

Launch Vehicle Avionics Market Size & Share Analysis - Growth Trends and Forecast (2025 - 2030)

> **Industry:** Space Economy, Satellites & Propulsion (Aerospace & Defense)
> **Source:** https://www.mordorintelligence.com/industry-reports/launch-vehicle-avionics-market
> **Scraped Date:** 2026-09-17

Executive Market Summary

Market Metric	Details
Base Market Size	USD 3.86 billion
Projected Forecast (2031)	USD 3.86 billion
Growth Rate (CAGR)	13.22 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

! [Major players in Launch Vehicle Avionics industry] (images/chart_2.png)

! [Launch Vehicle Avionics Market (2025 - 2030)] (images/chart_3.png)

! [Launch Vehicle Avionics Market: Market Share by Subsystem] (images/chart_4.png)

! [Launch Vehicle Avionics Market: Market Share by Enduser] (images/chart_5.png)

! [Launch Vehicle Avionics Market CAGR (%), Growth Rate by Region] (images/chart_6.png)

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Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market OverviewStudy Period | 2019 - 2030 |
Market Size (2025) | USD 3.86 Billion |
Market Size (2030) | USD 7.18 Billion |
Growth Rate (2025 - 2030) | 13.22 % |
Fastest Growing Market | Asia Pacific |
Largest Market | North America |
Market Concentration | Medium |
Major Players*Disclaimer: Major Players sorted in no particular order

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Market Overview

Launch Vehicle Avionics Market Analysis by Mordor Intelligence The launch vehicle avionics market size reached USD 3.86 billion in 2025 and is forecasted to advance at a 13.22% CAGR, lifting value to USD 7.18 billion by 2030. This rapid trajectory reflects the sector's pivot to reusable platforms that demand rugged, high-cycle electronics and the record 263 global launches logged in 2024.[1]Source: Elon Musk, "Starlink Mission Updates and Launch Statistics," SpaceX, spacex.com

Growing small-satellite constellations, expanding government deep-space programs, and falling component costs collectively push the launch vehicle avionics market toward standardized, scalable architectures. Suppliers that couple radiation-hardened hardware with software-defined flexibility now capture procurement priority, while semiconductor shortages and cybersecurity certification backlogs temper near-term expansion. Competitive intensity remains moderate as primes such as Northrop Grumman and Thales defend share against nimble entrants like Rocket Lab and Aurora. Still, the breadth of opportunities keeps barriers to exit low and the launch vehicle avionics market open to specialized innovators.

Key Report Takeaways* By subsystem, guidance, navigation, and control systems led with 35.80% of the launch vehicle avionics market share in 2024, while telemetry, tracking, and command systems are projected to expand at a 15.20% CAGR through 2030.

* By launch-vehicle class, small vehicles below 1,000 kg commanded 47.30% share of the launch vehicle avionics market size in 2024 and are expected to grow at a 14.60% CAGR over the forecast horizon.

* By end user, commercial operators held a 64.35% share in 2024; research and educational institutes are advancing at a 14.87% CAGR to 2030 as democratized access drives incremental demand.

* By geography, North America accounted for 44.20% of 2024 revenue, while Asia-Pacific is set to register the fastest regional CAGR at 14.85% to 2030, driven by China, India, and Japan's expanding programs.

Key Market Trends

Market Trends and Insights Drivers Impact Analysis of Launch Vehicle Avionics Market*Driver | (~)% Impact on CAGR Forecast | Geographic Relevance | Impact Timeline |

Surge in small-satellite constellations driving launch cadence | +2.5% | Global – North America and Asia-Pacific hubs | Medium term (2-4 years) |

Reusable launch vehicles demanding high-cycle avionics | +2.8% | North America and EU, expanding into Asia-Pacific | Long term (≥4 years) |

Government deep-space programs requiring radiation-hardened systems | +1.9% | North America and Europe, emerging Asia-Pacific | Long term (≥4 years) |

Advances in low-cost COTS miniaturized components | +2.1% | Global, manufacturing density in Asia-Pacific | Short term (≤2 years) |

Autonomous in-flight range safety systems adoption | +1.7% | North America and EU, regulatory spillover worldwide | Medium term (2-4 years) |

