

IoT Connectivity & Smart Infrastructure Market Forecasts to 2032 – Global Analysis By Component (Connectivity Platforms, Infrastructure Hardware, Software and Services), Connectivity Type, Infrastructure Domain, Technology, Application, End User and By Geography

<https://marketpublishers.com/r/I0890D2D9935EN.html>

Date: November 2025

Pages: 200

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

ID: I0890D2D9935EN

Abstracts

According to Statistics MRC, the Global IoT Connectivity & Smart Infrastructure Market is accounted for \$175.01 billion in 2025 and is expected to reach \$509.72 billion by 2032 growing at a CAGR of 16.5% during the forecast period. IoT Connectivity & Smart Infrastructure refers to the fusion of networked sensors, intelligent devices, and data-driven platforms that streamline the functioning of urban spaces, enterprises, and built environments. Through continuous data exchange between physical assets and digital systems, IoT enables more effective energy use, smoother mobility services, and improved public safety measures. Smart infrastructure ecosystems facilitate automated oversight, equipment health prediction, and coordinated communication among devices, cutting downtime and lowering expenses. With the growth of cloud integration and fast, dependable networks, IoT deployments are becoming more scalable. This evolution boosts operational efficiency, enriches experiences, and supports informed decision-making across modern industrial and city infrastructures.

According to the European Commission's Smart Cities Marketplace, IoT-based smart lighting systems deployed in European cities have achieved 50–70% reductions in electricity use compared to conventional street lighting, while also lowering maintenance costs.

Market Dynamics:

Driver:

Rapid urbanization and smart city development

Accelerating urban expansion significantly influences the IoT Connectivity & Smart Infrastructure Market, as cities seek advanced tools to address mounting challenges in sustainability, mobility, and service efficiency. Growing populations compel authorities to deploy IoT-driven technologies across transportation, utilities, water distribution, and waste systems for better oversight and control. Smart city initiatives depend on sensor networks and analytics platforms to provide continuous data, enabling proactive actions and reducing operational strain. The urgency to handle traffic, lower emissions, and utilize resources intelligently fuels IoT integration. As emerging regions undergo large-scale urban growth, the requirement for interconnected and intelligent infrastructure intensifies, supporting broader municipal modernization.

Restraint:

High deployment and integration costs

The IoT Connectivity & Smart Infrastructure Market faces significant limitations due to high investment and integration expenses, which create challenges for budget-constrained organizations. Deploying IoT at scale demands spending on hardware sensors, network equipment, cloud services, security layers, and trained professionals. Modernizing older infrastructure to function with IoT components adds further financial strain. Many public authorities lack sufficient funding, leading to postponed or incomplete projects. Compatibility issues between new digital systems and legacy equipment complicate rollout and raise long-term operational costs. For smaller businesses, unclear financial returns discourage adoption. These financial hurdles collectively restrict the market's growth trajectory, even as interest in IoT technologies increases.

Opportunity:

Growing adoption of 5G and next-generation connectivity

The increasing availability of 5G connectivity creates strong opportunities for the IoT Connectivity & Smart Infrastructure Market, offering unmatched speed, capacity, and responsiveness. With next-generation networks, organizations can deploy dense IoT

ecosystems capable of supporting real-time processing, automated operations, and high-data-demand applications. Enhanced reliability and reduced latency make 5G ideal for critical systems, including smart grids, intelligent transportation, and industrial automation. As network providers widen coverage, new IoT-driven services—such as remote inspections, smart public utilities, and advanced monitoring—gain traction. This transition toward ultra-fast connectivity accelerates innovation and enables scalable infrastructure upgrades that significantly expand market potential.

Threat:

Rising cyberattacks targeting critical infrastructure

Increasing cyber threats present a significant challenge for the IoT Connectivity & Smart Infrastructure Market, as highly connected environments offer more entry points for attackers. Hackers target IoT ecosystems to interrupt operations, alter data, or compromise control over critical assets. Sectors like utilities, transport, and municipal services are at greater risk due to outdated equipment and uneven security measures. Major incidents can trigger operational shutdowns, economic damage, and safety hazards. As cyberattacks grow more sophisticated, organizations must adopt robust security strategies, which increase deployment complexity and cost. These escalating risks undermine trust in IoT technologies and slow broader infrastructure modernization.

