

LEO PNT Market by Hardware (GNSS Module, Time Synchronization, Backhaul Module, Navigation Signal Generation, Signal Transmission Module), End Use (Government & Defense and Others), Frequency, Satellite Mass and Region - Global Forecast to 2030

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Abstracts

The LEO PNT market is expected to reach USD 0.57 billion by 2030, from USD 0.07 billion in 2025, with a CAGR of 53.9%. The market is driven by increasing demand for reliable navigation solutions beyond traditional GNSS, especially in defense, aviation, and infrastructure. Growth is also boosted by higher investments in small satellite constellations and advancements in atomic clocks, GNSS receivers, and authentication technologies. Public-private partnerships and elevated demand in commercial sectors such as logistics and autonomous systems will further accelerate market growth.

“By hardware, signal transmission module is expected to hold the largest share.”

The signal transmission module segment holds the largest share of the LEO PNT market because it is widely used for delivering accurate navigation, time synchronization, and secure communication. Its role in controlling signal transmission among users and satellites keeps it ahead in aviation, defense, and strategic infrastructure markets. Additional applications of high-frequency and interference-resistant signals also help maintain its market leadership.

“By satellite mass, CubeSat is expected to record the highest CAGR.”

CubeSat represents the fastest-growing segment of the LEO PNT market, driven by factors such as the affordability of launches due to the compactness of small satellites, the potential for rapid expansion of satellite constellations, and the availability of more

space for testbed PNT missions. These satellites can carry advanced payloads such as GNSS receivers, atomic clocks, and signal authentication modules, making them attractive for both military and commercial applications. Additionally, increasing government-sponsored initiatives for small satellites and rising individual investments are contributing to the growth of CubeSat applications in secure and distributed PNT architectures.

“North America is expected to be the fastest-growing market for LEO PNT.”

North America is witnessing the fastest growth in the LEO PNT market. This growth can be attributed to strong government spending, defense upgrade projects, and the early adoption of next-generation satellite navigation technology. The presence of major market players, combined with a heightened demand for backup PNT solutions due to vulnerabilities in GNSS, is also fueling local growth. The increasing commercial use of PNT in aviation, logistics, and autonomous systems further positions North America as the fastest-growing region during the forecast period.

Breakdown of Primaries

The study contains insights from various industry experts, ranging from component suppliers to Tier-1 companies and OEMs. The break-up of the primaries is as follows:

By Company Type: Tier 1–35%, Tier 2–45%, and Tier 3–20%

By Designation: C-level–25%, D-level–30%, and Others–45%

By Region: North America–45%, Europe–25%, Asia Pacific–20%, Middle East–10%.

GMV Innovating Solutions S.L. (Spain), Safran (France), Thales Alenia Space (France), Xona Space Systems, Inc. (US), TrustPoint, Inc. (US), Hexagon AB (Sweden), L3Harris Technologies, Inc. (US), and Airbus (Netherlands) are some of the leading players in the LEO PNT market.

Research Coverage

The report on the LEO PNT market offers an analysis from 2025 to 2030. It covers various industry and technology trends, as well as drivers, restraints, challenges, and

opportunities that influence market growth. This study also includes an in-depth competitive analysis of key players in the market, featuring company profiles, key insights related to LEO PNT and business offerings, significant developments, and the main strategies adopted by these companies.

Key Benefits of Buying this Report:

This report assists market leaders and new entrants by providing approximate revenue figures for the overall LEO PNT Market and its subsegments. It covers the entire ecosystem of the LEO PNT Market, helping stakeholders understand the competitive landscape and gain insights to better position their businesses and develop appropriate go-to-market strategies. Additionally, the report offers insights into the market's current trends and key factors such as drivers, restraints, challenges, and opportunities.

The report provides insights into the following pointers:

Analysis of key drivers such as a surge in demand for GPS-independent navigation systems, the need for low-latency, secure positioning in modern warfare, and the integration of LEO PNT into autonomous and connected systems

Product Development: In-depth analysis of product innovation/development by companies across various regions

Market Development: Comprehensive information about lucrative markets – the report analyses the LEO PNT market across varied regions

Market Diversification: Exhaustive information about new solutions, untapped geographies, recent developments, and investments in the LEO PNT market

Competitive Assessment: In-depth assessment of market shares, growth strategies, and product offerings of leading players like GMV Innovating Solutions S.L. (Spain), Safran (France), Thales Alenia Space (France), Xona Space Systems, Inc. (US), TrustPoint, Inc. (US), Hexagon AB (Sweden), L3Harris Technologies, Inc (US), and Airbus (Netherlands)

