wireless Mesh Device with improved Antenna Systems

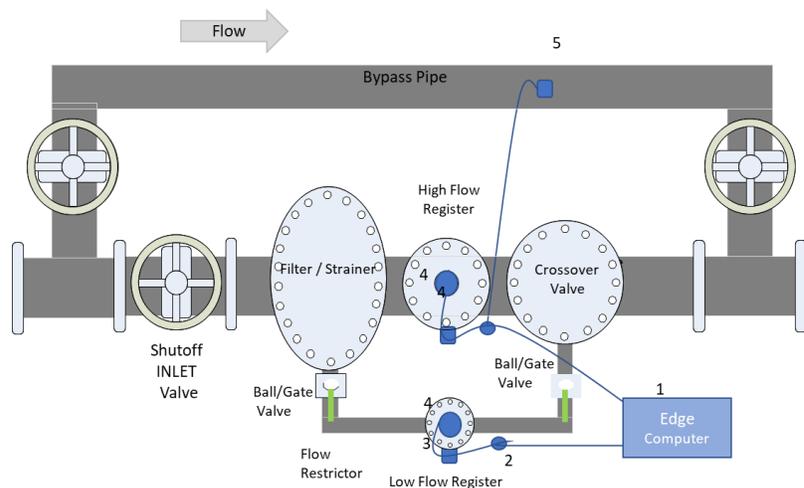
Qualified for sole source procurement

Solution Approach

Olea’s Meter Health Analytics (MHA) with Bypass Valve Monitor(BVM) solution is a complete turn-key solution delivering deep insights into the health of a commercial or industrial water meter. The foundation for the solution is Olea’s proprietary “edge computing” platform utilizing a powerful and energy efficient computer, a sophisticated sensor array, the latest cellular technology to communicate SMART data to the cloud for data visualization.

The Bypass Monitoring Solution is a sophisticated flow monitoring sensor housed in a waterproof, durable housing which is attached to the bypass valve pipe. The sensor is non-invasive and does not affect the operation of the water meter or register in any way. The Olea solution uses a small durable solar panel and a high-performance cellular antenna mounted outside the meter vault.

1. Edge Computer
2. Junction
3. Rotation & Vibration Sensor
4. Head Camera / Sensor
5. Bypass Sensor



Summary

Olea’s MHA Bypass Valve Solution is a state of the art flow sensor that provides actionable intelligence to the water utility in order to prevent loss of revenue due to open or partially open bypass valves.

- Utilizing advanced edge analytics to provide deep insights into the health of high-value water meters.
- Quick detection and communication of water meter failures and the cost of failures enabling prioritization of meter repairs and quick recovery of lost revenue.

Olea’s MHA solution allows utilities to bill for every drop of water delivered!