

# Smart Water Grid Market Forecasts to 2032 – Global Analysis by Component (Hardware, Software and Services), Deployment Type, Technology, Application and By Geography

<https://marketpublishers.com/r/S608E43AC668EN.html>

Date: April 2025

Pages: 150

Price: US\$ 4,150.00 (Single User License)

ID: S608E43AC668EN

## Abstracts

According to Statistics MRC, the Global Smart Water Grid Market is accounted for \$22.5 billion in 2025 and is expected to reach \$61.3 billion by 2032 growing at a CAGR of 15.4% during the forecast period. Smart water grid is an advanced water management system that integrates digital technologies, sensors, smart meters, and communication networks to monitor, control, and optimize water distribution and consumption. It enables real-time data collection and analysis, helping utilities detect leaks, manage pressure, and ensure efficient water usage. By providing accurate and timely information, smart water grids improve operational efficiency, reduce water loss, and enhance customer service. They also support sustainable water management by promoting conservation and enabling proactive maintenance. This modern approach transforms traditional water infrastructure into an intelligent, automated system, meeting growing demands for reliability, sustainability, and resource optimization.

Market Dynamics:

Driver:

Growing Demand for Water Conservation and Management

The increased demand for water conservation and effective management is boosting the smart water grid market. In order to optimize water distribution and guarantee effective usage, utilities and governments are progressively implementing smart water networks as worries about sustainability and water shortages grow. Leak detection and

system performance are being improved by cutting-edge technology including IoT sensors, real-time monitoring, and data analytics. The market for smart water grids is experiencing tremendous growth and innovation as a result of this change, which also promotes regulatory compliance and increases resource efficiency.

Restraint:

#### High Initial Capital Investment

The high initial capital expenditure greatly limits the expansion of the smart water grid business. Adoption by utilities is difficult, particularly in developing nations, due to the high upfront costs associated with implementing modern technologies like sensors, meters, and communication networks. Despite the long-term advantages of efficiency, conservation, and leak detection provided by smart water grids, projects are further delayed by limited funding and the requirement for long-term returns, which limits market expansion.

Opportunity:

#### Advancements in IoT and Smart Sensor Technologies

Advancements in IoT and smart sensor technologies are boosting the smart water grid market by allowing for real-time monitoring, data-driven decision-making, and effective water management. These solutions enhance distribution networks, minimize water loss, and enable proactive leak detection. Increased automation and connectivity reduce energy consumption and operating expenses while improving system responsiveness and dependability. Furthermore, water infrastructure is being transformed into intelligent, which enable utilities to precisely estimate demand, guaranteeing sustainable water use and assisting smart city projects.

Threat:

#### Data Privacy and Security Concerns

Data privacy and security concerns significantly hinder the growth of the smart water grid market. The fear of cyberattacks, data breaches, and unauthorized access to sensitive consumer and infrastructure data limits widespread adoption. Utilities and consumers worry about the potential misuse of personal and operational data, leading to regulatory challenges and increased compliance costs. These concerns create

resistance among stakeholders, slowing down the integration of advanced smart water grid technologies and solutions.

#### Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the Smart Water Grid Market. Initially, project delays and disrupted supply chains slowed market growth. However, the crisis highlighted the need for resilient and efficient water management systems, accelerating digital transformation and remote monitoring adoption. Governments and utilities began prioritizing smart water solutions to ensure uninterrupted supply, driving long-term growth and innovation in the market post-pandemic.

The smart irrigation segment is expected to be the largest during the forecast period

The smart irrigation segment is expected to account for the largest market share during the forecast period as Integration of IoT-enabled sensors and real-time data analytics allows for precise monitoring and control of water distribution in agriculture and landscaping. This not only conserves water but also reduces operational costs and energy usage. Growing concerns over water scarcity and the need for sustainable water management solutions are accelerating the adoption of smart irrigation, thereby fueling the expansion of the smart water grid market.

