scadasu
WATER MANAGEMENT SYSTEMs

Sustainable

WATER MANAGEMENT

“Every drop has a story. We manage that story from source to consumer.”

Managing Water is Managing the Future

Only 0.5% of the world’s water is accessible for human use.

Growing populations, climate stress and infrastructure losses turn every drop into a strategic resource.

How we manage water today determines how sustainable our cities will be tomorrow.

With this awareness, SCADASU monitors, measures and manages the entire journey of water — from its source to the consumer.

ABOUT SCADASU

Engineering, automation, and software technologies come together under SCADASU to digitalize urban water management and deliver end-to-end solutions through a fully integrated water-management ecosystem.

Data-Driven Approach

With real-time measurement and analysis technologies, we ensure measurable and traceable management at every step of the water cycle.

Integrated Perspective

By unifying hydraulic engineering, automation, and software components under a single ecosystem, we optimize water management from end to end.

15+ **Years of Experience**

We carry water into the future.

> The cities of the future will be guided by data-driven decisions. We make this transformation possible by digitalizing water management and bringing all components—from the field to the control room—together on a single intelligent platform.

Company Goals

Sustainable Water Management

Making urban water infrastructure more efficient, traceable and sustainable.

Digital Transformation & Integration

Integrating hydraulic, SCADA and software systems into a unified management platform.

Global Impact & Continuous Innovation

Developing innovative water management technologies that create impact on an international scale.

SCADASU is driven by a vision to manage the entire urban water cycle end-to-end.
By combining engineering, automation and software expertise, we create measurable value at every step of the water journey.

Company Expertise

Hydraulic Engineering

Expertise in analyzing urban water infrastructure, optimizing DMA zones, and reducing water losses through advanced hydraulic modeling.

SCADA & Automation

Experience in building integrated automation systems that monitor, control and analyze field data in real time.

R&D and Manufacturing

Engineering capability from design to production for data loggers, controllers and custom sensor solutions.

Project Management

End-to-end project management covering planning, installation, commissioning and training for all field applications.

Software Development

A robust software foundation that transforms data into actionable insights within the SCADASU ecosystem, including SUIS and other platforms.

Corporate Advisory

Strategic consultancy in water-loss reduction, energy efficiency, optimization and digital transformation for utilities.

SCADASU Advantages

SCADASU brings engineering, automation and software disciplines together under a single, integrated structure.

This synergy enables every stage—from planning to production, from field implementation to operation—to progress in harmony.

The manufacturing and automation strength of TBM Endüstri, the hydraulic engineering expertise of Suinova, and the software technologies of Spectrum come together to create a unique advantage in modern water management.

TBM Endüstri A.Ş.

- SCADA & Automation Solutions
- Field Implementations
- R&D and Manufacturing

Suinova Mühendislik A.Ş.

- Hydraulic Engineering Services
- Water Loss Reduction
- DMA Design and Applications

Spectrum Yazılım A.Ş.

- SUİS Water Operating System
- Laboratory Information Systems
- Regulatory & Specialized Software Solutions

Single Point of Contact, Single Responsibility

We eliminate the need to coordinate multiple vendors. Within the SCADASU ecosystem, all project stages operate under a single point of accountability. Planning, design, manufacturing, integration and operation are managed seamlessly from one place.

What We Do?

As SCADASU, we manage the entire urban water supply and distribution cycle end-to-end. By combining hydraulic engineering, automation and software technologies, we plan, monitor and optimize the full journey of water — from the source to the consumer.

Through a data-driven approach, we reduce water losses, improve energy efficiency and enable cities to achieve their sustainability goals.

We digitalize the entire water cycle from source to consumer.

