

Smart Street Lighting Market Forecasts to 2034– Global Analysis By Component (Hardware, Software and Services), Connectivity Technology, Lighting Type, Application, End User and By Geography

<https://marketpublishers.com/r/S72983F4A25EEN.html>

Date: April 2026

Pages: 200

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

ID: S72983F4A25EEN

Abstracts

According to Statistics MRC, the Global Smart Street Lighting Market is accounted for \$4.86 billion in 2026 and is expected to reach \$19.82 billion by 2034 growing at a CAGR of 19.2% during the forecast period. Smart street lighting refers to an advanced urban lighting system that integrates energy efficient LED luminaries' with intelligent control technologies such as sensors, wireless communication, and centralized management platforms. These systems enable real-time monitoring, adaptive brightness control, and automated fault detection, optimizing energy consumption and maintenance efficiency. By leveraging Internet of Things (IoT) connectivity, smart street lighting enhances public safety, supports smart city initiatives, and reduces operational costs. It can also integrate with additional services such as environmental monitoring, traffic management, and surveillance, making it a critical component of modern urban infrastructure.

Market Dynamics:

Driver:

Rising demand for energy efficiency and cost savings

The growing emphasis on reducing energy consumption and operational expenditures is a key driver for the market. Municipalities and governments are increasingly adopting LED based lighting systems combined with intelligent controls to significantly lower electricity usage and maintenance costs. These systems provide adaptive lighting and

remote monitoring, enabling optimized energy utilization. Rising electricity prices and budget constraints further accelerate the transition from conventional lighting to smart solutions, making energy efficient infrastructure a strategic priority for urban development initiatives worldwide.

Restraint:

High initial investment costs

Despite long-term benefits, the high upfront capital required for deploying Smart Street lighting systems acts as a major restraint. Costs associated with LED fixtures, sensors, communication networks, and centralized management software can be substantial, particularly for large scale installations. Many municipalities, especially in developing regions, face budget limitations and struggle to justify initial expenditures. Additionally, the complexity of installation and need for skilled workforce further add to costs, slowing adoption rates and delaying modernization of traditional street lighting infrastructure.

Opportunity:

Sustainability and carbon reduction goals

Global focus on sustainability and carbon emission reduction presents significant growth opportunities for the market. Governments are implementing stringent environmental regulations and climate action plans, encouraging the adoption of energy efficient technologies. Smart lighting systems contribute to reduced greenhouse gas emissions through lower energy consumption and improved operational efficiency. Integration with renewable energy sources such as solar power further enhances sustainability. These factors position smart street lighting as a vital component in achieving long-term environmental and urban sustainability goals.

Threat:

Integration challenges with legacy infrastructure

One of the major threats facing the market is the difficulty of integrating smart lighting systems with existing legacy infrastructure. Older street lighting networks often lack compatibility with modern digital technologies, requiring extensive upgrades or complete replacement. This can lead to increased costs, technical complexities, and prolonged project timelines. Additionally, interoperability issues between different hardware and

software platforms may hinder seamless communication and system performance, posing risks to efficient deployment and limiting adoption in regions with outdated infrastructure systems.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the smart street lighting market. While initial lockdowns disrupted supply chains, delayed projects, and reduced municipal budgets, the crisis also highlighted the importance of smart and connected urban infrastructure. Governments began prioritizing resilient and energy-efficient systems as part of recovery plans. The pandemic accelerated digital transformation and smart city initiatives, indirectly supporting market growth. Post pandemic, increased focus on sustainability and infrastructure modernization has contributed to renewed investments in smart street lighting solutions.

The fluorescent lighting segment is expected to be the largest during the forecast period

The fluorescent lighting segment is expected to account for the largest market share during the forecast period, due to its widespread existing deployment and relatively lower cost compared to advanced alternatives. Many regions continue to rely on fluorescent systems as a transitional solution before fully adopting LED based smart lighting. Additionally, compatibility with certain legacy infrastructures supports its continued use. However, gradual replacement by more energy efficient and durable LED technologies is anticipated, though fluorescent lighting remains significant in the current market landscape.

The smart city projects segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the smart city projects segment is predicted to witness the highest growth rate, due to rapid urbanization and increasing government investments in digital infrastructure. Smart street lighting plays a crucial role in smart city ecosystems by enabling connectivity, data collection, and efficient resource management. Integration with IoT platforms allows cities to enhance public safety, optimize traffic flow, and monitor environmental conditions. Growing adoption of intelligent urban solutions across both developed and emerging economies continues to fuel strong demand in this segment.

