Certain information and statistics set out in this section and elsewhere in this document are derived from various government and other publicly available sources and from the market research report prepared by Frost & Sullivan. Frost & Sullivan is an independent industry consultant engaged by us, and we commissioned Frost & Sullivan to prepare a market research report. The information from official government sources has not been independently verified by our Company, the Sole Sponsor, the [**REDACTED**]*, the* [**REDACTED**]*, the* [**REDACTED**]*, the* [**REDACTED**]*, the* [**REDACTED**]*, the* [**REDACTED**]*, or any other persons or parties involved in the* [**REDACTED**]*, and no representation is given as to its accuracy. For discussions of risks relating to our industry, please see "Risk Factors — Risks Relating to Our Business and Industry."*

THE COMMERCIAL AEROSPACE INDUSTRY IN CHINA

Commercial aerospace refers to market-driven and for-profit aerospace activities, including the R&D, production and provision of services of spacecraft, rockets and associated equipment, undertaken by commercial aerospace companies. In the satellite sector, the service offerings primarily include communication services, remote sensing data services, positioning and navigation services, and space computing services. In the rocket sector, the service offerings primarily include launch services for satellites and other spacecraft. In the ground equipment sector, the service offerings primarily include the reception and transmission of satellite data, enabling terrestrial access to space-based information and supporting the operation and application of spacecraft such as satellites. In terms of the nature of market participants, commercial aerospace companies can be divided into private aerospace companies and state-owned aerospace companies.

In recent years, the PRC government has vigorously encouraged the development of the commercial aerospace industry. The output value of the commercial aerospace industry in China increased from approximately RMB1.3 trillion in 2021 to RMB2.8 trillion in 2025, growing at a CAGR of 21.1%, and is expected to reach approximately RMB10.9 trillion by 2030, representing a CAGR of 31.2% from 2025 to 2030.

The commercial aerospace industry is set for significant growth due to several key factors: (i) future policies aim to enhance private investment in China's aerospace sector by streamlining permit management and approval processes across scientific research, rocket production, manned flights, satellite development, and other projects, while eliminating redundant construction and optimizing regional layouts. For instance, in 2015, the NDRC issued the "Medium and Long-term Development Plan of National Civil Space Infrastructure (2015-2025)" (《國家民用空間基礎設施中長期發展規劃(2015-2025年)》), aiming to support and guide private capital to participate in the construction of space infrastructure. In 2025, the provincial government of Sichuan Province issued the "Action Plan for High-Quality Development of Commercial Aerospace in Sichuan Province (2025-2030)" (《四川省商業航天高品質發展行動計劃(2025-2030年)》), explicitly encouraging private companies to participate in the commercial aerospace industry. Driven by these policies, China's commercial aerospace industry exhibits a competitive landscape with both state-owned companies and private companies, among which state-owned companies possess expertise in aerospace technologies, providing a solid technical foundation for the development of commercial aerospace activities, whilst private aerospace companies leverage flexible operating models and strong innovation capabilities to actively explore segmented markets. With accumulated technological know-how and resource advantages, state-owned companies maintain a leading position in high-end satellite development and national strategic missions. Meanwhile, private companies primarily focus on satellite applications in communications, remote sensing and space computing, with their satellite production mainly concentrated on micro and small LEO satellites; (ii) construction of commercial rocket launching facilities, and development of rocket technology such as multi-satellite launch which allows multiple satellites to be deployed using a single rocket, and reusable carrier rocket which can be launched and reused for multiple missions, significantly

reducing launch costs and increasing efficiency; and (iii) the accelerated deployment of large-scale satellite constellation, which drives the rapid growth in demand for satellites and satellite-related solutions from extensive applications.

THE SATELLITE INDUSTRY IN CHINA

Overview

Satellites are the principal type of spacecraft and the satellite industry is a subset of the commercial aerospace industry, with the participating private companies being private commercial aerospace companies. The satellite industry is a strategic emerging industry based on satellite communication, navigation, remote sensing, space computing and other technologies such as AI, which encompass all economic activities related to satellite production, launching and application. The satellite industry can be segmented into three main phases, namely, (i) satellite R&D and production, (ii) satellite launching and (iii) satellite operation and application, and the phase of satellite operation and application further includes the production of ground equipment and the provision of satellite-based solutions. Satellite constellation, a commonly used term in the satellite industry, refers to a group of satellites working together in a coordinated manner to provide enhanced coverage and capabilities, which is an important space infrastructure for satellite applications.