The data management & analytics segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the data management & analytics segment is predicted to witness the highest growth rate because advanced analytics tools help utilities analyze vast amounts of data from sensors and smart meters, allowing for early leak detection, optimized water distribution, and reduced operational costs. By providing actionable insights, data management enhances decision-making, improves service reliability, and supports regulatory compliance. This segment is crucial in creating intelligent, resilient water grids, ultimately promoting sustainability and efficient water usage in urban and rural areas.

#### Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share because rising urbanization, water scarcity concerns, and aging water systems are pushing municipalities to adopt smart technologies for efficient monitoring,

leak detection, and real-time data analytics. Integration of IoT, AI, and smart sensors is enhancing operational efficiency and reducing water wastage. Furthermore, supportive government initiatives and investments in smart city projects are positively impacting market expansion, promoting environmental conservation and improved water quality across the region.

#### Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR as it improves water distribution efficiency, minimizes waste, and ensures long-term resource utilization in the face of increasing urbanization and water constraint. Smart water grids lower operating costs and enhance service quality by facilitating real-time monitoring and leak identification. In addition, smart city initiatives and government programs are speeding up adoption, encouraging environmental preservation, and bolstering regional economic expansion.

#### Key players in the market

Some of the key players in Smart Water Grid Market include ABB Ltd., Aclara Technologies LLC, Aquarius Spectrum Ltd., Arad Group, Badger Meter, Inc., Diehl Stiftung & Co. KG, Elster Group, Honeywell International Inc., IBM Corporation, Itron Inc., Jain Irrigation Systems Ltd., Kamstrup A/S, Landis+Gyr Group AG, Neptune Technology Group Inc., Oracle Corporation, Schneider Electric SE, Sensus, Siemens AG, TaKaDu Ltd. and Trimble Water.

#### Key Developments:

In March 2025, ABB and Charbone Hydrogen Corporation, have signed a Memorandum of Understanding (MoU) agreement to collaborate on the development of up to 15 modular and scalable green hydrogen production facilities across North America over the next five years, providing a clean fuel source for existing hydrogen users and heavy industrial processes such as steelmaking, which currently use grey hydrogen as an energy source.

In January 2025, ABB and Skoda Group have partnered to supply Czech Railways with new battery-electric trains, marking a significant step toward greener and more sustainable rail transport in the Czech Republic.

In January 2025, ABB acquired Sensorfact BV, a fast-growing energy management

company. The acquisition further expands ABB's digital energy management offering.

#### Components Covered:

Hardware

Software

Services

#### Deployment Types Covered:

On-Premises

Cloud-Based

Hybrid

#### Technologies Covered:

Metering & Measurement

Communication Technology (IoT, M2M)

Data Management & Analytics

Supervisory Control and Data Acquisition (SCADA)

Geographic Information System (GIS)

Remote Sensing & Monitoring

Cloud Computing Solutions

#### Applications Covered:

Water Distribution Network Management

Advanced Pressure Management

Leakage Detection & Prevention

Water Quality Monitoring

Smart Irrigation

Wastewater Monitoring & Management

Customer Service & Billing Automation

Other Applications

#### Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & 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 2024, 2025, 2026, 2028, and 2032
- 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

## Contents

### **1 EXECUTIVE SUMMARY**

### **2 PREFACE**

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
  - 2.4.1 Data Mining
  - 2.4.2 Data Analysis
  - 2.4.3 Data Validation
  - 2.4.4 Research Approach
- 2.5 Research Sources
  - 2.5.1 Primary Research Sources
  - 2.5.2 Secondary Research Sources
  - 2.5.3 Assumptions

### **3 MARKET TREND ANALYSIS**

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Technology Analysis
- 3.7 Application Analysis
- 3.8 Emerging Markets
- 3.9 Impact of Covid-19

### **4 PORTERS FIVE FORCE ANALYSIS**

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

## **5 GLOBAL SMART WATER GRID MARKET, BY COMPONENT**

- 5.1 Introduction
- 5.2 Hardware
  - 5.2.1 Smart meters
  - 5.2.2 Sensors
  - 5.2.3 Communication Devices
  - 5.2.4 Flow and Pressure Sensors
  - 5.2.5 Control valves
- 5.3 Software
  - 5.3.1 Advanced Metering Infrastructure (AMI)
  - 5.3.2 Customer Information System (CIS)
  - 5.3.3 Network Monitoring & Management
- 5.4 Services
  - 5.4.1 Managed Services
  - 5.4.2 Maintenance & Support Services