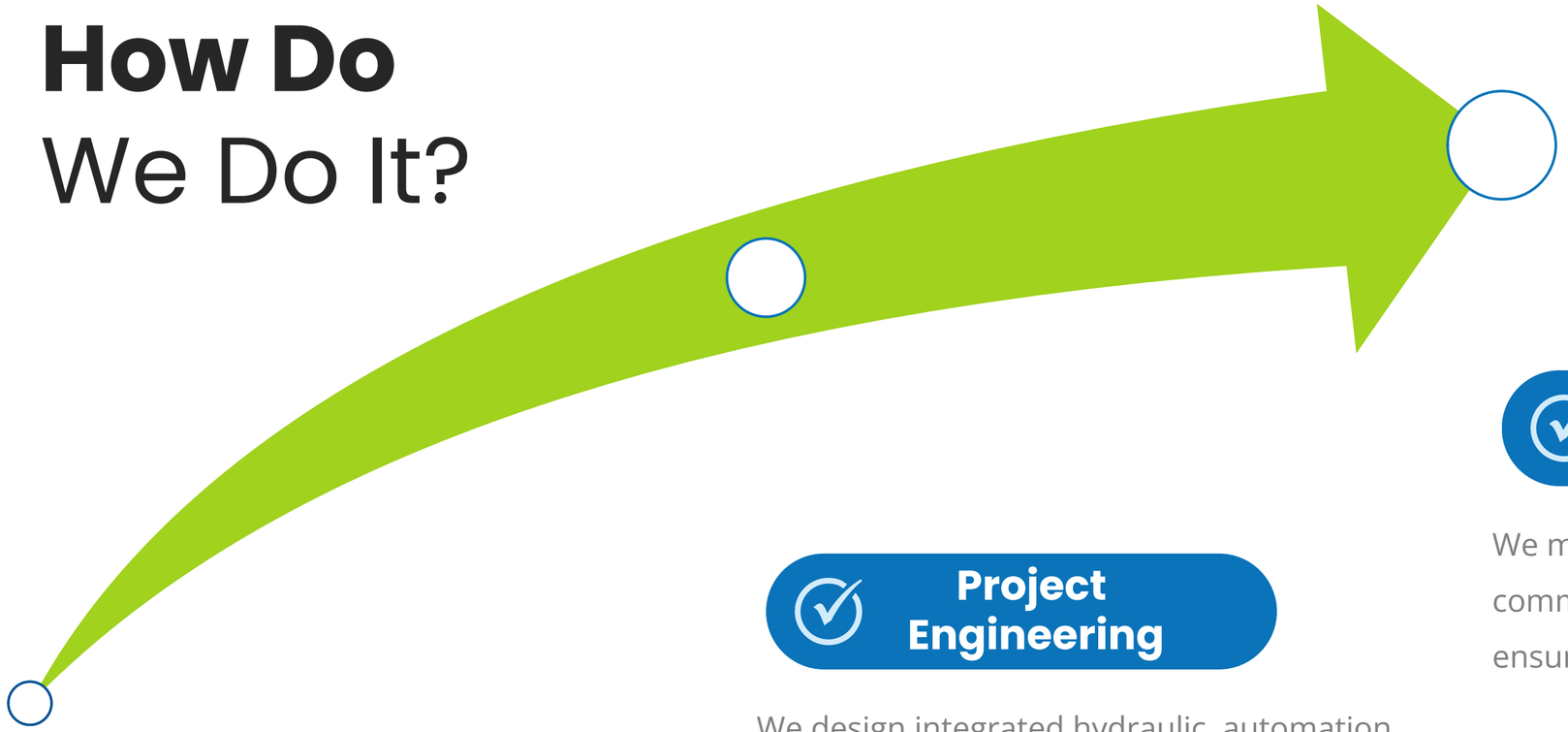
Water Management Solutions

We deliver comprehensive water-management solutions across all stages, including feasibility studies, hydraulic modeling, pressure management, flow measurement systems, SCADA integration and data analytics.

Digital Transformations

Within the SCADASU ecosystem, we collect all data from field sensors to the control center on a single platform, enabling decision-support systems, reporting, and remote-control capabilities.

How Do
We Do It?



Feasibility

We analyze the existing infrastructure, collect field data and determine the most effective strategy for the city’s water management.

Project Engineering

We design integrated hydraulic, automation and software components; planning the data flow from the field to the control center.

Implementation

We manage installation, integration and commissioning processes from a single point, ensuring sustainable and reliable system operation.