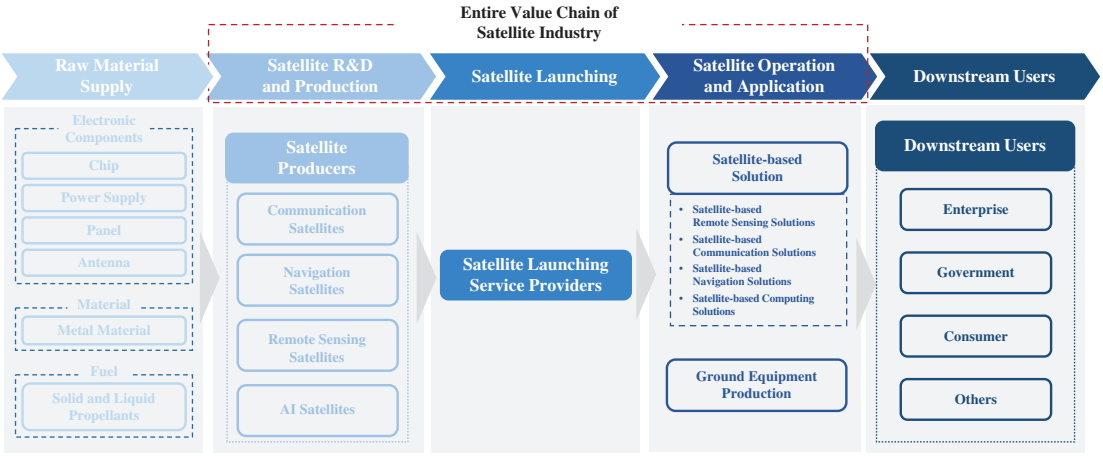
Satellite by Orbits and Applications

The classification of satellite by orbits includes two categories, namely near-circular orbits and elliptical orbits. Near-circular orbits can be further categorized into Low Earth Orbit ("LEO"), Medium Earth Orbit, and Geosynchronous Orbit by altitude. For definition of each type of orbit, see "Glossary of Technical Terms". With advantages such as low latency, high-resolution Earth observation and cost effectiveness, LEO satellites are an important development direction in satellite industry.

By functions, conventional satellites primarily include communication satellites, navigation satellites and remote sensing satellites. AI satellites are a newly developed and emerging category along with the rapid development of AI technology. AI satellites further include AI application satellites and AI computing satellites, among which (i) AI application satellites, equipped with AI payloads, provide AI-driven data analysis and computing services to deliver enhanced functions, and (ii) AI computing satellites provide advanced AI-driven data analysis and computing services not only for themselves but also for other spacecraft and ground-based applications, achieved by onboard computing resources and sophisticated algorithms designed to handle complex data analysis tasks.

The Satellite Industry Value Chain

The value chain of the satellite industry mainly includes satellite R&D and production, satellite launching, and satellite operation and application.



Source: Frost & Sullivan Report

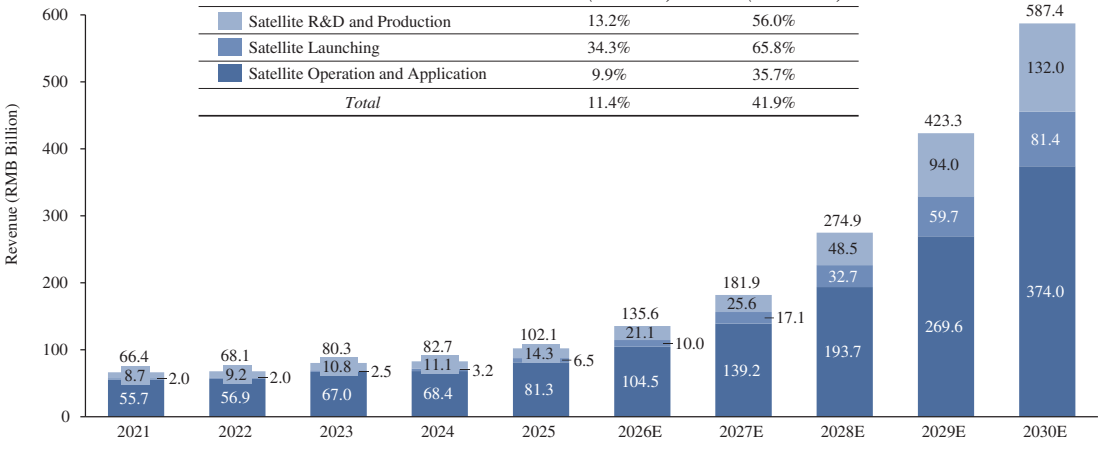
Market Size of the Satellite Industry in China