Covid-19 Impact:

The COVID-19 pandemic created both challenges and long-term growth opportunities for the IoT Connectivity & Smart Infrastructure Market. While lockdowns disrupted manufacturing, delayed installations, and strained public budgets, the crisis also accelerated reliance on automation, remote operations, and digital surveillance tools. Demand surged for smart building systems, real-time health monitoring, and contactless service technologies as organizations sought safer, more efficient operations. Supply-chain constraints temporarily slowed hardware availability, but the shift toward resilience and digital transformation strengthened IoT adoption. As industries and governments focused on preparedness and modernized infrastructure strategies, IoT technologies became essential in enabling smarter, flexible, and responsive urban and industrial environments.

The services segment is expected to be the largest during the forecast period

The services segment is expected to account for the largest market share during the

forecast period due to the rising need for consulting, integration, and ongoing operational support. As connected infrastructures become more intricate, organizations depend on specialists to configure networks, secure devices, manage cloud interfaces, and ensure seamless communication across components. Service providers deliver essential functions such as performance monitoring, system optimization, troubleshooting, and predictive maintenance. Their role is vital for maintaining smooth operations and enabling scalable expansion of IoT installations. With increasing adoption of remote management and lifecycle services, this segment remains central to helping enterprises and municipalities operate reliable and intelligent smart infrastructure systems.

The LPWAN segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the LPWAN segment is predicted to witness the highest growth rate due to its ability to deliver long-distance communication with exceptionally low power usage and affordable deployment. Technologies such as NB-IoT and LoRaWAN enable extensive sensor networks that support smart utilities, environmental systems, public infrastructure, and industrial operations. LPWAN excels in connecting large volumes of devices that need infrequent data transmission, long battery life, and strong coverage, even in remote or obstructed areas. Its cost-effectiveness and scalability make it ideal for expanding IoT ecosystems. As cities and enterprises adopt wide-area smart solutions, LPWAN demand continues rising significantly.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share, powered by its sophisticated digital foundation, reliable network capacity, and rapid integration of connected systems across sectors. Robust 5G rollouts, extensive smart city initiatives, and heavy investments in automation and security propel the region's dominance. Government-backed modernization of transportation, utilities, and emergency services strengthens IoT adoption even further. The presence of major cloud vendors, IoT platform developers, and chip manufacturers supports continuous innovation and efficient deployment of smart infrastructure solutions. North America's technologically advanced enterprises also prioritize IoT-driven optimization, reinforcing the region's strong and sustained market leadership.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest

CAGR, supported by swift modernization, widespread smart city development, and the rapid emergence of advanced communication networks. Governments across the region are prioritizing digital reforms, investing heavily in high-speed connectivity, and upgrading public infrastructure to meet increasing urban requirements. Adoption of IoT technologies is accelerating in sectors such as energy, mobility, and industrial operations, contributing to strong market expansion. With a growing ecosystem of IoT hardware producers and technology integrators, the region is well-positioned for sustained growth. Ongoing efforts toward automation, efficiency, and sustainability further strengthen its rising growth trajectory.

Key players in the market

Some of the key players in IoT Connectivity & Smart Infrastructure Market include Intel Corporation, Qualcomm, Texas Instruments, Cisco Systems, Hewlett Packard Enterprise, IBM, STMicroelectronics, Microsoft, PTC Inc., Amazon Web Services, Siemens, Honeywell, Hitachi, Schneider Electric and ABB.

Key Developments:

In August 2025, Intel Corporation announced an agreement with the Trump Administration to support the continued expansion of American technology and manufacturing leadership. Under terms of the agreement, the United States government will make an \$8.9 billion investment in Intel common stock, reflecting the confidence the Administration has in Intel to advance key national priorities and the critically important role the company plays in expanding the domestic semiconductor industry.

In June 2025, Qualcomm Incorporated announced that it has reached an agreement with Alphawave IP Group plc regarding the terms and conditions of a recommended acquisition by Aqua Acquisition Sub LLC, an indirect wholly-owned subsidiary of Qualcomm Incorporated, for the entire issued and to be issued ordinary share capital of Alphawave Semi at an implied enterprise value of approximately US\$2.4 billion.