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 MARKET DEFINITION

1.3 STUDY SCOPE

1.3.1 MARKETS COVERED AND REGIONAL SCOPE

1.3.2 INCLUSIONS AND EXCLUSIONS

1.3.3 YEARS CONSIDERED

1.4 CURRENCY CONSIDERED

1.5 STAKEHOLDERS

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

2.1.1 SECONDARY DATA

2.1.1.1 Key data from secondary sources

2.1.2 PRIMARY DATA

2.1.2.1 Primary sources

2.1.2.2 Key data from primary sources

2.1.2.3 Breakdown of primary interviews

2.2 FACTOR ANALYSIS

2.2.1 DEMAND-SIDE INDICATORS

2.2.2 SUPPLY-SIDE INDICATORS

2.3 MARKET SIZE ESTIMATION

2.3.1 BOTTOM-UP APPROACH

2.3.1.1 Market size estimation methodology (demand side)

2.3.1.2 Market size illustration: France's CubeSat LEO PNT market

2.3.2 TOP-DOWN APPROACH

2.4 DATA TRIANGULATION

2.5 RESEARCH ASSUMPTIONS

2.6 RESEARCH LIMITATIONS

2.7 RISK ASSESSMENT

3 EXECUTIVE SUMMARY

4 PREMIUM INSIGHTS

- 4.1 ATTRACTIVE OPPORTUNITIES FOR PLAYERS IN LEO PNT MARKET
- 4.2 LEO PNT MARKET, BY SATELLITE MASS
- 4.3 LEO PNT MARKET, BY END USE
- 4.3.5 MARKET OVERVIEW
- 5.1 INTRODUCTION
- 5.2 MARKET DYNAMICS
 - 5.2.1 DRIVERS
 - 5.2.1.1 Surge in demand for GPS-independent navigation systems
 - 5.2.1.2 Need for low-latency, secure positioning in modern warfare
 - 5.2.1.3 Integration of LEO PNT into autonomous and connected systems
 - 5.2.2 RESTRAINTS
 - 5.2.2.1 High launch and satellite deployment costs
 - 5.2.2.2 Technology lock-in with legacy GNSS infrastructure
 - 5.2.2.3 Orbital congestion and spectrum regulation challenges
 - 5.2.3 OPPORTUNITIES
 - 5.2.3.1 Commercialization of LEO PNT-as-a-Service
 - 5.2.3.2 Export potential to non-GNSS nations or allies
 - 5.2.3.3 Expansion into denied/degraded environments
 - 5.2.4 CHALLENGES
 - 5.2.4.1 Long development cycles and uncertain ROI
 - 5.2.4.2 Cybersecurity and signal integrity vulnerabilities
- 5.3 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS
- 5.4 VALUE CHAIN ANALYSIS
- 5.5 PRICING ANALYSIS
 - 5.5.1 AVERAGE SELLING PRICE TREND, BY REGION
 - 5.5.2 INDICATIVE PRICING ANALYSIS, BY SATELLITE MASS
- 5.6 VOLUME DATA
- 5.7 ECOSYSTEM ANALYSIS
 - 5.7.1 PROMINENT COMPANIES
 - 5.7.2 PRIVATE AND SMALL ENTERPRISES
 - 5.7.3 END USERS
- 5.8 TARIFF AND REGULATORY LANDSCAPE
 - 5.8.1 TARIFF DATA
 - 5.8.2 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS
 - 5.8.3 KEY REGULATIONS
 - 5.8.3.1 North America
 - 5.8.3.2 Europe
 - 5.8.3.3 Asia Pacific
 - 5.8.3.4 Middle East

5.9 TRADE DATA

5.9.1 IMPORT SCENARIO (HS CODE 880260)

5.9.2 EXPORT SCENARIO (HS CODE 880260)

5.10 KEY CONFERENCES AND EVENTS, 2025–2026

5.11 KEY STAKEHOLDERS AND BUYING CRITERIA

5.11.1 KEY STAKEHOLDERS IN BUYING PROCESS

5.11.2 BUYING CRITERIA

5.12 CASE STUDY ANALYSIS

5.12.1 ASSURED PNT FOR DEFENSE IN GNSS-DENIED ENVIRONMENTS

5.12.2 TIMING SYNCHRONIZATION FOR CRITICAL INFRASTRUCTURE

5.12.3 PRECISION CLOCKS FOR NEXT-GEN NAVIGATION SATELLITES

5.12.4 SDR-BASED NAVIGATION PAYLOAD FOR REGIONAL PNT SERVICES

5.13 BUSINESS MODELS

5.13.1 SUBSYSTEM OEM SALES

5.13.2 PNT-AS-A-SERVICE

5.13.3 CUSTOM PAYLOAD INTEGRATION

5.14 TOTAL COST OF OWNERSHIP

5.15 BILL OF MATERIALS

5.16 INVESTMENT AND FUNDING SCENARIO

5.17 TECHNOLOGY ROADMAP

5.18 TECHNOLOGY ANALYSIS

5.18.1 KEY TECHNOLOGIES

5.18.1.1 Carrier phase-based LEO ranging

5.18.1.2 Chip-scale atomic clocks

5.18.1.3 Frequency-diverse PNT waveforms

5.18.1.4 Two-way time transfer protocols

5.18.1.5 Software-defined transponders

5.18.2 COMPLEMENTARY TECHNOLOGIES

5.18.2.1 Sensor fusion

5.18.2.2 Cryptographic signal authentication

5.18.2.3 Electronically steered antennas

5.19 MACROECONOMIC OUTLOOK

5.19.1 NORTH AMERICA

5.19.2 EUROPE

5.19.3 ASIA PACIFIC

5.19.4 MIDDLE EAST

5.20 IMPACT OF MEGATRENDS

5.20.1 AI-ENABLED AUTONOMY FOR LEO SATELLITE CONSTELLATIONS

5.20.2 TIME-SENSITIVE NETWORKING IN 5G AND 6G

- 5.20.3 GAN-BASED RF AMPLIFIERS
- 5.20.4 MINIATURIZATION AND SPACE-QUALIFICATION OF PRECISION TIMING
- 5.20.5 OPTICAL COMMUNICATIONS AND CROSSLINK INFRASTRUCTURE
- 5.21 PATENT ANALYSIS
- 5.22 IMPACT OF AI
 - 5.22.1 AI IN ATOMIC CLOCK DRIFT MODELING
 - 5.22.2 AI-ENABLED SOFTWARE TRANSPONDER LOGIC
 - 5.22.3 AI IN ANTENNA BEAM CONTROL
 - 5.22.4 AI IN POWER AMPLIFIER MANAGEMENT
 - 5.22.5 AI IN GNSS SIGNAL PROCESSING
- 5.23 MARKET SCENARIO ANALYSIS
- 5.24 US 2025 TARIFF
 - 5.24.1 INTRODUCTION
 - 5.24.2 KEY TARIFF RATES
 - 5.24.3 PRICE IMPACT ANALYSIS
 - 5.24.4 IMPACT ON COUNTRY/REGION
 - 5.24.4.1 US
 - 5.24.4.2 Europe
 - 5.24.4.3 Asia Pacific
 - 5.24.5 IMPACT ON END-USE INDUSTRIES
 - 5.24.5.1 Commercial
 - 5.24.5.2 Defense
 - 5.24.5.3 Government