In recent years, the Chinese government has actively promoted the growth of the satellite industry, leading to a significant increase in the number of satellites in orbit. By the end of 2025, entities in China had submitted filings to the International Telecommunication Union ("ITU") for frequency and orbital resources for approximately 203 thousand satellites, reflecting substantial planned capacity in large-scale satellite constellations. According to the Union of Concerned Scientists Satellite Database, the quantity of in-orbit satellites developed and produced by Chinese companies increased from 499 as of December 31, 2021 to 1,166 as of December 31, 2025. LEO satellites, a crucial infrastructure for the development of China's satellite industry, saw an increase from 389 as of December 31, 2021 to 1,013 as of December 31, 2025, with the proportion in the total number of satellites in orbit from 78.0% as of December 31, 2021 to 86.9% as of December 31, 2025.

The satellite industry in China has experienced steady growth in the past few years. Due to the rapid development of China's commercial aerospace industry driven by favorable policies and the accelerated layout of LEO satellite constellations, the market size of the satellite industry in China in terms of revenue is expected to maintain a significant growth in the future.

Total Revenue of Satellite Industry in China, 2021-2030E

Revenue	*CAGR (2021-2025)*	*CAGR (2025-2030E)*
Satellite R&D and Production	13.2%	56.0%
Satellite Launching	34.3%	65.8%
Satellite Operation and Application	9.9%	35.7%
Total	11.4%	41.9%



Source: Satellite Industry Association, Frost & Sullivan Report

In recent years, the PRC government has actively encouraged private companies to engage in the satellite industry. Propelled by policy support, the swift development of commercial aerospace and technological advancements, and the rapid deployment of LEO satellite constellations, the revenue from private commercial aerospace companies with satellite-related business in China increased from approximately RMB19.2 billion in 2021 to approximately RMB34.0 billion in 2025 at a CAGR of 15.4%. The revenue from private commercial aerospace companies with satellite-related business in China is expected to further grow at a CAGR of 50.7% from 2025, reaching approximately RMB264.1 billion by 2030. The revenue from private companies accounted for 36.3% of total revenue of the satellite industry in China in 2025, and is expected to account for 45.0% in 2030.

Competitive Landscape of the Satellite Industry in China

For a long period of time, the satellite industry in China has been dominated by state-owned satellite companies, which refer to (i) the companies with the proportion of state-owned capital equity exceeding 50% and the largest shareholder being state-owned companies; and (ii) the companies with the proportion of state-owned capital equity lower than 50% and the largest shareholder and actual controller being state-owned companies. With the transformation in satellite development and favorable policies encouraging private capital to enter the satellite industry, private companies in the industry have thrived. Private commercial aerospace companies in satellite-related industries primarily participate in the satellite industry value chain including satellite R&D and production, satellite launching and satellite operation and application. As of December 31, 2025, there were approximately 400 private commercial aerospace companies with satellite-related business in China, among which, there were approximately 20 private commercial aerospace companies in China that managed the full satellite industry value chain such as our Group, and many participants only focused on single satellite-related business, whilst there were approximately 50 private rocket companies in China. In terms of revenue in 2025, China's top ten private commercial aerospace companies with satellite-related businesses accounted for approximately 35.9% of the total revenue generated from all private commercial aerospace companies with satellite-related businesses, among which our Group ranked seventh with a market share of 2.1%.

