

Smart Water Infrastructure Market Forecasts to 2034 – Global Analysis By Component (Smart Meters, Sensors, Control Systems, Communication Networks and Analytics Software), Monitoring Type, Network Type, Water Source, Technology, Application, End User and By Geography

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Abstracts

According to Statistics MRC, the Global Smart Water Infrastructure Market is accounted for \$18.0 billion in 2026 and is expected to reach \$47.5 billion by 2034 growing at a CAGR of 12.8% during the forecast period. Smart water infrastructure refers to digitally integrated water utility systems that deploy advanced metering, distributed sensor networks, automated control platforms, AI-powered analytics software, and two-way communication architectures to enable real-time monitoring and management of water distribution, quality, pressure, and consumption across municipal, industrial, and agricultural water delivery networks. These systems encompass smart water meters, pressure and flow sensors, water quality analyzers, supervisory control and data acquisition platforms, leak detection algorithms, demand forecasting tools, and customer engagement portals that collectively optimize water utility operational performance, resource conservation, and regulatory compliance reporting.

Market Dynamics:

Driver:

Water Scarcity and Efficiency Mandates

Water scarcity pressures and regulatory efficiency mandates are the primary drivers

compelling water utility investment in smart infrastructure that reduces non-revenue water losses through early leak detection, optimizes treatment and distribution energy consumption, and enables precision demand management. Water stress conditions in major population centers across the United States, Europe, Middle East, and Asia Pacific are elevating water utility boardroom prioritization of digital efficiency investment. Government water utility performance regulations mandating non-revenue water reduction targets and leakage management reporting are creating compliance-driven procurement requirements that accelerate smart infrastructure deployment timelines beyond voluntary efficiency improvement programs.

Restraint:

Fragmented Utility Procurement and Standards

Highly fragmented water utility ownership structure and absence of universal smart water communication and data standards represent significant market scaling barriers, as thousands of independent municipal water authorities operating with constrained capital budgets pursue incompatible technology approaches that prevent interoperability, limit vendor economies of scale, and create data integration challenges for regional water management authorities. Small utility procurement budgets inadequate for large-scale smart infrastructure investment without external grant support concentrate smart water market revenues among a relatively small number of well-capitalized metropolitan utilities. Regulatory environment fragmentation across jurisdictions with different investment cost recovery frameworks creates uneven deployment incentives.

Opportunity:

Agricultural Irrigation Precision Management

Agricultural irrigation precision management represents a large and growing smart water infrastructure opportunity as agricultural water consumption constituting 70% of global freshwater withdrawals faces growing efficiency pressure from water scarcity regulation and competitive water allocation. IoT soil moisture sensors, AI-powered irrigation scheduling platforms, and smart water delivery control systems are demonstrating 20–40% irrigation water reduction while maintaining or improving crop yields. Government agricultural water efficiency programs and sustainable agriculture certification schemes are subsidizing smart irrigation infrastructure adoption that generates substantial smart water technology procurement across major agricultural

water consuming regions including the United States, India, and Australia.

Threat:

Cybersecurity Vulnerabilities in Critical Infrastructure

Cybersecurity vulnerabilities in water utility operational technology networks represent a significant public safety threat that is complicating smart water infrastructure investment decisions as security incidents targeting water treatment control systems in multiple countries have demonstrated the potential for malicious actors to compromise water quality or supply continuity. Expanding network connectivity of water distribution control systems through smart infrastructure deployment creates additional attack vectors that require ongoing cybersecurity investment proportional to smart infrastructure expansion. Regulatory requirements for operational technology cybersecurity compliance are adding implementation cost burdens that constrain net financial benefits from smart water efficiency programs at utilities with limited IT security resources.

Covid-19 Impact:

COVID-19 demonstrated smart water infrastructure operational value by enabling water utility personnel to monitor network performance and respond to incidents remotely during pandemic-era workplace access restrictions. Contactless smart meter reading capabilities eliminated customer premise visits during lockdown periods, maintaining billing continuity. Post-pandemic government stimulus programs incorporated water infrastructure modernization provisions in multiple major economies that are generating accelerated smart water technology procurement. Heightened water infrastructure resilience awareness from pandemic-period supply chain disruptions is sustaining executive and regulatory support for smart water investment programs.