In December 2024, Texas Instruments and the U.S. Department of Commerce announced an award agreement of up to \$1.6 billion in direct funding through the U.S. CHIPS and Science Act. The funding will help support three of TI's new 300mm wafer fabs currently under construction in Texas and Utah. Support from the CHIPS Act, including the 25% investment tax credit, will help TI provide a geopolitically dependable supply of essential analog and embedded processing semiconductors.

Components Covered:

Connectivity Platforms

Infrastructure Hardware

Software

Services

Connectivity Types Covered:

Cellular

LPWAN

Satellite IoT

Wi-Fi / Bluetooth / Zigbee

Ethernet / Fiber

Infrastructure Domains Covered:

Urban Mobility Infrastructure

Built Environment Infrastructure

Utility Infrastructure

Civic Infrastructure

Industrial Infrastructure

Technologies Covered:

IoT

Artificial Intelligence

Cloud Computing

Edge Computing

Blockchain

Big Data Analytics

Applications Covered:

Integrated Smart Cities

Remote Healthcare & Monitoring

Industrial Automation & Smart Manufacturing

Retail Intelligence & Automation

Precision Agriculture & Environmental Sensing

Energy Optimization & Utility Management

Supply Chain Visibility & Fleet Tracking

End Users Covered:

Public Sector

Private Sector Enterprises

Residential Consumers

Infrastructure Operators

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:

IoT Connectivity & Smart Infrastructure Market Forecasts to 2032 – Global Analysis By Component (Connectivity...

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 End User Analysis
- 3.9 Emerging Markets
- 3.10 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 IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY COMPONENT

- 5.1 Introduction
- 5.2 Connectivity Platforms
- 5.3 Infrastructure Hardware
- 5.4 Software
- 5.5 Services

6 GLOBAL IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY CONNECTIVITY TYPE

- 6.1 Introduction
- 6.2 Cellular
- 6.3 LPWAN
- 6.4 Satellite IoT
- 6.5 Wi-Fi / Bluetooth / Zigbee
- 6.6 Ethernet / Fiber

7 GLOBAL IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY INFRASTRUCTURE DOMAIN

- 7.1 Introduction
- 7.2 Urban Mobility Infrastructure
- 7.3 Built Environment Infrastructure
- 7.4 Utility Infrastructure
- 7.5 Civic Infrastructure
- 7.6 Industrial Infrastructure

8 GLOBAL IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY TECHNOLOGY

- 8.1 Introduction
- 8.2 IoT
- 8.3 Artificial Intelligence
- 8.4 Cloud Computing
- 8.5 Edge Computing
- 8.6 Blockchain

8.7 Big Data Analytics

9 GLOBAL IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY APPLICATION

- 9.1 Introduction
- 9.2 Integrated Smart Cities
- 9.3 Remote Healthcare & Monitoring
- 9.4 Industrial Automation & Smart Manufacturing
- 9.5 Retail Intelligence & Automation
- 9.6 Precision Agriculture & Environmental Sensing
- 9.7 Energy Optimization & Utility Management
- 9.8 Supply Chain Visibility & Fleet Tracking

10 GLOBAL IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY END USER

- 10.1 Introduction
- 10.2 Public Sector
- 10.3 Private Sector Enterprises
- 10.4 Residential Consumers
- 10.5 Infrastructure Operators

11 GLOBAL IOT CONNECTIVITY & SMART INFRASTRUCTURE MARKET, BY GEOGRAPHY

- 11.1 Introduction
- 11.2 North America
 - 11.2.1 US
 - 11.2.2 Canada
 - 11.2.3 Mexico
- 11.3 Europe
 - 11.3.1 Germany
 - 11.3.2 UK
 - 11.3.3 Italy
 - 11.3.4 France
 - 11.3.5 Spain
 - 11.3.6 Rest of Europe
- 11.4 Asia Pacific

- 11.4.1 Japan
- 11.4.2 China
- 11.4.3 India
- 11.4.4 Australia
- 11.4.5 New Zealand
- 11.4.6 South Korea
- 11.4.7 Rest of Asia Pacific
- 11.5 South America
 - 11.5.1 Argentina
 - 11.5.2 Brazil
 - 11.5.3 Chile
 - 11.5.4 Rest of South America
- 11.6 Middle East & Africa
 - 11.6.1 Saudi Arabia
 - 11.6.2 UAE
 - 11.6.3 Qatar
 - 11.6.4 South Africa
 - 11.6.5 Rest of Middle East & Africa

