

**Low Power Wide Area Network Market By Technology (LoRaWAN, NB-IoT, SIGFOX, Others), By Application (Smart Building, Smart Gas and Water Monitoring, Smart Waste Management, Smart Agriculture, Smart Parking, Others), By End User (Oil and Gas, Industrial Manufacturing, Agriculture, Consumer Electronics, Transportation and Logistics, Healthcare, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032**

Market Report | 2023-06-01 | 277 pages | Allied Market Research

**AVAILABLE LICENSES:**

- Cloud Access License \$3110.40
- Business User License \$5157.00
- Enterprise License \$8640.00

**Report description:**

Low-power wide-area network (LPWAN) refers to a specific type of network that enables low bit-rate, long-distance communication. It is a wireless technology that connects low-power devices over considerable distances at slow data speeds. Devices that need a lot of battery life and can send data over large distances are expected to benefit from low-cost, low-power, and wide-area connection provided by LPWANs. In addition, decline in LPWAN technology costs is anticipated to drive the market for low power wide area network growth. Due to the rise in demand for low-power wide area connectivity for Internet of Things devices, the LPWAN market is anticipated to expand rapidly in upcoming years.. Agriculture, healthcare, logistics, and transportation are a few industries that implement the LPWAN technology. The development of smart cities and smart buildings is expected to present more opportunities for the low power wide area network market to expand in the upcoming years. The lack of global LPWAN standards, however, is anticipated to impede the expansion of the market for low power wide area networks in the near future.

Moreover, factors such as increase in demand for smart city initiatives and real-time monitoring and control of assets primarily drive the growth of the low power WAN market. However, security concerns with limited band width hamper the market growth. Additionally, increase in demand for smart agriculture is expected to provide lucrative opportunities for the market growth during

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

the forecast period.

On the basis of technology, LoRaWAN segment dominated the low power wide area network market size in 2022, and is expected to maintain its dominance in the upcoming years owing to growing need for low-cost, low-power connectivity solutions, which LoRaWAN technology offers, as IoT devices and applications are used more widely propels the market growth significantly. However, NB-IoT segment is expected segment is expected to witness highest growth, owing the advancement of NB-IoT technology has given cellular network operators access to brand-new commercial prospects.

North America is anticipated to account for the largest share of the low power wide area network market growth during the forecast period, owing to presence of a substantial industrial base in the U.S., government initiatives to promote innovation, and large purchasing power. The growth is primarily concentrated in the U.S. Companies owing to rise in demand for mobile and wearable devices and growing need for IoT devices in North America is one of the main potentials for LPWAN. However, Asia-Pacific is expected to exhibit the highest growth during the forecast period, owing to factors such as urbanization, industrialization, rise in need for automation and digitalization. IoT applications in industries including smart cities, agriculture, logistics, and healthcare are perfect for LPWAN technology.

The low power wide area network market is segmented on the basis of technology, application, end user, and region. On the basis of technology, it is segregated into LoRaWAN, NB-IoT, Sigfox, and others. On the basis of application, it is divided into smart building, smart agriculture, smart waste management, smart gas and water monitoring, smart parking, and others. On the basis of end user, it is divided into oil and gas, industrial manufacturing, agriculture, consumer electronics, transportation and logistics, healthcare, and others. Region-wise, it is analyzed across North America, Europe, Asia-Pacific, and LAMEA.

The global low power wide area network industry is dominated by key players such as Semtech Corporation, Lorient Ag, Nwave, Sigfox, Waviot, Actility, Ingenu Inc., Link Labs, Senet, ATandT Intellectual Property. These players have adopted various strategies to increase their market penetration and strengthen their position in low power wide area network industry.

#### Key Benefits For Stakeholders

-This report provides a quantitative analysis of the market segments, current trends, estimations, and dynamics of the low power wide area network market analysis from 2022 to 2032 to identify the prevailing low power wide area network market opportunities.

-The market research is offered along with information related to key drivers, restraints, and opportunities.

-Porter's five forces analysis highlights the potency of buyers and suppliers to enable stakeholders make profit-oriented business decisions and strengthen their supplier-buyer network.

-In-depth analysis of the low power wide area network market segmentation assists to determine the prevailing market opportunities.

