

North America Highly Directional Antenna Market Size and Forecast (2021 - 2031)

<https://marketpublishers.com/r/N10C107B1045EN.html>

Date: April 2026

Pages: 181

Price: US\$ 3,450.00 (Single User License)

ID: N10C107B1045EN

Abstracts

The North America Highly Directional Antenna Market is projected to grow significantly, reaching an estimated US\$ 171.1 million by 2031, up from US\$ 108.8 million in 2024. This growth represents a compound annual growth rate (CAGR) of 6.8% from 2025 to 2031.

Executive Summary and Market Analysis

The highly directional antenna market in North America is experiencing robust growth, primarily fueled by the region's advanced technological infrastructure and strong demand from critical sectors such as telecommunications, defense, and aerospace. The rapid adoption of 5G networks has notably accelerated the deployment of highly directional antennas, which are essential for enhancing signal precision and capacity in densely populated urban areas. Telecommunication companies are heavily investing in these antennas to improve network coverage and provide high-speed, reliable connectivity to both consumers and businesses.

In addition to telecommunications, the defense sector significantly contributes to market growth. Highly directional antennas are vital for military communication systems, radar, and surveillance applications, where precision and long-range communication capabilities are paramount. The ongoing modernization of defense infrastructure, coupled with rising geopolitical tensions, has led to increased spending on advanced antenna technologies. For instance, in December 2023, Raytheon, a subsidiary of RTX, was awarded a contract to design, develop, and test two high-power microwave antenna systems. These systems will utilize directed energy technology to neutralize airborne threats instantaneously, showcasing the critical role of advanced antennas in defense applications.

The aerospace sector also plays a crucial role in driving market demand. North America, home to many leading aerospace companies, utilizes highly directional antennas for satellite communications, weather monitoring, and space exploration missions. The focus on enhancing data transmission speeds and accuracy in satellite systems is further encouraging the adoption of advanced antenna solutions. Moreover, extensive research and development activities in the region are fostering innovation aimed at improving antenna performance, reducing size, and enhancing energy efficiency, thereby strengthening market competitiveness.

Market Segmentation Analysis

The North America Highly Directional Antenna Market can be segmented by product type, technology, and industry:

By Product Type: The market is segmented into Parabolic Dish, Grid Antenna, Yagi-Uda Antenna, and Others. The Parabolic Dish segment is expected to dominate the market in 2024.

By Technology: The market is categorized into 5G, 4G or LTE, Wi-Fi, Bluetooth, GPS or GNSS, and Others. The 5G segment is anticipated to lead the market in 2024.

By Industry: The market is divided into Telecommunications, Consumer Electronics, Mining, Aerospace and Defense, Industrial, Automotive and Transportation, and Others. The Telecommunications segment is projected to hold the largest share in 2024.

Market Outlook

The highly directional antenna market is witnessing significant growth, largely driven by the integration with 5G and future technologies. As the demand for faster, more reliable, and higher-capacity wireless communication increases, highly directional antennas are becoming essential components in enabling next-generation networks. These antennas provide focused signal transmission, which minimizes interference and enhances signal strength over long distances—attributes that are critical for the high-frequency millimeter-wave bands utilized in 5G and future wireless standards.

One of the primary reasons for the growing adoption of highly directional antennas in the 5G ecosystem is their support for beamforming technology. Beamforming enables antennas to direct radio waves toward specific users rather than broadcasting signals in all directions. This targeted approach not only improves network efficiency but also significantly enhances user experience by increasing data speeds and reducing latency. Industry leaders such as Ericsson and Nokia have emphasized that beamforming, facilitated by highly directional antennas, is foundational for deploying dense 5G networks, particularly in urban environments where spectrum reuse and interference mitigation are critical.

Looking beyond 5G, the push toward 6G and other future wireless technologies heavily relies on advancements in antenna design. Researchers and engineers are focusing on developing ultra-high frequency antennas with narrower beams and smarter adaptive capabilities. For example, academic studies and tech innovators are highlighting the importance of integrating artificial intelligence with highly directional antennas to enable real-time beam adjustments, thereby improving network robustness and resource allocation. Overall, the integration with 5G and emerging wireless standards acts as a catalyst for the highly directional antenna market, driving innovation and expanding applications across telecommunications, defense, and IoT sectors.