China's Top Ten Private Commercial Aerospace Companies with Satellite-related Businesses by Revenue of Principal Business, 2025

Ranking	Company	Background Information	Whether to Manage the Full Satellite Industry Value Chain	Listing Status	Revenue (Billion RMB)	Market Share (%)
1	Company A	Founded in 2003, Company A focuses on the research and development, manufacturing and industrial application of products and solutions related to high-precision navigation and positioning.	No	Listed	3.68	10.8%
2	Company B	Founded in 2006, Company B has been continuously researching and developing digital earth-related products and core technologies, providing software sales and data services, technology services, among others.	No	Listed	2.16	6.4%
3	Company C	Founded in 1994, Company C is one of the pioneers in the positioning, navigation and timing ("PNT") industry and a leader in the geospatial industry, focusing on high-precision satellite navigation applications.	No	Listed	1.28	3.8%
4	Company D	Founded in 1999, Company D focuses on the research and development, manufacturing, and sales of software and hardware products and services related to the high-precision positioning.	No	Listed	1.06	3.1%
5	Company E	Founded in 2014, Company E focuses on the research and development of high-performance and low-cost satellites and the air-space-ground integrated remote sensing information services.	Yes	Not Listed	1.04	3.1%
6	Company F	Founded in 2000, Company F has built a global leading intelligent Location Digital Base ("iLDB") by providing high-quality Global Navigation Satellite System ("GNSS") products and services for various applications.	No	Listed	0.86	2.5%
7	**Our Group**	**See "Business"**	**Yes**	**–**	**0.70**	**2.1%**
8	Company G	Founded in 2008, Company G is one of leading domestic satellite companies, focusing on the spaceground integrated perception network of satellites, drones and ground sensors.	No	Listed	0.54	1.6%
9	Company H	Founded in 2012, Company H is a high-tech enterprise that masters the core technologies of high-precision Beidou Navigation Satellite System ("BDS") and Global Navigation Satellite System ("GNSS") and has realized large-scale applications.	No	Listed	0.45	1.3%
10	Company I	Founded in 2016, Company I is a leading satellite internet solution provider and satellite manufacturer in China, focusing on the independent research and development and mass production of communication payloads and satellite platforms.	Yes	Not Listed	0.40	1.2%
Top 10						35.9%

Source: Annual Reports, Frost & Sullivan Report

Note: Revenue refers to the revenue derived from satellite-related businesses.

As of December 31, 2025, there were approximately 20 private commercial aerospace companies in China that manage the full satellite industry value chain, including satellite R&D and production, satellite launching, and satellite operation and application. In terms of revenue in 2025, our Group ranked second among all China's private commercial aerospace companies that manage the full satellite industry value chain, with a market share of 22.6%.

China's Top Five Private Commercial Aerospace Companies that Manage the Full Satellite Industry Value Chain by Revenue of the principal business, 2025

Ranking	Company Name	Background Information	Listing Status	Market Share (%)
1	Company E	Founded in 2014, Company E focuses on the research and development of high-performance and low-cost satellites and the air-space-ground integrated remote sensing information services.	Not Listed	33.5%
2	**Our Group**	**See "Business"**	**-**	**22.6%**
3	Company I	Founded in 2016, Company I is a leading satellite internet solution provider and satellite manufacturer in China, focusing on the independent research and development and mass production of communication payloads and satellite platforms.	Not Listed	12.9%
4	Company J	Founded in 2018, Company J is a provider of aerospace information and communication infrastructure and application solutions, with a strategic focus on satellite production and satellite-based applications.	Not Listed	11.9%
5	Company K	Founded in 2015, Company K is dedicated to providing Synthetic Aperture Radar ("SAR") satellite constellation construction and integrated SAR satellite data services.	Not Listed	4.5%

Source: Frost & Sullivan Report

Note: Revenue refers to the revenue derived from satellite-related businesses.

We pioneer the R&D and production and launch of AI satellites. With 27 satellites (including 21 AI satellites) successfully launched since the inception and up to the Latest Practicable Date, we ranked first among all private commercial aerospace companies in China in terms of cumulative number of AI satellites successfully launched. We have also developed, produced, launched and networked the world's first space computing constellation consisting of twelve satellites in a single orbital plane.