-Major countries in each region are mapped according to their revenue contribution to the global market.

-Market player positioning facilitates benchmarking and provides a clear understanding of the present position of the market players.

-The report includes the analysis of the regional as well as global low power wide area network market trends, key players, market segments, application areas, and market growth strategies.

#### Key Market Segments

##### By Technology

- LoRaWAN
- NB-IoT
- SIGFOX
- Others

##### By Application

- Smart Building
- Smart Gas and Water Monitoring
- Smart Waste Management
- Smart Agriculture
- Smart Parking

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- Others

By End User

- Healthcare

- Others

- Oil and Gas

- Industrial Manufacturing

- Agriculture

- Consumer Electronics

- Transportation and Logistics

By Region

- North America

- U.S.

- Canada

- Europe

- UK

- Germany

- France

- Italy

- Spain

- Rest of Europe

- Asia-Pacific

- China

- Japan

- India

- Australia

- South Korea

- Rest of Asia-Pacific

- LAMEA

- Latin America

- Middle East

- Africa

- Key Market Players

- Actility

- AT&T Intellectual Property

- Ingenu Inc.

- Link Labs

- Loriot AG

- Nwave

- Semtech Corporation

- Senet

- Sigfox

- WAVIoT

## **Table of Contents:**

### CHAPTER 1: INTRODUCTION

#### 1.1. Report description

#### 1.2. Key market segments

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

1.3. Key benefits to the stakeholders

1.4. Research Methodology

1.4.1. Primary research

1.4.2. Secondary research

1.4.3. Analyst tools and models

## CHAPTER 2: EXECUTIVE SUMMARY

2.1. CXO Perspective

## CHAPTER 3: MARKET OVERVIEW

3.1. Market definition and scope

3.2. Key findings

3.2.1. Top impacting factors

3.2.2. Top investment pockets

3.3. Porter's five forces analysis

3.3.1. Low bargaining power of suppliers

3.3.2. Low threat of new entrants

3.3.3. Low threat of substitutes

3.3.4. Low intensity of rivalry

3.3.5. Low bargaining power of buyers

3.4. Market dynamics

3.4.1. Drivers

3.4.1.1. Increase in demand for smart city initiatives

3.4.1.2. Real-time monitoring and control of assets

3.4.2. Restraints

3.4.2.1. Security Concerns

3.4.2.2. Limited Bandwidth

3.4.3. Opportunities

3.4.3.1. Increase in demand for smart agriculture

3.5. COVID-19 Impact Analysis on the market

## CHAPTER 4: LOW POWER WIDE AREA NETWORK MARKET, BY TECHNOLOGY

4.1. Overview

4.1.1. Market size and forecast

4.2. LoRaWAN

4.2.1. Key market trends, growth factors and opportunities

4.2.2. Market size and forecast, by region

4.2.3. Market share analysis by country

4.3. NB-IoT

4.3.1. Key market trends, growth factors and opportunities

4.3.2. Market size and forecast, by region

4.3.3. Market share analysis by country

4.4. SIGFOX

4.4.1. Key market trends, growth factors and opportunities

4.4.2. Market size and forecast, by region

4.4.3. Market share analysis by country

4.5. Others

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 4.5.1. Key market trends, growth factors and opportunities
- 4.5.2. Market size and forecast, by region
- 4.5.3. Market share analysis by country
- CHAPTER 5: LOW POWER WIDE AREA NETWORK MARKET, BY APPLICATION
- 5.1. Overview
- 5.1.1. Market size and forecast
- 5.2. Smart Building
- 5.2.1. Key market trends, growth factors and opportunities
- 5.2.2. Market size and forecast, by region
- 5.2.3. Market share analysis by country
- 5.3. Smart Gas and Water Monitoring
- 5.3.1. Key market trends, growth factors and opportunities
- 5.3.2. Market size and forecast, by region
- 5.3.3. Market share analysis by country