6 LEO PNT MARKET, BY HARDWARE

- 6.1 INTRODUCTION
- 6.2 USE CASE
- 6.3 GNSS MODULE
 - 6.3.1 INTEGRATING ANTENNA-TO-RECEIVER PNT FUNCTIONALITY FOR COMPACT LEO PAYLOADS
 - 6.3.2 GNSS ANTENNA
 - 6.3.3 GNSS RECEIVER
- 6.4 TIME SYNCHRONIZATION
 - 6.4.1 ESTABLISHING SUB-MICROSECOND COHERENCE ACROSS LEO-BASED PNT ARCHITECTURES
 - 6.4.2 ATOMIC CLOCK
 - 6.4.3 CLOCK MONITORING & CONTROL UNIT
 - 6.4.4 OCXO/PLL/DISTRIBUTION NETWORK

6.5 BACKHAUL MODULE

6.5.1 ENABLING HIGH-CAPACITY DATA UPLINK FOR PNT COMMAND, CONTROL, AND SYNCHRONIZATION

6.5.2 BACKHAUL ANTENNA

6.5.3 BACKHUAL RECEIVER

6.6 NAVIGATION SIGNAL GENERATION

6.6.1 ALLOWING REAL-TIME, SOFTWARE-DEFINED PNT BROADCASTS IN DYNAMIC LEO ENVIRONMENTS

6.6.2 NAVIGATION SIGNAL GENERATION UNIT

6.6.3 FREQUENCY GENERATION & UP-CONVERSION UNIT

6.7 SIGNAL TRANSMISSION MODULE

6.7.1 PROVIDING PRECISION SIGNALS TO END USERS THROUGH ROBUST TRANSMISSION CHAINS

6.7.2 HIGH-POWER AMPLIFIER

6.7.3 RF FILTER

6.7.4 ANTENNA

6.7.5 INTER-SATELLITE LINK

7 LEO SATELLITE MARKET, BY SATELLITE MASS

7.1 INTRODUCTION

7.2 USE CASE

7.3 CUBESAT

7.3.1 ACCELERATING PNT INNOVATION THROUGH LOW-COST DEMONSTRATION PLATFORMS

7.4 SMALLSAT

7.4.1 ENABLING RESILIENT SATELLITE ARCHITECTURES FOR SECURE AND SCALABLE NAVIGATION SERVICES

7.4.2 MICROSAT

7.4.3 MINISAT

8 LEO SATELLITE MARKET, BY FREQUENCY

8.1 INTRODUCTION

8.2 USE CASE

8.3 VHF & UHF-BAND

8.3.1 ENHANCING SIGNAL PENETRATION AND RELIABILITY IN CHALLENGING ENVIRONMENTS

8.4 L-BAND

8.4.1 DELIVERING CORE PNT FUNCTIONALITY WITH BROAD TERMINAL COMPATIBILITY

8.5 S-BAND

8.5.1 ENABLING AGILE PNT SIGNAL MANAGEMENT FOR DYNAMIC ENVIRONMENTS

8.6 C-BAND

8.6.1 SUPPORTING HIGH-CAPACITY PNT SIGNAL DELIVERY FOR ENCRYPTED AND SECURE APPLICATIONS

8.7 KU & KA-BAND

8.7.1 FACILITATING HIGH-CAPACITY, LOW-LATENCY PNT THROUGH NEXT-GENERATION HIGH-FREQUENCY INNOVATION

9 LEO PNT MARKET, BY END USE

9.1 INTRODUCTION

9.2 USE CASE

9.3 GOVERNMENT & DEFENSE

9.3.1 STRENGTHENING MULTI-DOMAIN DEFENSE OPERATIONS WITH SECURE, HIGH-RESILIENCE NAVIGATION SOLUTIONS

9.3.2 PLATFORM NAVIGATION IN GNSS-DENIED ENVIRONMENT

9.3.3 DISMOUNTED FORCE POSITIONING

9.3.4 SECURE TIMING FOR TACTICAL NETWORK

9.3.5 TEST & TRAINING RANGE TIME/POSITION INSTRUMENTATION

9.4 CIVIL AVIATION & UAS

9.4.1 ENHANCING AIRSPACE SAFETY AND UAS INTEGRATION WITH HIGH-ACCURACY, LOW-LATENCY POSITIONING SYSTEMS

9.4.2 PBN/RNP PERFORMANCE SUPPORT

9.4.3 AIRPORT SURFACE OPERATIONS COORDINATION

9.4.4 UTM/BVLOS DRONE NAVIGATION & GEOFENCING

9.5 MARITIME & OFFSHORE

9.5.1 DRIVING RELIABLE MARITIME AND OFFSHORE OPERATIONS WITH LOW-LATENCY, INTERFERENCE-RESILIENT LEO PNT SYSTEMS

9.5.2 PORT NAVIGATION & PILOTAGE

9.5.3 VESSEL TRAFFIC SERVICES TIMING

9.5.4 DYNAMIC POSITIONING & STATION KEEPING

9.5.5 OFFSHORE PLATFORM/WIND-FARM POSITIONING & TIMING

9.5.6 SEARCH & RESCUE LOCALIZATION

9.6 AUTOMOTIVE & MOBILITY

9.6.1 ENABLING NEXT-GENERATION AUTONOMOUS AND CONNECTED