Feasibility

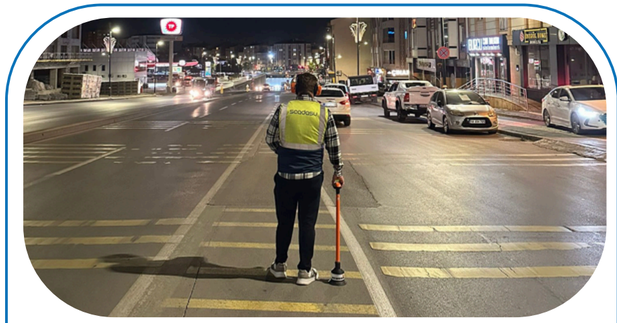
SCADASU analyzes the existing infrastructure at the start of each project with a comprehensive engineering approach.

Field measurements, valve and pipeline detection, pressure assessments, leakage surveys and flow measurements reveal the current condition of the network.

The collected data forms the foundation for hydraulic modeling and pressure-management scenarios.

Data-Driven Preliminary Assessment

All field measurements and existing documentation are evaluated to determine overall system performance.



Leak Detection

Physical losses are identified through acoustic listening, pressure analysis and night-flow assessments.

Pipeline & Valve Detection

The locations and conditions of valves, pipelines and connection points on the network are verified.

Pressure & Flow Measurements

Critical points are measured in the field; these datasets are used for model calibration.

Data Analysis & Reporting

All collected data is evaluated, and input datasets for hydraulic modeling are prepared.

Project Engineering

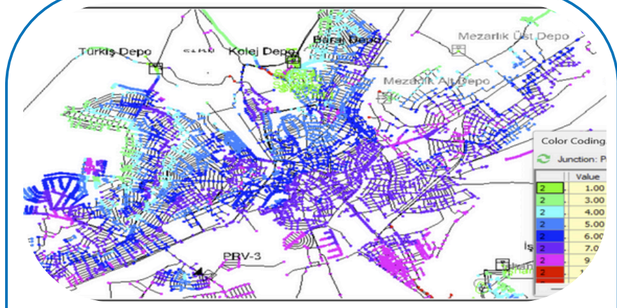
Field data collected during the feasibility stage is analyzed at an engineering level and transformed into practical, applicable project designs.

Hydraulic modeling, DMA zoning, pressure management and measurement-infrastructure design are structured as an integrated system at the city scale.

Accurate and reliable water-management projects are built on the right data — reducing water losses and improving operational efficiency.

Engineering-Driven Design

We design hydraulic, mechanical, electrical and communication components within a unified project framework.

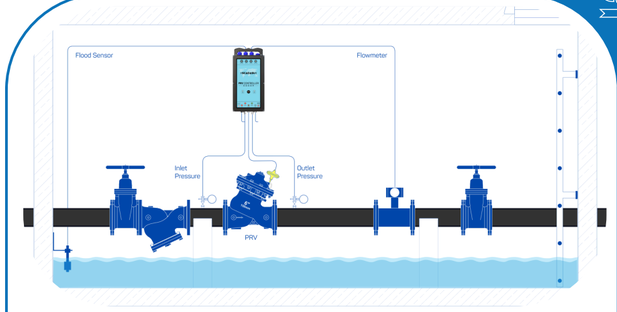


Hydraulic Modeling

Operational scenarios are developed using hydraulic models calibrated with real field data.

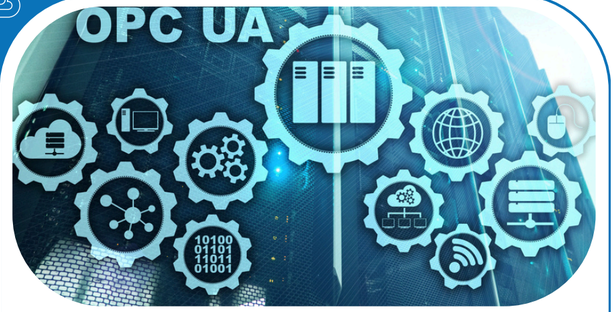
DMA Design

The network is segmented into controlled zones for effective water-loss management and measurement-point planning.