- 5.4. Smart Waste Management
- 5.4.1. Key market trends, growth factors and opportunities
- 5.4.2. Market size and forecast, by region
- 5.4.3. Market share analysis by country
- 5.5. Smart Agriculture
- 5.5.1. Key market trends, growth factors and opportunities
- 5.5.2. Market size and forecast, by region
- 5.5.3. Market share analysis by country
- 5.6. Smart Parking
- 5.6.1. Key market trends, growth factors and opportunities
- 5.6.2. Market size and forecast, by region
- 5.6.3. Market share analysis by country
- 5.7. Others
- 5.7.1. Key market trends, growth factors and opportunities
- 5.7.2. Market size and forecast, by region
- 5.7.3. Market share analysis by country
- CHAPTER 6: LOW POWER WIDE AREA NETWORK MARKET, BY END USER
- 6.1. Overview
- 6.1.1. Market size and forecast
- 6.2. Oil and Gas
- 6.2.1. Key market trends, growth factors and opportunities
- 6.2.2. Market size and forecast, by region
- 6.2.3. Market share analysis by country
- 6.3. Industrial Manufacturing
- 6.3.1. Key market trends, growth factors and opportunities
- 6.3.2. Market size and forecast, by region
- 6.3.3. Market share analysis by country
- 6.4. Agriculture
- 6.4.1. Key market trends, growth factors and opportunities
- 6.4.2. Market size and forecast, by region
- 6.4.3. Market share analysis by country
- 6.5. Consumer Electronics
- 6.5.1. Key market trends, growth factors and opportunities

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 6.5.2. Market size and forecast, by region
- 6.5.3. Market share analysis by country
- 6.6. Transportation and Logistics
  - 6.6.1. Key market trends, growth factors and opportunities
  - 6.6.2. Market size and forecast, by region
  - 6.6.3. Market share analysis by country
- 6.7. Healthcare
  - 6.7.1. Key market trends, growth factors and opportunities
  - 6.7.2. Market size and forecast, by region
  - 6.7.3. Market share analysis by country
- 6.8. Others
  - 6.8.1. Key market trends, growth factors and opportunities
  - 6.8.2. Market size and forecast, by region
  - 6.8.3. Market share analysis by country
- CHAPTER 7: LOW POWER WIDE AREA NETWORK MARKET, BY REGION
- 7.1. Overview
  - 7.1.1. Market size and forecast By Region
- 7.2. North America
  - 7.2.1. Key trends and opportunities
  - 7.2.2. Market size and forecast, by Technology
  - 7.2.3. Market size and forecast, by Application
  - 7.2.4. Market size and forecast, by End User
  - 7.2.5. Market size and forecast, by country
    - 7.2.5.1. U.S.
      - 7.2.5.1.1. Key market trends, growth factors and opportunities
      - 7.2.5.1.2. Market size and forecast, by Technology
      - 7.2.5.1.3. Market size and forecast, by Application
      - 7.2.5.1.4. Market size and forecast, by End User
    - 7.2.5.2. Canada
      - 7.2.5.2.1. Key market trends, growth factors and opportunities
      - 7.2.5.2.2. Market size and forecast, by Technology
      - 7.2.5.2.3. Market size and forecast, by Application
      - 7.2.5.2.4. Market size and forecast, by End User
- 7.3. Europe
  - 7.3.1. Key trends and opportunities
  - 7.3.2. Market size and forecast, by Technology
  - 7.3.3. Market size and forecast, by Application
  - 7.3.4. Market size and forecast, by End User
  - 7.3.5. Market size and forecast, by country
    - 7.3.5.1. UK
      - 7.3.5.1.1. Key market trends, growth factors and opportunities
      - 7.3.5.1.2. Market size and forecast, by Technology
      - 7.3.5.1.3. Market size and forecast, by Application
      - 7.3.5.1.4. Market size and forecast, by End User
    - 7.3.5.2. Germany
      - 7.3.5.2.1. Key market trends, growth factors and opportunities
      - 7.3.5.2.2. Market size and forecast, by Technology