The analytics software segment is expected to be the largest during the forecast period

The analytics software segment is expected to account for the largest market share during the forecast period, due to its role as the intelligence layer that generates actionable operational value from data collected by smart meter, sensor, and control system hardware components, creating recurring software subscription revenue streams that increasingly exceed one-time hardware procurement values in mature smart water market accounts. AI-powered predictive analytics platforms for leak detection, demand forecasting, and asset failure prediction are demonstrating substantial operational cost savings that justify premium software pricing. Growing

regulatory reporting requirements for water quality and non-revenue water performance are generating compliance analytics platform procurement beyond operational optimization use cases.

The real-time monitoring segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the real-time monitoring segment is predicted to witness the highest growth rate, driven by water utility investment in continuous pressure, flow, and quality monitoring networks that enable immediate incident detection and response, replacing periodic manual sampling workflows that cannot identify transient water quality exceedances or rapid distribution network pressure events. Real-time monitoring platform subscription revenues are expanding as utilities recognize that continuous monitoring generates faster regulatory compliance assurance and reduces liability exposure from undetected contamination events. Sensor cost reductions enabled by IoT technology advances are progressively extending viable monitoring density to secondary and tertiary distribution network segments previously excluded from continuous monitoring programs for cost reasons.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, due to substantial U.S. federal water infrastructure investment through the Infrastructure Investment and Jobs Act, large metropolitan water utility procurement programs for smart meter and analytics platform deployment, and leading smart water technology company ecosystem including Xylem Inc., Itron Inc., and Badger Meter. EPA water loss control reporting requirements are compelling utility investment in smart infrastructure that enables required performance documentation. North American water utility capital investment levels substantially exceed other regional markets on a per-connection basis.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, due to rapidly expanding urban water infrastructure investment in China, India, Southeast Asia, and Australia driven by population growth, water scarcity intensification, and government smart city program integration of intelligent water management as a core service delivery component. China's sponge city and smart water network programs represent the world's largest single national smart water infrastructure

investment initiative. India's AMRUT urban water mission is deploying smart water infrastructure across 500 cities, generating substantial procurement volumes for domestic and international smart water technology suppliers.

Key players in the market

Some of the key players in Smart Water Infrastructure Market include Xylem Inc., Suez, Veolia, Siemens AG, Schneider Electric, Honeywell, ABB Ltd., Itron Inc., Badger Meter, Trimble Inc., IBM Corporation, Oracle Corporation, Evoqua Water Technologies, Emerson Electric, Endress+Hauser, Kamstrup, Arad Group, and Ferguson Plc.

Key Developments:

In March 2026, Xylem Inc. launched its Vue Smart Infrastructure platform upgrade with AI-powered pressure zone analytics and automated district metered area leak localization for large municipal water networks.

In March 2026, Badger Meter secured a contract to deploy 800,000 ORION cellular smart water meters with integrated real-time leak detection analytics for a major U.S. metropolitan water utility.

In February 2026, Kamstrup expanded its OMNIA advanced metering infrastructure platform into Southeast Asian markets through a regional partnership with a national water utility technology systems integrator.

In January 2026, Evoqua Water Technologies introduced a new IoT-enabled water quality continuous monitoring system for distribution network regulatory compliance reporting and contamination early warning applications.

Components Covered:

Smart Meters

Sensors

Control Systems

Communication Networks

Analytics Software

Monitoring Types Covered:

Real-time Monitoring

Predictive Monitoring

Remote Monitoring

Condition-based Monitoring

Manual Monitoring

Network Types Covered:

Wired Networks

Wireless Networks

Water Sources Covered:

Freshwater Systems

Groundwater Systems

Surface Water Systems

Desalinated Water Systems

Recycled Water Systems

Technologies Covered:

IoT-enabled Water Management

AI & Data Analytics

SCADA Systems

Cloud-based Platforms

Automation Systems

Applications Covered:

Water Distribution

Wastewater Management

Leak Detection

Water Quality Monitoring

Irrigation Management

End Users Covered:

Municipal Utilities

Industrial Sector

Agriculture

Commercial Sector

Residential

Other End Users

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of Africa

What our report offers:

Market share assessments for the regional and country-level segments

Strategic recommendations for the new entrants

Covers Market data for the years 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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