Market Drivers of the Satellite Industry in China

Policy Support. The PRC government has prioritized the development of the commercial aerospace industry and the satellite industry, implementing a series of supportive policies to foster its growth. For instance, in 2015, the NDRC issued the "Medium and Long-term Development Plan of National Civil Space Infrastructure (2015-2025)" (《國家民用空間基礎設施中長期發展規劃(2015-2025年)》), aiming to support and guide private capital in participating in the construction of space infrastructure and promote the sustainable development of the satellite industry. In 2020, the NDRC included satellite Internet for the first time as a new infrastructure. In 2022, the PRC government proposed the development goal of accelerating the construction of a strong aerospace nation. In 2023, the PRC government proposed to develop a number of strategic emerging industries including commercial aerospace, aiming to accelerate the formation of new driving forces for industrial development and further promote the development of commercial aerospace. In 2024, commercial aerospace was mentioned for the first time in the government work report, bringing new development opportunities to China's commercial aerospace industry. In 2024, the Chengdu Municipal Bureau of Economy and Information Technology and two other departments issued the "Special Policy for Promoting the Development of Satellite Internet and Satellite Application Industry in Chengdu" (《成都市促進衛星互聯網與衛星應用產業發展專項政策》), aiming to accelerate the construction of new space infrastructure and promote the development of satellite Internet and satellite applications. In 2025, the provincial government of Sichuan Province issued the "Action Plan for High-Quality Development of Commercial Aerospace in Sichuan Province

(2025-2030)" (《四川省商業航天高品質發展行動計劃(2025-2030年)》), that proposed to enhance commercial aerospace launch capabilities, strengthen innovation driving forces, consolidate industrial foundations, expand application scenarios, and promote the high-quality development of commercial aerospace industry.

The Rapid Development of Private Companies in Commercial Aerospace. Following the release of the Medium and Long-term Development Plan for National Civil Space Infrastructure (2015-2025) (《國家民用空間基礎設施中長期發展規劃(2015-2025年)》) in 2015, which supported and guided private capital to participate in the construction of space infrastructure, the commercial aerospace industry in China has evolved from a state-dominated model to a hybrid model with both state-owned companies and private companies that fosters market-oriented activities, catalyzing the industry's swift expansion and the rapid development of private companies in commercial aerospace. This has effectively enhanced the vitality of the commercial aerospace industry, stimulated capital investment, fostered technological innovation and provided broad development potentials for private companies in segmented markets such as satellite applications in remote sensing and in-orbit computing, as well as the R&D and production of micro and small LEO satellites. Private companies now play a key role in developing satellite industry, leading to reduced costs, enhanced scalability and accelerated innovation. The growing presence of private satellite companies has contributed to the sustained growth of the industry.

Rapid Layout of LEO Satellite Constellations. The recent accelerated deployment of LEO satellite constellations has spurred advances in the satellite industry. As the LEO satellite constellations are progressively deployed, they provide continuous global access to satellite observation and satellite communication for ground users. Remote sensing satellite constellations can provide comprehensive remote sensing information services. Communication speeds are rising due to the ongoing development of satellite constellations. Satellites equipped with integrated functions such as communication and remote sensing can meet a wide range of application needs, thereby stimulating the rapid growth in demand for satellite services.

Technological Advancements. With the continual advances in satellite technology, the new generation of satellite provides transmission speeds comparable to or even exceeding those of terrestrial broadband. Adopting more efficient transmission technology and advanced satellites can meet users' requirements for high-bandwidth applications such as high-speed data downloads and livestreaming video playback. Meanwhile, as the computing capabilities of individual satellites continue to advance, the aggregate computing capacity of space computing infrastructure is expected to increase accordingly. These improvements have increased demand for satellite services and established these as a crucial infrastructure, leading to a broadening range of applications and growing market demand.

Development Opportunities and Challenges for the Satellite Industry in China

Development of Space Computing. Driven by the increasing demand for on-orbit computing, the development of space computing is accelerating. The continuous expansion in satellite deployments and the exponential growth in space-generated data are driving a surge in demand for space computing. Meanwhile, as the demand for AI-driven computing intensifies, ground-based computing architectures are increasingly constrained by bandwidth limitations, energy efficiency considerations and the latency associated with transmitting large volumes of data from space to ground, further reinforcing the strategic importance of space computing. The global commercial space industry is rapidly entering the era of space-based computing, as leading players increasingly prioritize the establishment of space computing networks. A global leading commercial aerospace company has recently announced plans to develop a space computing network with the deployment of up to one million satellites dedicated to space-based computing and AI workloads. Moreover, a global leading AI computing power provider has announced plans to develop a large-scale on-orbit data center consisting of 88,000 satellites, with a targeted capacity of up to 5 gigawatts, aimed at supporting the development of space computing infrastructure. Therefore, AI computing satellites are expected to become an important development trend in the satellite industry. With the rapid advancement of space computing infrastructure, commercial aerospace companies worldwide will increase their investment in the research and development of AI satellites, especially AI computing satellites.