Region with largest share:

During the forecast period, the Europe region is expected to hold the largest market share, due to strong government initiatives, stringent energy efficiency regulations, and early adoption of smart technologies. Countries across the region are actively investing in smart city development and sustainable infrastructure. Favorable policies, funding programs, and public private partnerships further drive implementation of smart street lighting systems. Additionally, the presence of leading technology providers and well-established urban infrastructure contributes to Europe's dominant position in the global market.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR, owing to expanding population, and increasing investments in smart city projects. Governments in countries such as China and India are focusing on modernizing urban infrastructure and improving energy efficiency. Rising awareness about sustainability and growing adoption of IoT based solutions are further accelerating market growth. Additionally, supportive government policies and large scale infrastructure development projects create significant opportunities for smart street lighting deployment across the region.

Key players in the market

Some of the key players in Smart Street Lighting Market include Signify, Schröder, Acuity Brands, Eaton Corporation, Osram Licht AG, Hubbell Incorporated, Telensa, CIMCON Lighting, Flashnet, Dimonoff, Tvilight, Zumtobel Group, Itron, Honeywell International and Schneider Electric.

Key Developments:

In February 2026, CGI Inc. and Schneider Electric expanded their strategic partnership to deliver end-to-end digital solutions for energy providers in the DACH region. The collaboration integrates CGI's IT consulting, systems integration, and managed services with Schneider Electric's grid technologies such as ADMS and GIS to help utilities modernize networks.

In November 2025, Schneider Electric and Switch announced a two-phase supply capacity agreement (SCA) totaling \$1.9 billion in sales. The milestone deal includes prefabricated power modules and the first North American deployment of chillers.

Schneider Electric and Switch have evolved their longstanding partnership to support the growing AI and hyperscale computing demand of AI factories.

Components Covered:

Hardware

Software

Services

Connectivity Technologies Covered:

Wired

Wireless

Lighting Types Covered:

LED Lighting

Fluorescent Lighting

High-Intensity Discharge (HID) Lamps

Applications Covered:

Highways & Roadways

Public Places

Parking Areas

Commercial Streets

Industrial & Logistics Zones

Residential Streets

End Users Covered:

Municipalities & Government Authorities

Commercial & Industrial

Transportation Infrastructure

Smart City Projects

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

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL SMART STREET LIGHTING MARKET, BY COMPONENT

- 5.1 Hardware
- 5.2 Software
- 5.3 Services

6 GLOBAL SMART STREET LIGHTING MARKET, BY CONNECTIVITY TECHNOLOGY

- 6.1 Wired
 - 6.1.1 Power Line Communication (PLC)
 - 6.1.2 Ethernet
- 6.2 Wireless
 - 6.2.1 Zigbee
 - 6.2.2 Wi-Fi
 - 6.2.3 Cellular (3G/4G/5G)

7 GLOBAL SMART STREET LIGHTING MARKET, BY LIGHTING TYPE

- 7.1 LED Lighting
- 7.2 Fluorescent Lighting
- 7.3 High-Intensity Discharge (HID) Lamps

8 GLOBAL SMART STREET LIGHTING MARKET, BY APPLICATION

- 8.1 Highways & Roadways
- 8.2 Public Places
- 8.3 Parking Areas
- 8.4 Commercial Streets
- 8.5 Industrial & Logistics Zones
- 8.6 Residential Streets

9 GLOBAL SMART STREET LIGHTING MARKET, BY END USER

- 9.1 Municipalities & Government Authorities

- 9.2 Commercial & Industrial
- 9.3 Transportation Infrastructure
- 9.4 Smart City Projects

10 GLOBAL SMART STREET LIGHTING MARKET, BY GEOGRAPHY

- 10.1 North America
 - 10.1.1 United States
 - 10.1.2 Canada
 - 10.1.3 Mexico
- 10.2 Europe
 - 10.2.1 United Kingdom
 - 10.2.2 Germany
 - 10.2.3 France
 - 10.2.4 Italy
 - 10.2.5 Spain
 - 10.2.6 Netherlands
 - 10.2.7 Belgium
 - 10.2.8 Sweden
 - 10.2.9 Switzerland
 - 10.2.10 Poland
 - 10.2.11 Rest of Europe
- 10.3 Asia Pacific
 - 10.3.1 China
 - 10.3.2 Japan
 - 10.3.3 India
 - 10.3.4 South Korea
 - 10.3.5 Australia
 - 10.3.6 Indonesia
 - 10.3.7 Thailand
 - 10.3.8 Malaysia
 - 10.3.9 Singapore
 - 10.3.10 Vietnam
 - 10.3.11 Rest of Asia Pacific
- 10.4 South America
 - 10.4.1 Brazil
 - 10.4.2 Argentina
 - 10.4.3 Colombia
 - 10.4.4 Chile

