

Space Propulsion Market Platform (Satellite, Launch Vehicle), Propulsion Type (Chemical Propulsion, Non-Chemical Propulsion), Component (Thrusters, Propellant Feed System, Nozzle), Orbit, End User, Orbit, Support Service Region - Global Forecast to 2028

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Abstracts

Space propulsion systems play a crucial role in spacecraft, launch vehicles, capsules, and rovers by providing the necessary thrust for various operations such as orbit insertion, station keeping, launching vehicles into space, and attitude control, among others. These propulsion systems can be broadly categorized into two types: chemical propulsion and non-chemical propulsion.

Chemical propulsion technologies encompass a variety of methods, including solid, liquid, hybrid, and cold gas propulsion. On the other hand, non-chemical propulsion technologies utilize different principles, such as electric, solar, nuclear, and laser propulsion.

The key components used in space propulsion systems are thrusters, propellant feed systems, rocket motors, nozzles, reactors, propulsion thermal control systems, and power processing units (PPU).

The space propulsion market caters to both government & military, and commercial end users. It encompasses the application of chemical and non-chemical propulsion technologies in space missions. The end users of space propulsion systems can be further classified into commercial entities and government & defense organizations.

The space propulsion market size is projected to grow from USD 10.6 billion in 2023 to USD 18.1 billion by 2028, at a CAGR of 11.3% during the forecast period.

Low Earth Orbit (LEO) Segment: Rapidly growing segment of the space propulsion market by orbit during 2023-2028

Payloads in the low Earth orbit (LEO) are placed between 500 and 1,500 kilometers above the surface of the Earth. They are visible for 95 to 120 minutes as these satellites circulate in a lower orbit. There is a growing demand for space propulsion systems that enable CubeSats and small satellites to achieve attitude, orbit control, and orbital transfers. The growth of the space sector has led to the greater use of advanced components such as electric thrusters, propellant tanks, and pressure regulators in the propulsion systems of spacecraft. NanoAvionics (US) provides high-performance and environment-friendly propulsion systems for CubeSats and small satellites.

” Commercial Segment: Rapidly growing segment of the space propulsion market by the end user during 2023-2028. “

The commercial segment includes companies that use satellites for communication, Earth observation, imaging, and agricultural monitoring, among other applications. For instance, Pumpkin Space (US), a leading player in the nanosatellites market, uses small satellites for scientific experiments, such as testing new technologies like batteries with sleep mode capability (BM-2). Busek Co. Inc (US) is another company focused on developing new propulsion systems, such as pulsed plasma thrusters, green monopropellant thrusters, and electrothermal thrusters.

In 2021, SpaceX built and launched 1,869 operational Starlink satellites in 25 months, more than 1,750 of which are still in orbit and functional. And in 2022, Space X alone raised USD 2.2 billion and became the most valuable private company in the US.

“Asia Pacific to account for the largest share in the space propulsion market in 2023.”

Investment in the space industry in Asia Pacific has increased continuously in recent years. This factor supports the growth of the space propulsion market in Asia Pacific.

Well-established and prominent manufacturers of these military systems in this region include Lockheed Martin Corporation (US), L3Harris Technologies Inc. (US), Northrop Grumman Corporation (US), Blue Origin, LLC (US), and others.

The break-up of profiles of primary participants in the Space Propulsion market: By Company Type: Tier 1 – 35%, Tier 2 – 45%, and Tier 3 – 20% By Designation: C-Level Executives – 35%, Directors – 25%, and Others – 40% By Region: North America – 45%, Europe – 15%, Asia Pacific – 25%, Middle East & Africa – 10%, and Latin America – 5%

Prominent companies in the space propulsion market are Safran S.A. (France), SpaceX (US), L3Harris Technologies Inc. (US), IHI Corporation (Japan), and Northrop Grumman Corporation (US), among others.

Research Coverage: The market study covers the space propulsion market across segments. It aims to estimate the market size and growth potential of this market across different segments, such as platform, propulsion type, component, orbit, end user, support service, and region. The study also includes an in-depth competitive analysis of the key players in the market, their company profiles, key observations related to product and business offerings, recent developments, and key market strategies. **Key benefits of buying this report:** This report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall space propulsion market and its subsegments. The report covers the entire ecosystem of the space propulsion industry. It will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and plan suitable go-to-market strategies. The report will also help stakeholders understand the pulse of the market and provide them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

Analysis of key drivers and several factors, such as increased investments in space research, growing space exploration programs, the need for space propulsion systems, and others that could contribute to an increase in space propulsion market.

Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the space propulsion market

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

Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in space propulsion market

Competitive Assessment: In-depth assessment of market shares, growth strategies, and service offerings of leading players like Safran S.A. (France), SpaceX (US), L3Harris Technologies Inc. (US), IHI Corporation (Japan), Northrop Grumman Corporation (US), among others in the space propulsion market.

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