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 7.3.5.2.3. Market size and forecast, by Application
- 7.3.5.2.4. Market size and forecast, by End User
- 7.3.5.3. France
  - 7.3.5.3.1. Key market trends, growth factors and opportunities
  - 7.3.5.3.2. Market size and forecast, by Technology
  - 7.3.5.3.3. Market size and forecast, by Application
  - 7.3.5.3.4. Market size and forecast, by End User
- 7.3.5.4. Italy
  - 7.3.5.4.1. Key market trends, growth factors and opportunities
  - 7.3.5.4.2. Market size and forecast, by Technology
  - 7.3.5.4.3. Market size and forecast, by Application
  - 7.3.5.4.4. Market size and forecast, by End User
- 7.3.5.5. Spain
  - 7.3.5.5.1. Key market trends, growth factors and opportunities
  - 7.3.5.5.2. Market size and forecast, by Technology
  - 7.3.5.5.3. Market size and forecast, by Application
  - 7.3.5.5.4. Market size and forecast, by End User
- 7.3.5.6. Rest of Europe
  - 7.3.5.6.1. Key market trends, growth factors and opportunities
  - 7.3.5.6.2. Market size and forecast, by Technology
  - 7.3.5.6.3. Market size and forecast, by Application
  - 7.3.5.6.4. Market size and forecast, by End User
- 7.4. Asia-Pacific
  - 7.4.1. Key trends and opportunities
  - 7.4.2. Market size and forecast, by Technology
  - 7.4.3. Market size and forecast, by Application
  - 7.4.4. Market size and forecast, by End User
  - 7.4.5. Market size and forecast, by country
    - 7.4.5.1. China
      - 7.4.5.1.1. Key market trends, growth factors and opportunities
      - 7.4.5.1.2. Market size and forecast, by Technology
      - 7.4.5.1.3. Market size and forecast, by Application
      - 7.4.5.1.4. Market size and forecast, by End User
    - 7.4.5.2. Japan
      - 7.4.5.2.1. Key market trends, growth factors and opportunities
      - 7.4.5.2.2. Market size and forecast, by Technology
      - 7.4.5.2.3. Market size and forecast, by Application
      - 7.4.5.2.4. Market size and forecast, by End User
    - 7.4.5.3. India
      - 7.4.5.3.1. Key market trends, growth factors and opportunities
      - 7.4.5.3.2. Market size and forecast, by Technology
      - 7.4.5.3.3. Market size and forecast, by Application
      - 7.4.5.3.4. Market size and forecast, by End User
    - 7.4.5.4. Australia
      - 7.4.5.4.1. Key market trends, growth factors and opportunities
      - 7.4.5.4.2. Market size and forecast, by Technology
      - 7.4.5.4.3. Market size and forecast, by Application

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 7.4.5.4.4. Market size and forecast, by End User
- 7.4.5.5. South Korea
  - 7.4.5.5.1. Key market trends, growth factors and opportunities
  - 7.4.5.5.2. Market size and forecast, by Technology
  - 7.4.5.5.3. Market size and forecast, by Application
  - 7.4.5.5.4. Market size and forecast, by End User
- 7.4.5.6. Rest of Asia-Pacific
  - 7.4.5.6.1. Key market trends, growth factors and opportunities
  - 7.4.5.6.2. Market size and forecast, by Technology
  - 7.4.5.6.3. Market size and forecast, by Application
  - 7.4.5.6.4. Market size and forecast, by End User
- 7.5. LAMEA
  - 7.5.1. Key trends and opportunities
  - 7.5.2. Market size and forecast, by Technology
  - 7.5.3. Market size and forecast, by Application
  - 7.5.4. Market size and forecast, by End User
  - 7.5.5. Market size and forecast, by country
    - 7.5.5.1. Latin America
      - 7.5.5.1.1. Key market trends, growth factors and opportunities
      - 7.5.5.1.2. Market size and forecast, by Technology
      - 7.5.5.1.3. Market size and forecast, by Application
      - 7.5.5.1.4. Market size and forecast, by End User
    - 7.5.5.2. Middle East
      - 7.5.5.2.1. Key market trends, growth factors and opportunities
      - 7.5.5.2.2. Market size and forecast, by Technology
      - 7.5.5.2.3. Market size and forecast, by Application
      - 7.5.5.2.4. Market size and forecast, by End User
    - 7.5.5.3. Africa
      - 7.5.5.3.1. Key market trends, growth factors and opportunities
      - 7.5.5.3.2. Market size and forecast, by Technology
      - 7.5.5.3.3. Market size and forecast, by Application
      - 7.5.5.3.4. Market size and forecast, by End User