Country Insights

The North America Highly Directional Antenna Market is segmented by country into the United States, Canada, and Mexico, with the United States holding the largest market share in 2024. The US market is primarily driven by rapid advancements in telecommunications infrastructure and the widespread adoption of 5G networks. The aggressive rollout of 5G technology necessitates highly directional antennas for efficient, high-speed data transmission with minimal interference, especially in urban settings. Additionally, the demand for reliable connectivity in remote areas further stimulates the use of these antennas to extend network coverage effectively.

The defense sector in the US also plays a crucial role, with increasing investments in radar and secure communication systems that rely on highly directional antennas for enhanced performance. The US's focus on smart city projects, IoT deployments, and autonomous vehicle communication systems further fuels demand. Technological innovations and substantial funding for research and development are encouraging the development of advanced antenna designs. However, regulatory policies regarding spectrum allocation and environmental concerns may impact market dynamics. Overall, the growth of the US market is shaped by a combination of technological progress,

government initiatives, and the increasing need for robust wireless communication systems across various applications.

Company Profiles

Key players in the North America Highly Directional Antenna Market include Cisco Systems Inc, PCTEL Inc., Quectel Wireless Solutions Co., Ltd., Airgain, Inc., Panorama Antennas Ltd., 2J Antennas S.R.O., Huawei Technologies Co., Ltd., Sinclair Technologies Inc, Ezurio, and Parsec Technologies. These companies are employing various strategies such as expansion, product innovation, and mergers and acquisitions to deliver innovative products and increase their market share.

Contents

1. INTRODUCTION

- 1.1 Report Guidance
- 1.2 Market Segmentation

2. EXECUTIVE SUMMARY

- 2.1 Key Insights
- 2.2 Market Attractiveness

3. RESEARCH METHODOLOGY

- 3.1 Secondary Research
- 3.2 Primary Research
 - 3.2.1 Hypothesis formulation:
 - 3.2.2 Macroeconomic factor analysis:
 - 3.2.3 Developing base number:
 - 3.2.4 Data Triangulation:
 - 3.2.5 Country-level data:

4. HIGHLY DIRECTIONAL ANTENNA MARKET LANDSCAPE

- 4.1 Market Overview
- 4.2 PEST Analysis
- 4.3 Ecosystem Analysis
 - 4.3.1 Component Provider
 - 4.3.2 Communication Service Providers
 - 4.3.3 Wireless Antenna Manufacturers
 - 4.3.4 End-Use
 - 4.3.5 List of Vendors in the Value Chain

5. NORTH AMERICA HIGHLY DIRECTIONAL ANTENNA MARKET - KEY MARKET DYNAMICS

- 5.1 Market Drivers
- 5.2 Market Restraints
- 5.3 Market Opportunities

5.4 Future Trends

5.5 Impact of Drivers and Restraints:

6. HIGHLY DIRECTIONAL ANTENNA MARKET - NORTH AMERICA MARKET ANALYSIS

6.1 North America Highly Directional Antenna Market Revenue (US\$ Million), 2024 - 2031

6.2 North America Highly Directional Antenna Market Forecast and Analysis

7. NORTH AMERICA HIGHLY DIRECTIONAL ANTENNA MARKET REVENUE ANALYSIS - BY PRODUCT TYPE

7.1 Parabolic Dish

7.1.1 Overview

7.1.2 Parabolic Dish: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

7.2 Grid Antenna

7.2.1 Overview

7.2.2 Grid Antenna: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

7.3 Yagi-Uda Antenna

7.3.1 Overview

7.3.2 Yagi-Uda Antenna: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

7.4 Others

7.4.1 Overview

7.4.2 Others: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8. NORTH AMERICA HIGHLY DIRECTIONAL ANTENNA MARKET REVENUE ANALYSIS - BY TECHNOLOGY