MOBILITY WITH LOCALIZATION

9.6.2 LANE-LEVEL LOCALIZATION FOR ADAS/AV

9.6.3 FLEET TELEMATICS & ROAD-ASSET TRACKING

9.6.4 RAIL/METRO TIMING & LOCALIZATION FOR SIGNALING

9.7 TELECOM & POWER

9.7.1 STRENGTHENING CRITICAL INFRASTRUCTURES WITH LOW-LATENCY

PNT

9.7.2 5G/6G NETWORK SYNCHRONIZATION & BACKHAUL TIMING

9.7.3 POWER-GRID SYNCHROPHASOR TIMING & PROTECTION

9.7.4 DATA-CENTER/ENTERPRISE GRANDMASTER HOLDOVER

9.8 CONSTRUCTION & PRECISION AGRICULTURE

9.8.1 TRANSFORMING INFRASTRUCTURE DEVELOPMENT AND FARMING

THROUGH LEO PNT

9.8.2 SURVEY/GEOMATICS PRECISE POSITIONING

9.8.3 CONSTRUCTION MACHINE GUIDANCE

9.8.4 PRECISION AGRICULTURE GUIDANCE & OPERATIONS

9.9 INDUSTRIAL & LOGISTICS

9.9.1 ENABLING PRECISE INDUSTRIAL OPERATIONS AND GLOBAL SUPPLY CHAIN EFFICIENCY

9.9.2 INDUSTRIAL LOCALIZATION IN HARSH/NEAR-INDOOR SITES

9.9.3 YARD/WAREHOUSE/PORT LOGISTICS ASSET TRACKING

9.10 OTHER END USES

10 LEO PNT MARKET, BY REGION

10.1 INTRODUCTION

10.2 NORTH AMERICA

10.2.1 PESTLE ANALYSIS

10.2.2 US

10.2.2.1 Federal PNT initiatives and procurement programs reinforce leadership in space-based navigation

10.3 EUROPE

10.3.1 PESTLE ANALYSIS

10.3.2 FRANCE

10.3.2.1 National space sovereignty goals and ESA-backed subsystem development support expansion

10.3.3 UK

10.3.3.1 Sovereign funding and SME-led innovation sustain momentum

10.4 ASIA PACIFIC

10.4.1 PESTLE ANALYSIS

10.4.2 CHINA

10.4.2.1 Military-led LEO navigation programs and vertically integrated hardware production propel growth

10.4.3 JAPAN

10.4.3.1 Government-backed LEO augmentation research and component-level specialization fuel expansion

10.4.4 AUSTRALIA

10.4.4.1 Defense-led space strategy and allied partnerships prompt growth

10.5 MIDDLE EAST

10.5.1 PESTLE ANALYSIS

10.5.2 GCC

10.5.2.1 UAE

10.5.2.1.1 Public-private partnerships and knowledge transfer agreements fuel demand

10.5.3 TURKEY

10.5.3.1 Defense-led satellite programs and indigenous subsystem development strengthen market

11 COMPETITIVE LANDSCAPE

11.1 INTRODUCTION

11.2 KEY PLAYER STRATEGIES/RIGHT TO WIN, 2020–2024

11.3 REVENUE ANALYSIS, 2021–2024

11.4 MARKET SHARE ANALYSIS, 2025

11.5 BRAND/PRODUCT COMPARISON

11.6 COMPANY VALUATION AND FINANCIAL METRICS

11.7 COMPANY EVALUATION MATRIX: KEY PLAYERS, 2024

11.7.1 STARS

11.7.2 EMERGING LEADERS

11.7.3 PERVASIVE PLAYERS

11.7.4 PARTICIPANTS

11.7.5 COMPANY FOOTPRINT

11.7.5.1 Company footprint

11.7.5.2 Region footprint

11.7.5.3 Satellite mass footprint

11.7.5.4 Frequency footprint

11.8 COMPANY EVALUATION MATRIX: START-UPS/SMES, 2024

11.8.1 PROGRESSIVE COMPANIES

- 11.8.2 RESPONSIVE COMPANIES
- 11.8.3 DYNAMIC COMPANIES
- 11.8.4 STARTING BLOCKS
- 11.8.5 COMPETITIVE BENCHMARKING
 - 11.8.5.1 List of start-ups/SMEs
 - 11.8.5.2 Competitive benchmarking of start-ups/SMEs
- 11.9 COMPETITIVE SCENARIO
 - 11.9.1 PRODUCT LAUNCHES
 - 11.9.2 DEALS
 - 11.9.3 OTHER DEVELOPMENTS

