

# SMART WATER



## Overview

The Smart Water System is made up of smart nodes distributed over the entire water network, plus the GIS-based SCADA which provides overall control over the entire infrastructure. The system is a “Smart Grid” idea incorporated into water infrastructure. This is a new and innovative way of making the use of water resources more optimal and secure.

## System Components

- ✓ Communication server
- ✓ Central SCADA station
- ✓ Operator workstations
- ✓ Local Operator Workstations
- ✓ RTUs
- ✓ Central Nodes
- ✓ Transmission Node
- ✓ Distribution Node
- ✓ Consumption Node

## System Functions

- ✓ Detailed monitoring data from remote locations
- ✓ Distributed quality analysis for the entire infrastructure
- ✓ Real-time monitoring and control of pumps and valves
- ✓ Isolation of faulty areas to avoid water leakage or pollution
- ✓ Differentiated water tariffs
- ✓ Historical data for future analysis
- ✓ Identification of pollution sources in the infrastructure
- ✓ Local web interface
- ✓ Alarms handling and monitoring
- ✓ Different authentication levels

## Benefits

- ✓ Effective organization of water treatment process
- ✓ Identification of pollution sources in the infrastructure
- ✓ Increase of water security for customers
- ✓ Effective transmission of water resources
- ✓ Lower loses and leakages of water
- ✓ Lower maintenance cost
- ✓ Faster fault identification and repair
- ✓ Higher water quality