8.1 5G

8.1.1 Overview

8.1.2 5G: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.2 4G or LTE

8.2.1 Overview

8.2.2 4G or LTE: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.3 Wi-Fi

8.3.1 Overview

8.3.2 Wi-Fi: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.4 Bluetooth

8.4.1 Overview

8.4.2 Bluetooth: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.5 GPS or GNSS

8.5.1 Overview

8.5.2 GPS or GNSS: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

8.6 Others

8.6.1 Overview

8.6.2 Others: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9. NORTH AMERICA HIGHLY DIRECTIONAL ANTENNA MARKET REVENUE ANALYSIS - BY INDUSTRY

9.1 Telecommunications

9.1.1 Overview

9.1.2 Telecommunications: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.2 Consumer Electronics

9.2.1 Overview

9.2.2 Consumer Electronics: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.3 Mining

9.3.1 Overview

9.3.2 Mining: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.4 Aerospace and Defense

9.4.1 Overview

9.4.2 Aerospace and Defense: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.5 Industrial

9.5.1 Overview

9.5.2 Industrial: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.6 Automotive and Transportation

9.6.1 Overview

9.6.2 Automotive and Transportation: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

9.7 Others

9.7.1 Overview

9.7.2 Others: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

10. NORTH AMERICA HIGHLY DIRECTIONAL ANTENNA MARKET - COUNTRY ANALYSIS

10.1 North America

10.1.1 North America Highly Directional Antenna Market Revenue and Forecast and Analysis - by Country

10.1.1.1 North America Highly Directional Antenna Market Revenue and Forecast and Analysis - by Country

10.1.2.2 United States: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

10.1.2.2.1 United States: North America Highly Directional Antenna Market Share - by Product Type

10.1.2.2.2 United States: North America Highly Directional Antenna Market Share - by Technology

10.1.2.2.3 United States: North America Highly Directional Antenna Market Share - by Industry

10.2.3.3 Canada: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

10.2.3.3.1 Canada: North America Highly Directional Antenna Market Share - by Product Type

10.2.3.3.2 Canada: North America Highly Directional Antenna Market Share - by Technology

10.2.3.3.3 Canada: North America Highly Directional Antenna Market Share - by Industry

10.3.4.4 Mexico: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

10.3.4.4.1 Mexico: North America Highly Directional Antenna Market Share - by

Product Type

10.3.4.4.2 Mexico: North America Highly Directional Antenna Market Share - by Technology

10.3.4.4.3 Mexico: North America Highly Directional Antenna Market Share - by Industry

11 COMPETITIVE LANDSCAPE

11.1 Heat Map Analysis by Key Players

11.2 Company Positioning & Concentration

12 INDUSTRY LANDSCAPE

12.1 Overview

12.2 New Product Development

12.3 Merger and Acquisition

12.4 Other Strategic Developments

13 COMPANY PROFILES

13.1 Cisco Systems Inc

13.1.1 Key Facts

13.1.2 Business Description

13.1.3 Products and Services

13.1.4 Financial Overview

13.1.5 SWOT Analysis

13.1.6 Key Developments

13.2 PCTEL Inc.

13.2.1 Key Facts

13.2.2 Business Description

13.2.3 Products and Services

13.2.4 Financial Overview

13.2.5 SWOT Analysis

13.2.6 Key Developments

13.3 Quectel Wireless Solutions Co Ltd

13.3.1 Key Facts

13.3.2 Business Description

13.3.3 Products and Services

13.3.4 Financial Overview

- 13.3.5 SWOT Analysis
- 13.3.6 Key Developments
- 13.4 Airgain, Inc.
 - 13.4.1 Key Facts
 - 13.4.2 Business Description
 - 13.4.3 Products and Services
 - 13.4.4 Financial Overview
 - 13.4.5 SWOT Analysis
 - 13.4.6 Key Developments
- 13.5 Panorama Antennas Ltd.
 - 13.5.1 Key Facts
 - 13.5.2 Business Description
 - 13.5.3 Products and Services
 - 13.5.4 Financial Overview
 - 13.5.5 SWOT Analysis
 - 13.5.6 Key Developments
- 13.6 2J Antennas S.R.O.
 - 13.6.1 Key Facts
 - 13.6.2 Business Description
 - 13.6.3 Products and Services
 - 13.6.4 Financial Overview
 - 13.6.5 SWOT Analysis
 - 13.6.6 Key Developments
- 13.7 Huawei Technologies Co Ltd
 - 13.7.1 Key Facts
 - 13.7.2 Business Description
 - 13.7.3 Products and Services
 - 13.7.4 Financial Overview
 - 13.7.5 SWOT Analysis
 - 13.7.6 Key Developments
- 13.8 Sinclair Technologies Inc
 - 13.8.1 Key Facts
 - 13.8.2 Business Description