12 COMPANY PROFILES

- 12.1 KEY PLAYERS
 - 12.1.1 GMV INNOVATING SOLUTIONS S.L.
 - 12.1.1.1 Business overview
 - 12.1.1.2 Products offered
 - 12.1.1.3 Recent developments
 - 12.1.1.3.1 Deals
 - 12.1.1.3.2 Other developments
 - 12.1.1.4 MnM view
 - 12.1.1.4.1 Right to win
 - 12.1.1.4.2 Strategic choices
 - 12.1.1.4.3 Weaknesses and competitive threats
 - 12.1.2 SAFRAN
 - 12.1.2.1 Business overview
 - 12.1.2.2 Products offered
 - 12.1.2.3 Recent developments
 - 12.1.2.3.1 Product launches
 - 12.1.2.3.2 Deals
 - 12.1.2.3.3 Other developments
 - 12.1.2.4 MnM view
 - 12.1.2.4.1 Right to win
 - 12.1.2.4.2 Strategic choices
 - 12.1.2.4.3 Weaknesses and competitive threats
 - 12.1.3 THALES ALENIA SPACE
 - 12.1.3.1 Business overview
 - 12.1.3.2 Products offered
 - 12.1.3.3 Recent developments

- 12.1.3.3.1 Deals
- 12.1.3.3.2 Other developments
- 12.1.3.4 MnM view
 - 12.1.3.4.1 Right to win
 - 12.1.3.4.2 Strategic choices
 - 12.1.3.4.3 Weaknesses and competitive threats
- 12.1.4 XONA SPACE SYSTEMS, INC.
 - 12.1.4.1 Business overview
 - 12.1.4.2 Products offered
 - 12.1.4.3 Recent developments
 - 12.1.4.3.1 Deals
 - 12.1.4.3.2 Other developments
 - 12.1.4.4 MnM view
 - 12.1.4.4.1 Right to win
 - 12.1.4.4.2 Strategic choices
 - 12.1.4.4.3 Weaknesses and competitive threats
- 12.1.5 TRUSTPOINT, INC.
 - 12.1.5.1 Business overview
 - 12.1.5.2 Products offered
 - 12.1.5.3 Recent developments
 - 12.1.5.3.1 Product launches
 - 12.1.5.3.2 Deals
 - 12.1.5.3.3 Other developments
 - 12.1.5.4 MnM view
 - 12.1.5.4.1 Right to win
 - 12.1.5.4.2 Strategic choices
 - 12.1.5.4.3 Weaknesses and competitive threats
- 12.1.6 HEXAGON AB
 - 12.1.6.1 Business overview
 - 12.1.6.2 Products offered
 - 12.1.6.3 Recent developments
 - 12.1.6.3.1 Deals
- 12.1.7 L3HARRIS TECHNOLOGIES, INC.
 - 12.1.7.1 Business overview
 - 12.1.7.2 Products offered
 - 12.1.7.3 Recent developments
 - 12.1.7.3.1 Other developments
- 12.1.8 AIRBUS
 - 12.1.8.1 Business overview

- 12.1.8.2 Products offered
- 12.1.8.3 Recent developments
 - 12.1.8.3.1 Deals
- 12.1.9 CACI INTERNATIONAL INC
 - 12.1.9.1 Business overview
 - 12.1.9.2 Products offered
 - 12.1.9.3 Recent developments
 - 12.1.9.3.1 Deals
 - 12.1.9.3.2 Other developments
- 12.1.10 MICROCHIP TECHNOLOGY INC.
 - 12.1.10.1 Business overview
 - 12.1.10.2 Products offered
 - 12.1.10.3 Recent developments
 - 12.1.10.3.1 Product launches
 - 12.1.10.3.2 Other developments
- 12.1.11 GENERAL DYNAMICS CORPORATION
 - 12.1.11.1 Business overview
 - 12.1.11.2 Products offered
 - 12.1.11.3 Recent developments
 - 12.1.11.3.1 Deals
 - 12.1.11.3.2 Other developments
- 12.1.12 RUAG GROUP
 - 12.1.12.1 Business overview
 - 12.1.12.2 Products offered
 - 12.1.12.3 Recent developments
 - 12.1.12.3.1 Product launches
 - 12.1.12.3.2 Deals
 - 12.1.12.3.3 Other developments
- 12.1.13 NORTHROP GRUMMAN
 - 12.1.13.1 Business overview
 - 12.1.13.2 Products offered
 - 12.1.13.3 Recent developments
 - 12.1.13.3.1 Other developments
- 12.1.14 HONEYWELL INTERNATIONAL INC.
 - 12.1.14.1 Business overview
 - 12.1.14.2 Products offered
 - 12.1.14.3 Recent developments
 - 12.1.14.3.1 Product launches
 - 12.1.14.3.2 Deals

- 12.1.14.3.3 Other developments
- 12.1.15 FUGRO
 - 12.1.15.1 Business overview
 - 12.1.15.2 Products offered
 - 12.1.15.3 Recent developments
 - 12.1.15.3.1 Deals
- 12.1.16 RAKON LIMITED
 - 12.1.16.1 Business overview
 - 12.1.16.2 Products offered
 - 12.1.16.3 Recent developments
 - 12.1.16.3.1 Product launches
 - 12.1.16.3.2 Other developments
- 12.1.17 TELEDYNE TECHNOLOGIES INCORPORATED
 - 12.1.17.1 Business overview
 - 12.1.17.2 Products offered
- 12.1.18 SATELLES, INC.
 - 12.1.18.1 Business overview
 - 12.1.18.2 Products offered
- 12.2 OTHER PLAYERS
 - 12.2.1 SKYKRAFT PTY LTD
 - 12.2.2 QASCOM
 - 12.2.3 AOSENSE, INC.
 - 12.2.4 ARKEDGE SPACE INC.
 - 12.2.5 INFLEQTION, INC.
 - 12.2.6 OSCILLOQUARTZ
 - 12.2.7 ACCUBEAT LTD.
 - 12.2.8 BLILEY TECHNOLOGIES
 - 12.2.9 FERGANI