12 KEY DEVELOPMENTS

- 12.1 Agreements, Partnerships, Collaborations and Joint Ventures
- 12.2 Acquisitions & Mergers
- 12.3 New Product Launch
- 12.4 Expansions
- 12.5 Other Key Strategies

13 COMPANY PROFILING

- 13.1 Intel Corporation
- 13.2 Qualcomm
- 13.3 Texas Instruments
- 13.4 Cisco Systems
- 13.5 Hewlett Packard Enterprise
- 13.6 IBM
- 13.7 STMicroelectronics
- 13.8 Microsoft
- 13.9 PTC Inc.
- 13.10 Amazon Web Services

13.11 Siemens

13.12 Honeywell

13.13 Hitachi

13.14 Schneider Electric

13.15 ABB

List Of Tables

LIST OF TABLES

Table 1 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Region (2024-2032) (\$MN)

Table 2 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Component (2024-2032) (\$MN)

Table 3 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Connectivity Platforms (2024-2032) (\$MN)

Table 4 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Infrastructure Hardware (2024-2032) (\$MN)

Table 5 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Software (2024-2032) (\$MN)

Table 6 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Services (2024-2032) (\$MN)

Table 7 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Connectivity Type (2024-2032) (\$MN)

Table 8 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Cellular (2024-2032) (\$MN)

Table 9 Global IoT Connectivity & Smart Infrastructure Market Outlook, By LPWAN (2024-2032) (\$MN)

Table 10 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Satellite IoT (2024-2032) (\$MN)

Table 11 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Wi-Fi / Bluetooth / Zigbee (2024-2032) (\$MN)

Table 12 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Ethernet / Fiber (2024-2032) (\$MN)

Table 13 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Infrastructure Domain (2024-2032) (\$MN)

Table 14 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Urban Mobility Infrastructure (2024-2032) (\$MN)

Table 15 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Built Environment Infrastructure (2024-2032) (\$MN)

Table 16 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Utility Infrastructure (2024-2032) (\$MN)

Table 17 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Civic Infrastructure (2024-2032) (\$MN)

Table 18 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Industrial

Infrastructure (2024-2032) (\$MN)

Table 19 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Technology (2024-2032) (\$MN)

Table 20 Global IoT Connectivity & Smart Infrastructure Market Outlook, By IoT (2024-2032) (\$MN)

Table 21 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Artificial Intelligence (2024-2032) (\$MN)

Table 22 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Cloud Computing (2024-2032) (\$MN)

Table 23 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Edge Computing (2024-2032) (\$MN)

Table 24 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Blockchain (2024-2032) (\$MN)

Table 25 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Big Data Analytics (2024-2032) (\$MN)

Table 26 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Application (2024-2032) (\$MN)

Table 27 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Integrated Smart Cities (2024-2032) (\$MN)

Table 28 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Remote Healthcare & Monitoring (2024-2032) (\$MN)

Table 29 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Industrial Automation & Smart Manufacturing (2024-2032) (\$MN)

Table 30 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Retail Intelligence & Automation (2024-2032) (\$MN)

Table 31 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Precision Agriculture & Environmental Sensing (2024-2032) (\$MN)

Table 32 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Energy Optimization & Utility Management (2024-2032) (\$MN)

Table 33 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Supply Chain Visibility & Fleet Tracking (2024-2032) (\$MN)

Table 34 Global IoT Connectivity & Smart Infrastructure Market Outlook, By End User (2024-2032) (\$MN)

Table 35 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Public Sector (2024-2032) (\$MN)

Table 36 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Private Sector Enterprises (2024-2032) (\$MN)

Table 37 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Residential Consumers (2024-2032) (\$MN)

Table 38 Global IoT Connectivity & Smart Infrastructure Market Outlook, By Infrastructure Operators (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: IoT Connectivity & Smart Infrastructure Market Forecasts to 2032 – Global Analysis By Component (Connectivity Platforms, Infrastructure Hardware, Software and Services), Connectivity Type, Infrastructure Domain, Technology, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/I0890D2D9935EN.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

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/I0890D2D9935EN.html>