 - 13.8.3 Products and Services
 - 13.8.4 Financial Overview
 - 13.8.5 SWOT Analysis
 - 13.8.6 Key Developments
- 13.9 Ezurio
 - 13.9.1 Key Facts

- 13.9.2 Business Description
- 13.9.3 Products and Services
- 13.9.4 Financial Overview
- 13.9.5 SWOT Analysis
- 13.9.6 Key Developments
- 13.10 Parsec Technologies
 - 13.10.1 Key Facts
 - 13.10.2 Business Description
 - 13.10.3 Products and Services
 - 13.10.4 Financial Overview
 - 13.10.5 SWOT Analysis
 - 13.10.6 Key Developments

14. APPENDIX

- 14.1 About The Insight Partners

List Of Tables

LIST OF TABLES

Table 1. North America Highly Directional Antenna Market Segmentation

Table 2. List of Vendors

Table 3. North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Table 4. North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 5. North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 6. North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Industry

Table 7. North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Country

Table 8. United States: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 9. United States: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 10. United States: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Industry

Table 11. Canada: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 12. Canada: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 13. Canada: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Industry

Table 14. Mexico: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Product Type

Table 15. Mexico: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Technology

Table 16. Mexico: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million) - by Industry

Table 17. Heat Map Analysis by Key Players

List Of Figures

LIST OF FIGURES

Figure 1. North America Highly Directional Antenna Market Segmentation - Country

Figure 2. PEST Analysis

Figure 3. Ecosystem: Highly Directional Antenna Market

Figure 4. North America Highly Directional Antenna Market - Key Market Dynamics

Figure 5. Impact Analysis of Drivers and Restraints

Figure 6. North America Highly Directional Antenna Market Revenue (US\$ Million), 2024 - 2031

Figure 7. North America Highly Directional Antenna Market Share (%) - by Product Type, 2024 and 2031

Figure 8. Parabolic Dish: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 9. Grid Antenna: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 10. Yagi-Uda Antenna: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 11. Others: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 12. North America Highly Directional Antenna Market Share (%) - by Technology, 2024 and 2031

Figure 13. 5G: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 14. 4G or LTE: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 15. Wi-Fi: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 16. Bluetooth: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 17. GPS or GNSS: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 18. Others: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 19. North America Highly Directional Antenna Market Share (%) - by Industry, 2024 and 2031

Figure 20. Telecommunications: North America Highly Directional Antenna Market -

Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 21. Consumer Electronics: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 22. Mining: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 23. Aerospace and Defense: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 24. Industrial: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 25. Automotive and Transportation: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 26. Others: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 27. North America Highly Directional Antenna Market Breakdown by Key Countries, 2024 and 2031 (%)

Figure 28. United States: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 29. Canada: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 30. Mexico: North America Highly Directional Antenna Market - Revenue and Forecast, 2021 - 2031 (US\$ Million)

Figure 31. Company Positioning & Concentration

I would like to order

Product name: North America Highly Directional Antenna Market Size and Forecast (2021 - 2031)

Product link: <https://marketpublishers.com/r/N10C107B1045EN.html>

Price: US\$ 3,450.00 (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/N10C107B1045EN.html>