## **6 GLOBAL SMART WATER GRID MARKET, BY DEPLOYMENT TYPE**

- 6.1 Introduction
- 6.2 On-Premises
- 6.3 Cloud-Based
- 6.4 Hybrid

## **7 GLOBAL SMART WATER GRID MARKET, BY TECHNOLOGY**

- 7.1 Introduction
- 7.2 Metering & Measurement
- 7.3 Communication Technology (IoT, M2M)
- 7.4 Data Management & Analytics
- 7.5 Supervisory Control and Data Acquisition (SCADA)
- 7.6 Geographic Information System (GIS)
- 7.7 Remote Sensing & Monitoring
- 7.8 Cloud Computing Solutions

## **8 GLOBAL SMART WATER GRID MARKET, BY APPLICATION**

- 8.1 Introduction
- 8.2 Water Distribution Network Management

- 8.3 Advanced Pressure Management
- 8.4 Leakage Detection & Prevention
- 8.5 Water Quality Monitoring
- 8.6 Smart Irrigation
- 8.7 Wastewater Monitoring & Management
- 8.8 Customer Service & Billing Automation
- 8.9 Other Applications

## **9 GLOBAL SMART WATER GRID MARKET, BY GEOGRAPHY**

- 9.1 Introduction
- 9.2 North America
  - 9.2.1 US
  - 9.2.2 Canada
  - 9.2.3 Mexico
- 9.3 Europe
  - 9.3.1 Germany
  - 9.3.2 UK
  - 9.3.3 Italy
  - 9.3.4 France
  - 9.3.5 Spain
  - 9.3.6 Rest of Europe
- 9.4 Asia Pacific
  - 9.4.1 Japan
  - 9.4.2 China
  - 9.4.3 India
  - 9.4.4 Australia
  - 9.4.5 New Zealand
  - 9.4.6 South Korea
  - 9.4.7 Rest of Asia Pacific
- 9.5 South America
  - 9.5.1 Argentina
  - 9.5.2 Brazil
  - 9.5.3 Chile
  - 9.5.4 Rest of South America
- 9.6 Middle East & Africa
  - 9.6.1 Saudi Arabia
  - 9.6.2 UAE
  - 9.6.3 Qatar