## CHAPTER 8: COMPETITIVE LANDSCAPE

- 8.1. Introduction
- 8.2. Top winning strategies
- 8.3. Product Mapping of Top 10 Player
- 8.4. Competitive Dashboard
- 8.5. Competitive Heatmap
- 8.6. Top player positioning, 2022

## CHAPTER 9: COMPANY PROFILES

- 9.1. Semtech Corporation
  - 9.1.1. Company overview
  - 9.1.2. Key Executives
  - 9.1.3. Company snapshot
  - 9.1.4. Operating business segments
  - 9.1.5. Product portfolio
  - 9.1.6. Business performance

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)



- 9.1.7. Key strategic moves and developments
- 9.2. Lorient AG
  - 9.2.1. Company overview
  - 9.2.2. Key Executives
  - 9.2.3. Company snapshot
  - 9.2.4. Operating business segments
  - 9.2.5. Product portfolio
  - 9.2.6. Key strategic moves and developments
- 9.3. Nwave
  - 9.3.1. Company overview
  - 9.3.2. Key Executives
  - 9.3.3. Company snapshot
  - 9.3.4. Operating business segments
  - 9.3.5. Product portfolio
- 9.4. Sigfox
  - 9.4.1. Company overview
  - 9.4.2. Key Executives
  - 9.4.3. Company snapshot
  - 9.4.4. Operating business segments
  - 9.4.5. Product portfolio
  - 9.4.6. Key strategic moves and developments
- 9.5. WAVIoT
  - 9.5.1. Company overview
  - 9.5.2. Key Executives
  - 9.5.3. Company snapshot
  - 9.5.4. Operating business segments
  - 9.5.5. Product portfolio
- 9.6. Actility
  - 9.6.1. Company overview
  - 9.6.2. Key Executives
  - 9.6.3. Company snapshot
  - 9.6.4. Operating business segments
  - 9.6.5. Product portfolio
  - 9.6.6. Key strategic moves and developments
- 9.7. Ingenio Inc.
  - 9.7.1. Company overview
  - 9.7.2. Key Executives
  - 9.7.3. Company snapshot
  - 9.7.4. Operating business segments
  - 9.7.5. Product portfolio
- 9.8. Link Labs
  - 9.8.1. Company overview
  - 9.8.2. Key Executives
  - 9.8.3. Company snapshot
  - 9.8.4. Operating business segments
  - 9.8.5. Product portfolio
  - 9.8.6. Key strategic moves and developments

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

- 9.9. Senet
  - 9.9.1. Company overview
  - 9.9.2. Key Executives
  - 9.9.3. Company snapshot
  - 9.9.4. Operating business segments
  - 9.9.5. Product portfolio
  - 9.9.6. Key strategic moves and developments
- 9.10. AT&T Intellectual Property
  - 9.10.1. Company overview
  - 9.10.2. Key Executives
  - 9.10.3. Company snapshot
  - 9.10.4. Operating business segments
  - 9.10.5. Product portfolio
  - 9.10.6. Business performance
  - 9.10.7. Key strategic moves and developments

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: [support@scotts-international.com](mailto:support@scotts-international.com)

[www.scotts-international.com](http://www.scotts-international.com)

**Low Power Wide Area Network Market By Technology (LoRaWAN, NB-IoT, SIGFOX, Others), By Application (Smart Building, Smart Gas and Water Monitoring, Smart Waste Management, Smart Agriculture, Smart Parking, Others), By End User (Oil and Gas, Industrial Manufacturing, Agriculture, Consumer Electronics, Transportation and Logistics, Healthcare, Others): Global Opportunity Analysis and Industry Forecast, 2023-2032**

Market Report | 2023-06-01 | 277 pages | Allied Market Research

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

**ORDER FORM:**

Select license	License	Price
	Cloud Access License	\$3110.40
	Business User License	\$5157.00
	Enterprise License	\$8640.00
		VAT
		Total

\*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

\*\* VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		

**Scotts International. EU Vat number: PL 6772247784**

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2025-05-08"/>
		Signature	<input type="text"/>