- 10.4.5 Peru
- 10.4.6 Rest of South America
- 10.5 Rest of the World (RoW)
 - 10.5.1 Middle East
 - 10.5.1.1 Saudi Arabia
 - 10.5.1.2 United Arab Emirates
 - 10.5.1.3 Qatar
 - 10.5.1.4 Israel
 - 10.5.1.5 Rest of Middle East
 - 10.5.2 Africa
 - 10.5.2.1 South Africa
 - 10.5.2.2 Egypt
 - 10.5.2.3 Morocco
 - 10.5.2.4 Rest of Africa

11 STRATEGIC MARKET INTELLIGENCE

- 11.1 Industry Value Network and Supply Chain Assessment
- 11.2 White-Space and Opportunity Mapping
- 11.3 Product Evolution and Market Life Cycle Analysis
- 11.4 Channel, Distributor, and Go-to-Market Assessment

12 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 12.1 Mergers and Acquisitions
- 12.2 Partnerships, Alliances, and Joint Ventures
- 12.3 New Product Launches and Certifications
- 12.4 Capacity Expansion and Investments
- 12.5 Other Strategic Initiatives

13 COMPANY PROFILES

- 13.1 Signify
- 13.2 Schröder
- 13.3 Acuity Brands
- 13.4 Eaton Corporation
- 13.5 Osram Licht AG
- 13.6 Hubbell Incorporated
- 13.7 Telensa

13.8 CIMCON Lighting

13.9 Flashnet

13.10 Dimonoff

13.11 Tvilight

13.12 Zumtobel Group

13.13 Itron

13.14 Honeywell International

13.15 Schneider Electric

List Of Tables

LIST OF TABLES

Table 1 Global Smart Street Lighting Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Smart Street Lighting Market Outlook, By Component (2023-2034) (\$MN)

Table 3 Global Smart Street Lighting Market Outlook, By Hardware (2023-2034) (\$MN)

Table 4 Global Smart Street Lighting Market Outlook, By Software (2023-2034) (\$MN)

Table 5 Global Smart Street Lighting Market Outlook, By Services (2023-2034) (\$MN)

Table 6 Global Smart Street Lighting Market Outlook, By Connectivity Technology (2023-2034) (\$MN)

Table 7 Global Smart Street Lighting Market Outlook, By Wired (2023-2034) (\$MN)

Table 8 Global Smart Street Lighting Market Outlook, By Power Line Communication (PLC) (2023-2034) (\$MN)

Table 9 Global Smart Street Lighting Market Outlook, By Ethernet (2023-2034) (\$MN)

Table 10 Global Smart Street Lighting Market Outlook, By Wireless (2023-2034) (\$MN)

Table 11 Global Smart Street Lighting Market Outlook, By Zigbee (2023-2034) (\$MN)

Table 12 Global Smart Street Lighting Market Outlook, By Wi-Fi (2023-2034) (\$MN)

Table 13 Global Smart Street Lighting Market Outlook, By Cellular (3G/4G/5G) (2023-2034) (\$MN)

Table 14 Global Smart Street Lighting Market Outlook, By Lighting Type (2023-2034) (\$MN)

Table 15 Global Smart Street Lighting Market Outlook, By LED Lighting (2023-2034) (\$MN)

Table 16 Global Smart Street Lighting Market Outlook, By Fluorescent Lighting (2023-2034) (\$MN)

Table 17 Global Smart Street Lighting Market Outlook, By High-Intensity Discharge (HID) Lamps (2023-2034) (\$MN)

Table 18 Global Smart Street Lighting Market Outlook, By Application (2023-2034) (\$MN)

Table 19 Global Smart Street Lighting Market Outlook, By Highways & Roadways (2023-2034) (\$MN)

Table 20 Global Smart Street Lighting Market Outlook, By Public Places (2023-2034) (\$MN)

Table 21 Global Smart Street Lighting Market Outlook, By Parking Areas (2023-2034) (\$MN)

Table 22 Global Smart Street Lighting Market Outlook, By Commercial Streets (2023-2034) (\$MN)

Table 23 Global Smart Street Lighting Market Outlook, By Industrial & Logistics Zones (2023-2034) (\$MN)

Table 24 Global Smart Street Lighting Market Outlook, By Residential Streets (2023-2034) (\$MN)

Table 25 Global Smart Street Lighting Market Outlook, By End User (2023-2034) (\$MN)

Table 26 Global Smart Street Lighting Market Outlook, By Municipalities & Government Authorities (2023-2034) (\$MN)

Table 27 Global Smart Street Lighting Market Outlook, By Commercial & Industrial (2023-2034) (\$MN)

Table 28 Global Smart Street Lighting Market Outlook, By Transportation Infrastructure (2023-2034) (\$MN)

Table 29 Global Smart Street Lighting Market Outlook, By Smart City Projects (2023-2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

I would like to order

Product name: Smart Street Lighting Market Forecasts to 2034– Global Analysis By Component (Hardware, Software and Services), Connectivity Technology, Lighting Type, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/S72983F4A25EEN.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/S72983F4A25EEN.html>