

# **Assured PNT (Positioning, Navigation, and Timing) Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 to 2034**

<https://marketpublishers.com/r/A51FFF339981EN.html>

Date: November 2024

Pages: 210

Price: US\$ 4,850.00 (Single User License)

ID: A51FFF339981EN

## **Abstracts**

The Global Assured PNT (Positioning, Navigation, And Timing) Market was valued at USD 665.6 million in 2024 and is anticipated to grow at a robust CAGR of 28.2% from 2025 to 2034. This growth is primarily driven by the increasing dependence on critical infrastructure, which requires reliable timing and positioning solutions. Industries such as telecommunications, energy, finance, and defense depend on accurate time synchronization to ensure seamless operations. However, the rising adoption of Global Positioning Systems (GPS) for navigation and timing has raised concerns about potential vulnerabilities, including signal jamming, spoofing, and disruptions.

To address these challenges, the demand for Assured PNT systems is rising. These systems are designed to provide resilience and redundancy by leveraging multiple technologies and ensuring continuous operation even if one source fails. Advanced solutions now integrate multi-source assurance and zero-trust security models to enhance reliability and mitigate risks associated with GPS dependency.

The assured PNT market is transforming rapidly to meet the growing need for secure and integrated solutions. As the reliance on GPS and Global Navigation Satellite Systems (GNSS) increases across sectors like defense, telecommunications, and smart infrastructure, the industry is shifting towards hybrid systems. These solutions blend signals from different GNSS constellations and incorporate ground-based enhancements to ensure uninterrupted service. With the world becoming more interconnected, the necessity for backup systems and strong cybersecurity drives further innovation in the PNT sector.

By platform, the market is segmented into air, land, and naval, with the air segment

projected to witness the fastest growth, expanding at a CAGR of over 28.5% through 2034. The aviation industry's need for precise navigation and timing pushes the development of advanced PNT solutions, particularly as the sector explores autonomous technologies and networked air systems.

In terms of components, the market includes atomic clocks, antennas, sensors, transponders, receivers, and more. Atomic clocks held over 27% of the market share in 2024 and are expected to grow significantly. The increasing demand for ultra-precise timing across industries is driving advancements in atomic clock technologies, with a focus on enhancing accuracy, reliability, and energy efficiency.

North America leads the global market, with the U.S. expected to surpass USD 3.5 billion by 2034. Investments in resilient PNT solutions, particularly for defense and national security, propel regional growth. The development of integrated PNT systems that combine satellite, terrestrial, and inertial technologies is key to ensuring reliable operations across critical sectors.

## Contents

### Report Content

#### **CHAPTER 1 METHODOLOGY & SCOPE**

- 1.1 Market scope & definitions
- 1.2 Base estimates & calculations
- 1.3 Forecast calculations
- 1.4 Data sources
  - 1.4.1 Primary
  - 1.4.2 Secondary
    - 1.4.2.1 Paid sources
    - 1.4.2.2 Public sources

#### **CHAPTER 2 EXECUTIVE SUMMARY**

- 2.1 Industry synopsis, 2021-2034

#### **CHAPTER 3 INDUSTRY INSIGHTS**

- 3.1 Industry ecosystem analysis
  - 3.1.1 Factor affecting the value chain
  - 3.1.2 Profit margin analysis
  - 3.1.3 Disruptions
  - 3.1.4 Future outlook
  - 3.1.5 Manufacturers
  - 3.1.6 Distributors
- 3.2 Supplier landscape
- 3.3 Profit margin analysis
- 3.4 Key news & initiatives
- 3.5 Regulatory landscape
- 3.6 Impact forces
  - 3.6.1 Growth drivers
    - 3.6.1.1 Increase in demand for reliable information in applications such as emergency services, military, and aerospace
    - 3.6.1.2 Growth in autonomous vehicles and robotics
    - 3.6.1.3 Increasing reliance on GPS for critical operations
    - 3.6.1.4 Growing use of advanced technologies to improve security

- 3.6.1.5 Telecommunications advancements
- 3.6.2 Industry pitfalls & challenges
  - 3.6.2.1 High development and training cost
  - 3.6.2.2 Lack of proper regulations and standards
- 3.7 Growth potential analysis
- 3.8 Porter's analysis
- 3.9 PESTEL analysis

## **CHAPTER 4 COMPETITIVE LANDSCAPE, 2024**

- 4.1 Introduction
- 4.2 Company market share analysis
- 4.3 Competitive positioning matrix
- 4.4 Strategic outlook matrix

## **CHAPTER 5 MARKET ESTIMATES & FORECAST, BY COMPONENTS, 2021-2034 (USD MILLION)**

- 5.1 Key trends
- 5.2 Atomic clocks
- 5.3 Antennas
- 5.4 Transponders
- 5.5 Sensors
- 5.6 Power amplifiers
- 5.7 Receivers
- 5.8 Others

## **CHAPTER 6 MARKET ESTIMATES & FORECAST, BY PLATFORM, 2021-2034 (USD MILLION)**

- 6.1 Key trends
- 6.2 Air
  - 6.2.1 Military aircraft
    - 6.2.1.1 Fighter aircraft
    - 6.2.1.2 Special mission aircraft
  - 6.2.2 Military helicopters
  - 6.2.3 Unmanned systems
- 6.5 Land
  - 6.5.1 Combat vehicles

- 6.5.1.1 Main battle tanks
- 6.5.1.2 Armored personnel carriers
- 6.5.1.3 Armored amphibious vehicles
- 6.5.1.4 Others
- 6.5.2 Unmanned ground vehicles
- 6.6 Naval
  - 6.6.1 Destroyers
  - 6.6.2 Frigates
  - 6.6.3 Corvettes
  - 6.6.4 Submarines

## **CHAPTER 7 MARKET ESTIMATES & FORECAST, BY END USE, 2021-2034 (USD MILLION)**

- 7.1 Key trends
- 7.2 Defense
- 7.3 Homeland security

## **CHAPTER 8 MARKET ESTIMATES & FORECAST, BY REGION, 2021-2034 (USD MILLION)**

- 8.1 Key trends
- 8.2 North America
  - 8.2.1 U.S.
  - 8.2.2 Canada
- 8.3 Europe
  - 8.3.1 UK
  - 8.3.2 Germany
  - 8.3.3 France
  - 8.3.4 Italy
  - 8.3.5 Spain
  - 8.3.6 Russia
- 8.4 Asia Pacific
  - 8.4.1 China
  - 8.4.2 India
  - 8.4.3 Japan
  - 8.4.4 South Korea
  - 8.4.5 Australia
- 8.5 Latin America

8.5.1 Brazil

8.5.2 Mexico

8.6 MEA

8.6.1 South Africa

8.6.2 Saudi Arabia

8.6.3 UAE

## **CHAPTER 9 COMPANY PROFILES**

9.1 BAE Systems

9.2 Curtiss-Wright

9.3 General Dynamics

9.4 Hexagon

9.5 Honeywell

9.6 Israel Aerospace Industries

9.7 L3Harris Technologies

9.8 Leonardo

9.9 Lockheed Martin

9.10 Northrop Grumman

9.11 Raytheon Technologies

9.12 Spirent Communications

9.13 Thales

## I would like to order

Product name: Assured PNT (Positioning, Navigation, and Timing) Market Opportunity, Growth Drivers, Industry Trend Analysis, and Forecast 2025 to 2034

Product link: <https://marketpublishers.com/r/A51FFF339981EN.html>

Price: US\$ 4,850.00 (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/A51FFF339981EN.html>