9.6.4 South Africa

9.6.5 Rest of Middle East & Africa

## **10 KEY DEVELOPMENTS**

10.1 Agreements, Partnerships, Collaborations and Joint Ventures

10.2 Acquisitions & Mergers

10.3 New Product Launch

10.4 Expansions

10.5 Other Key Strategies

## **11 COMPANY PROFILING**

11.1 ABB Ltd.

11.2 Aclara Technologies LLC

11.3 Aquarius Spectrum Ltd.

11.4 Arad Group

11.5 Badger Meter, Inc.

11.6 Diehl Stiftung & Co. KG

11.7 Elster Group

11.8 Honeywell International Inc.

11.9 IBM Corporation

11.10 Itron Inc.

11.11 Jain Irrigation Systems Ltd.

11.12 Kamstrup A/S

11.13 Landis+Gyr Group AG

11.14 Neptune Technology Group Inc.

11.15 Oracle Corporation

11.16 Schneider Electric SE

11.17 Sensus

11.18 Siemens AG

11.19 TaKaDu Ltd.

11.20 Trimble Water

## List Of Tables

### LIST OF TABLES

- Table 1 Global Smart Water Grid Market Outlook, By Region (2024-2032) (\$MN)
- Table 2 Global Smart Water Grid Market Outlook, By Component (2024-2032) (\$MN)
- Table 3 Global Smart Water Grid Market Outlook, By Hardware (2024-2032) (\$MN)
- Table 4 Global Smart Water Grid Market Outlook, By Smart meters (2024-2032) (\$MN)
- Table 5 Global Smart Water Grid Market Outlook, By Sensors (2024-2032) (\$MN)
- Table 6 Global Smart Water Grid Market Outlook, By Communication Devices (2024-2032) (\$MN)
- Table 7 Global Smart Water Grid Market Outlook, By Flow and Pressure Sensors (2024-2032) (\$MN)
- Table 8 Global Smart Water Grid Market Outlook, By Control valves (2024-2032) (\$MN)
- Table 9 Global Smart Water Grid Market Outlook, By Software (2024-2032) (\$MN)
- Table 10 Global Smart Water Grid Market Outlook, By Advanced Metering Infrastructure (AMI) (2024-2032) (\$MN)
- Table 11 Global Smart Water Grid Market Outlook, By Customer Information System (CIS) (2024-2032) (\$MN)
- Table 12 Global Smart Water Grid Market Outlook, By Network Monitoring & Management (2024-2032) (\$MN)
- Table 13 Global Smart Water Grid Market Outlook, By Services (2024-2032) (\$MN)
- Table 14 Global Smart Water Grid Market Outlook, By Managed Services (2024-2032) (\$MN)
- Table 15 Global Smart Water Grid Market Outlook, By Maintenance & Support Services (2024-2032) (\$MN)
- Table 16 Global Smart Water Grid Market Outlook, By Deployment Type (2024-2032) (\$MN)
- Table 17 Global Smart Water Grid Market Outlook, By On-Premises (2024-2032) (\$MN)
- Table 18 Global Smart Water Grid Market Outlook, By Cloud-Based (2024-2032) (\$MN)
- Table 19 Global Smart Water Grid Market Outlook, By Hybrid (2024-2032) (\$MN)
- Table 20 Global Smart Water Grid Market Outlook, By Technology (2024-2032) (\$MN)
- Table 21 Global Smart Water Grid Market Outlook, By Metering & Measurement (2024-2032) (\$MN)
- Table 22 Global Smart Water Grid Market Outlook, By Communication Technology (IoT, M2M) (2024-2032) (\$MN)
- Table 23 Global Smart Water Grid Market Outlook, By Data Management & Analytics (2024-2032) (\$MN)
- Table 24 Global Smart Water Grid Market Outlook, By Supervisory Control and Data

Acquisition (SCADA) (2024-2032) (\$MN)

Table 25 Global Smart Water Grid Market Outlook, By Geographic Information System (GIS) (2024-2032) (\$MN)

Table 26 Global Smart Water Grid Market Outlook, By Remote Sensing & Monitoring (2024-2032) (\$MN)

Table 27 Global Smart Water Grid Market Outlook, By Cloud Computing Solutions (2024-2032) (\$MN)

Table 28 Global Smart Water Grid Market Outlook, By Application (2024-2032) (\$MN)

Table 29 Global Smart Water Grid Market Outlook, By Water Distribution Network Management (2024-2032) (\$MN)

Table 30 Global Smart Water Grid Market Outlook, By Advanced Pressure Management (2024-2032) (\$MN)

Table 31 Global Smart Water Grid Market Outlook, By Leakage Detection & Prevention (2024-2032) (\$MN)

Table 32 Global Smart Water Grid Market Outlook, By Water Quality Monitoring (2024-2032) (\$MN)

Table 33 Global Smart Water Grid Market Outlook, By Smart Irrigation (2024-2032) (\$MN)

Table 34 Global Smart Water Grid Market Outlook, By Wastewater Monitoring & Management (2024-2032) (\$MN)

Table 35 Global Smart Water Grid Market Outlook, By Customer Service & Billing Automation (2024-2032) (\$MN)

Table 36 Global Smart Water Grid Market Outlook, By Other Applications (2024-2032) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Middle East & Africa Regions are also represented in the same manner as above.

## I would like to order

Product name: Smart Water Grid Market Forecasts to 2032 – Global Analysis by Component (Hardware, Software and Services), Deployment Type, Technology, Application and By Geography

Product link: <https://marketpublishers.com/r/S608E43AC668EN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/S608E43AC668EN.html>