13 APPENDIX

- 13.1 DISCUSSION GUIDE
- 13.2 KNOWLEDGESTORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL
- 13.3 CUSTOMIZATION OPTIONS
- 13.4 RELATED REPORTS
- 13.5 AUTHOR DETAILS

List Of Tables

LIST OF TABLES

TABLE 1 USD EXCHANGE RATES

TABLE 2 DEFENSE-DRIVEN DEMAND FOR SECURE NAVIGATION COMPONENTS

TABLE 3 SIGNAL INTEGRITY AND CYBER THREATS AT COMPONENT LEVEL

TABLE 4 LEO PNT SATELLITE VOLUME, BY REGION, 2025–2030 (UNITS)

TABLE 5 ROLE OF COMPANIES IN ECOSYSTEM

TABLE 6 TARIFF DATA FOR HS CODE 880260-COMPLIANT PRODUCTS, 2024

TABLE 7 NORTH AMERICA: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 8 EUROPE: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 9 ASIA PACIFIC: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 10 MIDDLE EAST: REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 11 IMPORT DATA FOR HS CODE 880260-COMPLIANT PRODUCTS, BY COUNTRY, 2020–2024 (USD THOUSAND)

TABLE 12 EXPORT DATA FOR HS CODE 880260-COMPLIANT PRODUCTS, BY COUNTRY, 2020–2024 (USD THOUSAND)

TABLE 13 KEY CONFERENCES AND EVENTS, 2025–2026

TABLE 14 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS, BY SATELLITE MASS (%)

TABLE 15 KEY BUYING CRITERIA, BY HARDWARE

TABLE 16 BUSINESS MODELS IN LEO PNT MARKET

TABLE 17 BILL OF MATERIALS, BY HARDWARE

TABLE 18 BILL OF MATERIALS FOR CUBESAT VS. SMALLSAT

TABLE 19 PATENT ANALYSIS

TABLE 20 US-ADJUSTED RECIPROCAL TARIFF RATES

TABLE 21 KEY PRODUCT-RELATED TARIFF FOR SATELLITE NON-TERRESTRIAL NETWORKS

TABLE 22 ANTICIPATED CHANGE IN PRICES AND POTENTIAL IMPACT ON END-USE MARKETS

TABLE 23 LEO PNT MARKET, BY HARDWARE, 2025–2030 (USD MILLION)

TABLE 24 LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 25 LEO PNT MARKET, BY FREQUENCY, 2025–2030 (USD MILLION)

TABLE 26 LEO PNT MARKET, BY END USE, 2025–2030 (USD MILLION)

TABLE 27 LEO PNT MARKET, BY REGION, 2025–2030 (USD MILLION)

TABLE 28 LEO PNT MARKET, BY REGION, 2025–2030 (UNITS)

TABLE 29 NORTH AMERICA: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 30 NORTH AMERICA: LEO PNT MARKET, BY FREQUENCY, 2025–2030 (USD MILLION)

TABLE 31 NORTH AMERICA: LEO PNT MARKET, BY COUNTRY, 2025–2030 (USD MILLION)

TABLE 32 US: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 33 EUROPE: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 34 EUROPE: LEO PNT MARKET, BY FREQUENCY, 2025–2030 (USD MILLION)

TABLE 35 EUROPE: LEO PNT MARKET, BY COUNTRY, 2025–2030 (USD MILLION)

TABLE 36 FRANCE: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 37 UK: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 38 ASIA PACIFIC: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 39 ASIA PACIFIC: LEO PNT MARKET, BY FREQUENCY, 2025–2030 (USD MILLION)

TABLE 40 ASIA PACIFIC: LEO PNT MARKET, BY COUNTRY, 2025–2030 (USD MILLION)

TABLE 41 CHINA: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 42 JAPAN: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 43 AUSTRALIA: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 44 MIDDLE EAST: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 45 MIDDLE EAST: LEO PNT MARKET, BY FREQUENCY, 2025–2030 (USD MILLION)

TABLE 46 MIDDLE EAST: LEO PNT MARKET, BY COUNTRY, 2025–2030 (USD MILLION)

TABLE 47 UAE: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 48 TURKEY: LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