Pressure Management Plan

Pressure-reduction strategies, night-flow optimization and operational control scenarios are prepared for the network.



Automation Infrastructure

SCADA and automation architecture is designed for all field devices (flow, pressure, level sensors, data loggers and more).

Implementation

SCADASU brings the designed systems to life in the field.

From construction, mechanical and electrical works to the installation of DMA chambers; from commissioning the SCADA infrastructure to integrating SUİS — all processes are managed centrally.

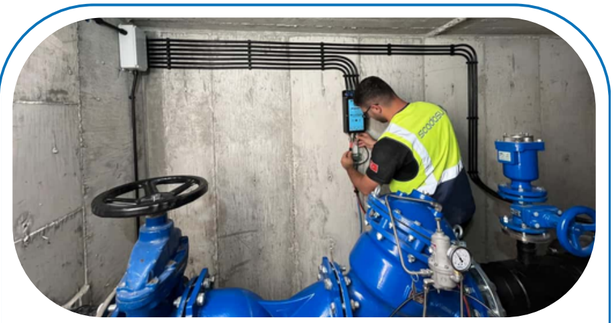
A fully connected water-management network is formed, where data flows uninterruptedly and can be monitored and controlled reliably.

Single-Point Implementation Management

Field teams, automation specialists and software engineers work in coordination to commission the system as a turnkey solution.

Construction & Mechanical Works

All infrastructure construction and installation works are completed, including pump stations, valve chambers and pipeline connections.



DMA Chambers

DMA chambers for pressure and flow measurement are installed according to site conditions and fully calibrated.

SCADA Control Center

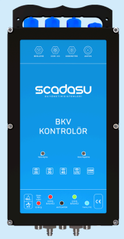
All field devices are integrated into the SCADA system, data flow is verified and the remote-monitoring infrastructure is activated.

SUİS Water Operating System

SCADA, GIS, customer and pressure-management data are unified in SUİS, giving full operational visibility.

Product Range

SCADASU designs and develops specialized measurement and control equipment used in water-management systems with its own engineering capabilities. From controllers to data loggers, portable flow meters to solar systems — every product is built to be reliable, durable and fully integrated.



PRV Controller

Automatically regulates network pressure in isolated zones, reducing physical losses and operational failures.

Data Logger

Collects pressure, flow and level data at regular intervals and transmits it to the control center for continuous monitoring.

Portable Flow Meter

A portable device that enables instant field measurements and simultaneously performs pressure measurement.

Solar Panel System

Provides uninterrupted power to field equipment through solar panels and long-life batteries.

PRV
Controller

The SCADASU BKV Controller is a high-performance field unit developed for pressure management and smart valve control. It provides real-time monitoring, remote operation, automatic pressure optimization and secure data communication in DMA zones.

With its durable structure, low power consumption and strong communication options, it is an ideal solution for reducing water losses in urban networks.

Flow-Sensitive Control

Measures consumption instantly and automatically adjusts zone pressure based on real-time demand.

Time-Scheduled Control

It adjusts pressure automatically based on Daily time intervals or different days of the week.

Fixed Pressure Control

Maintains the DMA pressure at a predefined constant level with automatic regulation.

Critical-Point Referenced Control

Uses a critical point reference to automatically regulate network pressure based on the most sensitive location.

DATA
Logger

The SCADASU Data Logger is an intelligent telemetry unit that securely records, processes and transmits pressure, flow, level and quality data collected from field sensors.

With uninterrupted data collection, large memory capacity and robust communication options, it delivers all time-stamped data required for informed decision-making in water-network management.

0–50 bar Pressure Measurement

Easily connects to the network and offers a wide measurement range from 0 to 50 bar.

5+ Years Battery Life

With up to 8 communications per day, the unit provides more than 5 years of battery life.

High-Capacity Memory

Large internal memory enables long-term data logging and secure storage.

Critical-Point Logger

Can be installed at critical points within isolated zones for precise monitoring.

PORTABLE
Flowmeter

The SCADASU Portable Flow & Pressure Meter is a field device designed to measure flow and pressure values in city water networks quickly, accurately and reliably.