VC funding for digital-twin and AI-centric avionics startups | +1.8% | Funding concentration in North America and Europe | Short term (≤2 years) |

Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

The launch vehicle avionics market exhibits moderate concentration. Northrop Grumman Corporation, Thales Group, and L3Harris Technologies, Inc. lean on legacy contracts and vertically integrated manufacturing, anchoring high-reliability niches.

hes. Rocket Lab has demonstrated the viability of in-house avionics for small launchers, and its Electron heritage now feeds into Neutron, threatening incumbents in the medium-class segment. SpaceX continues to internalize key avionics, leveraging economies of learning from 20-plus reuses per booster to iterate on hardware every six months. This velocity compels external vendors to adopt concurrent-engineering workflows and digital-twin platforms to maintain relevance.

Strategically, the field is bifurcating. Volume-centric suppliers prioritize standardized boards to migrate across booster families, minimizing non-recurring engineering charges. Premium providers focus on radiation-hardened or deep-space-capable units where margins exceed 35%. Patent filings surged in 2024 for autonomous flight-termination logic and AI-derived sensor fusion, suggesting intellectual property will shape the next competitive battleground. M&A activity, typified by Lynx's purchase of CoreAVI, underscores a race to integrate robust safety-critical graphics and processing IP under one roof.

Regionalization trends complicate the picture. Chinese manufacturers back-integrate avionics to avoid Western sanctions, while EU suppliers are ITAR-free partners for Middle Eastern and Asian clients. Supply-chain resiliency initiatives under the CHIPS Act encourage US primes to dual-source fabs domestically, potentially raising entry barriers. Yet the sheer diversity of payload requirements ensures that even niche houses, such as Aurora Avionics with digital-twin controllers, can capture a meaningful share if they meet schedule and cost targets. Overall, the competitive canvas remains dynamic, with incumbents and newcomers jockeying for design wins in a launch vehicle avionics market expanding at a double-digit pace.

Launch Vehicle Avionics Industry Leaders* Northrop Grumman Corporation

- * Safran SA
- * Space Exploration Technologies Corp.
- * L3Harris Technologies, Inc.
- * Moog Inc.

* *Disclaimer: Major Players sorted in no particular order
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Component Component 3 Scope Of The Report Bottom

Global Launch Vehicle Avionics Market Report ScopeBy SubsystemGuidance, Navigation, and Control (GNC) Systems |
Flight Computers and Data Handling Systems |
Telemetry, Tracking, and Command Systems |
Electrical Power Systems |
Others Systems |

Segmentation Accordion Item

By GeographyNorth America | United States |
| Canada |
| Mexico |
Europe | United Kingdom |
| France |
| Germany |
| Italy |
| Russia |
| Rest of Europe |
Asia-Pacific | China |
| India |

- | Japan |
- | South Korea |
- | Rest of Asia-Pacific |
- South America | Brazil |
- | Rest of South America |
- |
- Middle East and Africa | Middle East | Saudi Arabia |
- | | Israel |
- | | Rest of Middle East |
- |
- | Africa | South Africa |
- | | Rest of Africa |

Frequently Asked Questions

What was the launch vehicle avionics market size in 2025?

The sector generated USD 3.86 billion in 2025, setting the baseline for a strong forecast cycle.

Which subsystem leads spending today?

Guidance, Navigation, and Control (GNC) systems hold 35.80% of 2024 revenue, reflecting their critical function in vehicle safety and performance.

Why are small launchers so important to future growth?

Small vehicles (below 1,000 kg) payload combine high flight cadence with standardized avionics, driving a 14.60% CAGR that outpaces other classes.

Which region is expanding fastest?

Asia-Pacific is projected to grow at 14.85% CAGR through 2030 thanks to Chinese, Indian, and Japanese program momentum.

How does reusability influence avionics design?

Reusable rockets force avionics to withstand dozens of thermal and vibro-acoustic cycles, prompting upgrades in component durability and health-monitoring software.

What is limiting wider adoption of AI-driven avionics?

Extended cybersecurity certification under evolving D0-178C and FAA guidelines adds up to 18 months to