TABLE 49 KEY PLAYER STRATEGIES/RIGHT TO WIN, 2020–2024

TABLE 50 LEO PNT MARKET: DEGREE OF COMPETITION

TABLE 51 REGION FOOTPRINT

TABLE 52 SATELLITE MASS FOOTPRINT

TABLE 53 FREQUENCY FOOTPRINT

TABLE 54 LIST OF START-UPS/SMES

TABLE 55 COMPETITIVE BENCHMARKING OF START-UPS/SMES

TABLE 56 LEO PNT MARKET: PRODUCT LAUNCHES, 2021–2025

TABLE 57 LEO PNT MARKET: DEALS, 2021–2025

TABLE 58 LEO PNT MARKET: OTHER DEVELOPMENTS, 2021–2025

TABLE 59 GMV INNOVATING SOLUTIONS S.L.: COMPANY OVERVIEW

TABLE 60 GMV INNOVATING SOLUTIONS S.L.: PRODUCTS OFFERED

TABLE 61 GMV INNOVATING SOLUTIONS S.L.: DEALS

TABLE 62 GMV INNOVATING SOLUTIONS S.L.: OTHER DEVELOPMENTS

TABLE 63 SAFRAN: COMPANY OVERVIEW

TABLE 64 SAFRAN: PRODUCTS OFFERED

TABLE 65 SAFRAN: PRODUCT LAUNCHES

TABLE 66 SAFRAN: DEALS

TABLE 67 SAFRAN: OTHER DEVELOPMENTS

TABLE 68 THALES ALENIA SPACE: COMPANY OVERVIEW

TABLE 69 THALES ALENIA SPACE: PRODUCTS OFFERED

TABLE 70 THALES ALENIA SPACE: DEALS

TABLE 71 THALES ALENIA SPACE: OTHER DEVELOPMENTS

TABLE 72 XONA SPACE SYSTEMS, INC. COMPANY OVERVIEW

TABLE 73 XONA SPACE SYSTEMS, INC.: PRODUCTS OFFERED

TABLE 74 XONA SPACE SYSTEMS, INC.: DEALS

TABLE 75 XONA SPACE SYSTEMS, INC.: OTHER DEVELOPMENTS

TABLE 76 TRUSTPOINT, INC.: COMPANY OVERVIEW

TABLE 77 TRUSTPOINT, INC.: PRODUCTS OFFERED

TABLE 78 TRUSTPOINT, INC.: PRODUCT LAUNCHES

TABLE 79 TRUSTPOINT, INC.: DEALS

TABLE 80 TRUSTPOINT, INC.: OTHER DEVELOPMENTS

TABLE 81 HEXAGON AB: COMPANY OVERVIEW

TABLE 82 HEXAGON AB: PRODUCTS OFFERED

TABLE 83 HEXAGON AB: DEALS

TABLE 84 L3HARRIS TECHNOLOGIES, INC.: COMPANY OVERVIEW

TABLE 85 L3HARRIS TECHNOLOGIES, INC.: PRODUCTS OFFERED

TABLE 86 L3HARRIS TECHNOLOGIES, INC.: OTHER DEVELOPMENTS

TABLE 87 AIRBUS: COMPANY OVERVIEW

TABLE 88 AIRBUS: PRODUCTS OFFERED

TABLE 89 AIRBUS: DEALS

TABLE 90 CACI INTERNATIONAL INC: COMPANY OVERVIEW

TABLE 91 CACI INTERNATIONAL INC: PRODUCTS OFFERED

TABLE 92 CACI INTERNATIONAL INC: DEALS

TABLE 93 CACI INTERNATIONAL INC: OTHER DEVELOPMENTS

TABLE 94 MICROCHIP TECHNOLOGY INC.: COMPANY OVERVIEW

TABLE 95 MICROCHIP TECHNOLOGY INC.: PRODUCTS OFFERED

TABLE 96 MICROCHIP TECHNOLOGY INC.: PRODUCT LAUNCHES

TABLE 97 MICROCHIP TECHNOLOGY INC.: OTHER DEVELOPMENTS

TABLE 98 GENERAL DYNAMICS CORPORATION: COMPANY OVERVIEW

TABLE 99 GENERAL DYNAMICS CORPORATION: PRODUCTS OFFERED

TABLE 100 GENERAL DYNAMICS CORPORATION: DEALS

TABLE 101 GENERAL DYNAMICS CORPORATION: OTHER DEVELOPMENTS

TABLE 102 RUAG GROUP: COMPANY OVERVIEW

TABLE 103 RUAG GROUP: PRODUCTS OFFERED

TABLE 104 RUAG GROUP: PRODUCT LAUNCHES

TABLE 105 RUAG GROUP: DEALS

TABLE 106 RUAG GROUP: OTHER DEVELOPMENTS

TABLE 107 NORTHROP GRUMMAN: COMPANY OVERVIEW

TABLE 108 NORTHROP GRUMMAN: PRODUCTS OFFERED

TABLE 109 NORTHROP GRUMMAN: OTHER DEVELOPMENTS

TABLE 110 HONEYWELL INTERNATIONAL INC.: COMPANY OVERVIEW

TABLE 111 HONEYWELL INTERNATIONAL INC.: PRODUCTS OFFERED

TABLE 112 HONEYWELL INTERNATIONAL INC.: PRODUCT LAUNCHES

TABLE 113 HONEYWELL INTERNATIONAL INC.: DEALS

TABLE 114 HONEYWELL INTERNATIONAL INC.: OTHER DEVELOPMENTS

TABLE 115 FUGRO: COMPANY OVERVIEW

TABLE 116 FUGRO: PRODUCTS OFFERED

TABLE 117 FUGRO: DEALS

TABLE 118 RAKON LIMITED: COMPANY OVERVIEW

TABLE 119 RAKON LIMITED: PRODUCTS OFFERED

TABLE 120 RAKON LIMITED: PRODUCT LAUNCHES

TABLE 121 RAKON LIMITED: OTHER DEVELOPMENTS

TABLE 122 TELEDYNE TECHNOLOGIES INCORPORATED: COMPANY OVERVIEW

TABLE 123 TELEDYNE TECHNOLOGIES INCORPORATED: PRODUCTS OFFERED

TABLE 124 SATELLES, INC.: COMPANY OVERVIEW

TABLE 125 SATELLES, INC.: PRODUCTS OFFERED

TABLE 126 SKYKRAFT PTY LTD: COMPANY OVERVIEW

TABLE 127 QASCOM: COMPANY OVERVIEW

TABLE 128 AOSENSE, INC.: COMPANY OVERVIEW
TABLE 129 ARKEDGE SPACE INC.: COMPANY OVERVIEW
TABLE 130 INFLEQTION, INC.: COMPANY OVERVIEW
TABLE 131 OSCILLOQUARTZ: COMPANY OVERVIEW
TABLE 132 ACCUBEAT LTD.: COMPANY OVERVIEW
TABLE 133 BLILEY TECHNOLOGIES: COMPANY OVERVIEW
TABLE 134 FERGANI: COMPANY OVERVIEW