It enables field teams to take instant measurements, record data and transfer it directly to the control center — accelerating all processes from fault detection to DMA analysis.

DN50 – DN6000 Measurement Range

Provides ultrasonic measurement capability across a wide range, from DN50 up to DN6000 pipe diameters.

0–50 bar Pressure Measurement

Easily connects to the network and offers a broad pressure measurement range up to 50 bar.

High-Capacity Memory

Large internal memory allows long-term data logging.

Critical-Point Logger Mode

Can function as a data logger at critical locations within isolated zones.

SOLAR
Panel Pole

SCADASU Solar Panel Poles are autonomous power units designed to provide uninterrupted field operation for data loggers, pressure-control devices and environmental sensors.

High-efficiency solar panels, long-life battery systems and a durable mechanical structure ensure reliable 24/7 power in all field conditions.

Durable Modular Design
Pole height, panel capacity and battery size can be customized according to project requirements.

Uninterrupted Power Supply
The most practical way to deliver stable, maintenance-free power to field equipment.

Easy Installation
Corrosion-resistant metal body engineered for field conditions; reinforced structure against tampering and vandalism.

High-Efficiency Panel
Monocrystalline solar panel provides optimal production even in low-light conditions.

SUİS Water Operating System

An asset-based platform that manages the entire water network from source to consumer.

Waste Tracking System

Enables real-time monitoring of vacuum truck filling and disposal operations directly on the map.

Basin Monitoring System

Allows tracking and reporting of all environmental inspections within watershed protection zones.

Software Solutions

SCADASU Software Solutions offer modern, intelligent and scalable platforms developed specifically for every step of water management.

All processes — from watershed to network, from field to control center — are unified under a single architecture with modules for analysis, reporting, monitoring and operational management.
This digital ecosystem provides utilities with full visibility, rapid response capability and sustainable operational excellence, ensuring the value of water is carried into the future.

Water Quality Monitoring

Software that organizes sampling, work orders and reporting processes.

Laboratory Management System

Laboratory software that digitalizes sampling workflows and manages analysis processes.

Mobile Environmental Inspection

Environmental inspection software that enables field audits to be managed via mobile devices.

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WATER Operating System

SUiS

One System, One Intelligence

All field data, unified on a single screen.

Real-Time Network Monitoring & Smart Alert System

- Access from anywhere
- Monitoring of pressure, flow, meters, faults, night flow and alarms
- AI-powered anomaly detection (leak, burst, outage risks)
- Automatic notifications and report generation during critical events

Map-Based Infrastructure & Asset Management

- Visual mapping of pipes, valves, reservoirs, buildings and customers
- Valve shutoff / impact zone simulations
- Centralized management of all network assets

Water Supply, Consumption & Billing Integration

- Tracking water supply from source to reservoir and isolated zones
- Customer consumption, billing/invoicing data and consumption analytics
- Water balance reporting (IWA compliant)

Advanced Reporting & Data Analytics

- Fast and flexible reporting of all network data
- Comparative analysis between selected time periods
- Network performance indicators, alarm and fault statistics

Water Loss Analysis & DMA Management

- Regional analysis of water-loss rates
- Night flow, fault/leak source detection in DMAs
- Zone definitions, meter matching and tolerance analyses

Enterprise System Integration & Automation

- Address-Based Spatial System integration
- Customer data matching
- IoT device management (parameters, readings, configuration)
- Automatic correction of faulty data / clean-data guarantee

Integrated Water Management

Carrying Water Into the Future

“Every drop has a story. We manage this story from source to consumer.”

SCADASU is an intelligent water-management ecosystem that unifies every process from source to consumer on a single platform.
It processes field data in real time, transforms it into actionable insights and provides full visibility and operational control for utilities.

From watershed protection to network monitoring, from device management to DMA analysis, from SCADA integration to advanced software platforms — SCADASU connects all components to reduce water losses, optimize resource usage and strengthen the sustainability of urban water infrastructure.

SCADASU delivers the speed, reliability and technology required for modern water management in one unified system.

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Thank You

for Your Interest

Please feel free to contact us for all your water management needs.

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