List Of Figures

LIST OF FIGURES

FIGURE 1 LEO PNT MARKET SEGMENTATION

FIGURE 2 RESEARCH DESIGN MODEL

FIGURE 3 RESEARCH DESIGN

FIGURE 4 BOTTOM-UP APPROACH

FIGURE 5 TOP-DOWN APPROACH

FIGURE 6 DATA TRIANGULATION

FIGURE 7 L-BAND TO BE DOMINANT DURING FORECAST PERIOD

FIGURE 8 SMALLSAT TO BE LARGER THAN CUBESAT DURING FORECAST PERIOD

FIGURE 9 BACKHAUL MODULE TO BE FASTEST-GROWING SEGMENT DURING FORECAST PERIOD

FIGURE 10 AUTOMOTIVE & MOBILITY TO EXHIBIT FASTEST GROWTH DURING FORECAST PERIOD

FIGURE 11 ASIA PACIFIC TO HOLD LEADING POSITION IN 2025

FIGURE 12 GROWING USE OF LEO SATELLITES FOR TRACKING, MONITORING, AND SURVEILLANCE TO DRIVE MARKET

FIGURE 13 SMALLSAT TO SURPASS CUBESAT DURING FORECAST PERIOD

FIGURE 14 GOVERNMENT & DEFENSE TO ACCOUNT FOR LARGEST SHARE IN 2025

FIGURE 15 LEO PNT MARKET DYNAMICS

FIGURE 16 TRENDS AND DISRUPTIONS IMPACTING CUSTOMER BUSINESS

FIGURE 17 VALUE CHAIN ANALYSIS

FIGURE 18 AVERAGE SELLING PRICE TREND, BY REGION, 2021–2024 (USD MILLION)

FIGURE 19 ECOSYSTEM ANALYSIS

FIGURE 20 IMPORT DATA FOR HS CODE 880260-COMPLIANT PRODUCTS, BY COUNTRY, 2020–2024 (USD THOUSAND)

FIGURE 21 EXPORT DATA FOR HS CODE 880260-COMPLIANT PRODUCTS, BY COUNTRY, 2020–2024 (USD THOUSAND)

FIGURE 22 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS, BY SATELLITE MASS

FIGURE 23 KEY BUYING CRITERIA, BY HARDWARE

FIGURE 24 BUSINESS MODELS IN LEO PNT MARKET

FIGURE 25 BREAKDOWN OF TOTAL COST OF OWNERSHIP

FIGURE 26 BILL OF MATERIALS, BY HARDWARE

FIGURE 27 NUMBER AND VALUE OF DEALS IN EUROPEAN START-UPS,

2020–2024 (USD BILLION)

FIGURE 28 TECHNOLOGY ROADMAP

FIGURE 29 EVOLUTION OF LEO PNT TECHNOLOGIES

FIGURE 30 IMPACT OF MEGATRENDS

FIGURE 31 PATENT ANALYSIS

FIGURE 32 IMPACT OF AI ON LEO PNT MARKET

FIGURE 33 LEO PNT SATELLITE LAUNCHES, 2025–2030

FIGURE 34 LEO PNT MARKET, BY HARDWARE, 2025–2030 (USD MILLION)

FIGURE 35 LEO PNT MARKET, BY SATELLITE MASS, 2025–2030 (USD MILLION)

FIGURE 37 LEO PNT MARKET, BY END USE, 2025–2030 (USD MILLION)

FIGURE 38 LEO PNT MARKET, BY REGION, 2025–2030 (USD MILLION)

FIGURE 39 NORTH AMERICA: LEO PNT MARKET SNAPSHOT

FIGURE 40 EUROPE: LEO PNT MARKET SNAPSHOT

FIGURE 41 ASIA PACIFIC: LEO PNT MARKET SNAPSHOT

FIGURE 42 MIDDLE EAST: LEO PNT MARKET SNAPSHOT

FIGURE 43 REVENUE ANALYSIS OF TOP THREE PLAYERS, 2021–2024

FIGURE 44 MARKET SHARE ANALYSIS OF KEY PLAYERS, 2025

FIGURE 45 BRAND/PRODUCT COMPARISON

FIGURE 46 FINANCIAL METRICS (EV/EBITDA)

FIGURE 47 COMPANY VALUATION (USD BILLION)

FIGURE 48 COMPANY EVALUATION MATRIX (KEY PLAYERS), 2024

FIGURE 49 COMPANY FOOTPRINT

FIGURE 50 COMPANY EVALUATION MATRIX (START-UPS/SMES), 2024

FIGURE 51 SAFRAN: COMPANY SNAPSHOT

FIGURE 52 HEXAGON AB: COMPANY SNAPSHOT

FIGURE 53 L3HARRIS TECHNOLOGIES, INC.: COMPANY SNAPSHOT

FIGURE 54 AIRBUS: COMPANY SNAPSHOT

FIGURE 55 CACI INTERNATIONAL INC: COMPANY SNAPSHOT

FIGURE 56 MICROCHIP TECHNOLOGY INC.: COMPANY SNAPSHOT

FIGURE 57 GENERAL DYNAMICS CORPORATION: COMPANY SNAPSHOT

FIGURE 58 RUAG GROUP: COMPANY SNAPSHOT

FIGURE 59 NORTHROP GRUMMAN: COMPANY SNAPSHOT

FIGURE 60 HONEYWELL INTERNATIONAL INC.: COMPANY SNAPSHOT

FIGURE 61 FUGRO: COMPANY SNAPSHOT

FIGURE 62 RAKON LIMITED: COMPANY SNAPSHOT

FIGURE 63 TELEDYNE TECHNOLOGIES INCORPORATED: COMPANY SNAPSHOT

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