Space—Air—Ground—Sea Integrated Network. In 2020, the NDRC included satellite Internet as a "new infrastructure" for the first time as a category of communication network infrastructure. The accelerated deployment of space infrastructure will enable multidimensional communication interconnectivity across space-based, ground-based, aerial and maritime platforms. This will provide users with comprehensive information services across all space and time domains, facilitating the accurate acquisition, rapid processing and efficient transmission of information. The integrated space—air—ground—sea network will also empower the satellite industry to offer customers broader, more intelligent and more efficient information services.

The Continual Expansion of Application Scenarios. With advances in satellite production technology and the integration of satellite functions, the application scenarios for satellite are expanding into a diverse range of uses, including smart cities, oceanic communication, emergency rescue services, culture, tourism and gaming. For example, in remote areas such as oceans, deserts and mountainous regions, individuals can enjoy high-quality data services through direct satellite connections on their mobile phones; in the event of natural disasters, rescue personnel can obtain critical information and act more swiftly; and in urban mobility, air traffic management and autonomous driving can enhance both the efficiency and safety of transportation.

Limitations on Rocket Technology and Payload Capacity. In the future, as the satellite industry gradually expands, there will be a substantial increase in the demand for satellite launches. The rocket technology and payload capacity will become a critical factor in determining whether large-scale satellite constellations can be successfully deployed.

Entry Barriers of the Satellite Industry in China

Qualification Barriers. The satellite industry, which is one of the key nationally regulated industries, is subject to the "Catalog of Investment Projects Subject to Government Confirmation (2016 Edition) (《政府核准的投資專案目錄(2016年本)》)" issued by the State Council. In China, satellite production and the establishment of satellite ground stations by private companies require NDRC approval. Additionally, new market participants must secure satellite-related qualifications, including radio frequency use permits and radio station license, making it challenging for new entrants to swiftly navigate regulatory requirements and secure the necessary approvals.

Technical Barriers. The satellite industry is technology intensive, involving multiple disciplines such as communications, aerospace, physics and electronic information. The widespread applications of new technologies such as AI, edge computing, new materials and new energy in the satellite industry, present a significant challenge for new entrants to quickly master the industry's core technologies.

Resource Barriers. Satellite frequency spectrum and orbit resources are limited. The global satellite frequency spectrum and orbit resources are managed by the International Telecommunication Union ("ITU"). According to the ITU, the allocation of satellite frequency spectrum and orbit resources primarily follows a "First Come, First Served" mechanism. The companies are required to submit satellite network information to the ITU through the telecommunications authorities of the member countries. In China, the Ministry of Industry and Information Technology (MIIT) is responsible for the domestic coordination of satellite frequency spectrum and orbit resources and submits satellite network information to the ITU. The MIIT conducts domestic coordination of satellite frequency and orbit resources based on the "Provisions on the Management of Satellite Network Filing, Coordination and Registration (Trial Implementation)" (《衛星網絡申報協調與登記維護管理辦法(試行)》), which is applicable for the allocation of satellite frequency spectrum and orbit resources for both state-owned enterprises ("SOEs") and private companies. As of December 31, 2025, there were approximately 11,977 LEO satellites in orbit globally, with the utilisation rate of LEO orbit resources reaching approximately 20.0%. The satellite frequency spectrum used by commercial LEO satellites can be categorized into L band, S band, C band, X band, Ku band, Ka band, Q band and Terahertz by different frequency ranges. The frequency ranges that have already been occupied cannot be used by other commercial

satellite companies. Therefore, established companies often secure necessary resources early, whereas new entrants face difficulties in acquiring these resources which require a long time period. The following table sets forth the occupation status of commercial LEO satellite frequency spectrum resources:

Frequency Band	Frequency Range	Occupation Status
L Band	1 to 2 GHz	Resources are almost fully allocated, mainly used for terrestrial mobile communications, satellite positioning, satellite mobile communications, and satellite telemetry and control services.
S Band	2 to 4 GHz	Resources are almost fully allocated, mainly used for radar, satellite positioning, terrestrial mobile, satellite mobile communications, and satellite telemetry and control services.
C Band	4 to 8 GHz	Almost saturated, mainly used for radar, terrestrial mobile, and satellite communications services.
X Band	8 to 12 GHz	Saturated, mainly used for satellite communications, satellite positioning, and satellite television broadcasting services.
Ku Band	12 to 18 GHz	Saturated, mainly used for satellite communications and satellite television broadcasting services.
Ka Band	26 to 40 GHz	Currently being heavily used, mainly used for satellite communications, terrestrial mobile, and inter-satellite communications services.
Q Band	40 to 52 GHz	Beginning to enter the commercial satellite communications sector.
Terahertz	0.1 to 10 THz	Under development.

Source: Frost & Sullivan Report

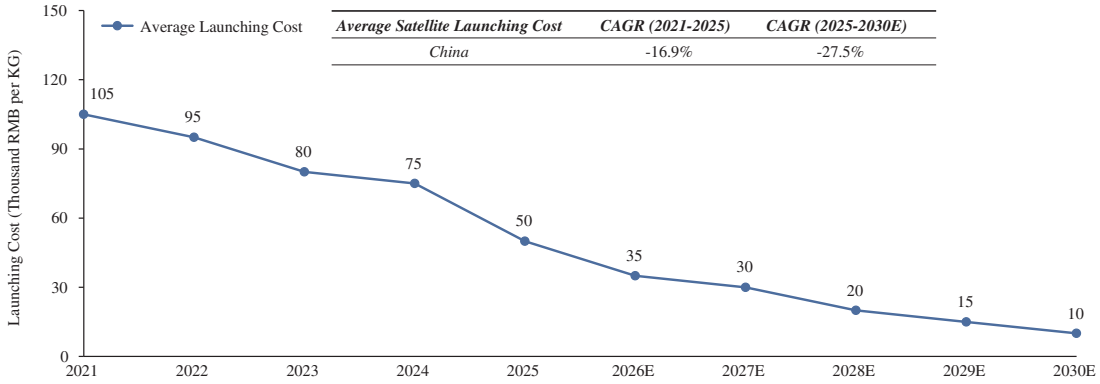
Capital Barriers. The satellite industry demands significant capital for developing, producing, launching and operating satellites, and constructing necessary infrastructure for comprehensive satellite-based solutions. Additionally, companies requires significant investment in technology research and development, and the establishment of talent reserves to sustain technological leadership and market competitiveness.

Talent Barriers. Technical R&D personnel are the core assets of commercial aerospace companies. However, talents in the commercial aerospace industry are scarce, whilst the training period for these talents is lengthy. The satellite industry not only requires technical talent to have solid professional knowledge and skills but also requires them to continually learn and adapt to the development of new technologies to meet the evolving needs of the industry. Therefore, the training and introduction of technical talent is an important entry barrier.

Average Satellite Launch Cost in China

Mainly due to the continuous advancements in rocket technologies, such as the improvement of payload capacity and the development of reusable technologies, and the intensified competition in the rocket industry with the growing number of private rocket companies, the satellite launch cost in China has been decreasing. At present, launch costs offered by leading international commercial launch service providers have declined significantly, with certain launch services priced at below USD2,000 per kg. As China continues to advance its rocket technologies, domestic launch costs are expected to gradually converge with those of leading international players. Due to differences in rocket technology pathways, ownership structures (including state-backed and private-sector players) and resource accessibility, launch service pricing remains relatively dispersed across providers. In 2028, the lowest launch cost in China is expected to reach approximately RMB10,000 per kg.

Average Satellite Launch Cost (China), 2021-2030E



Average Satellite Launching Cost	*CAGR (2021-2025)*	*CAGR (2025-2030E)*
China	-16.9%	-27.5%

Source: Frost & Sullivan Report

THE SATELLITE PRODUCTION INDUSTRY IN CHINA

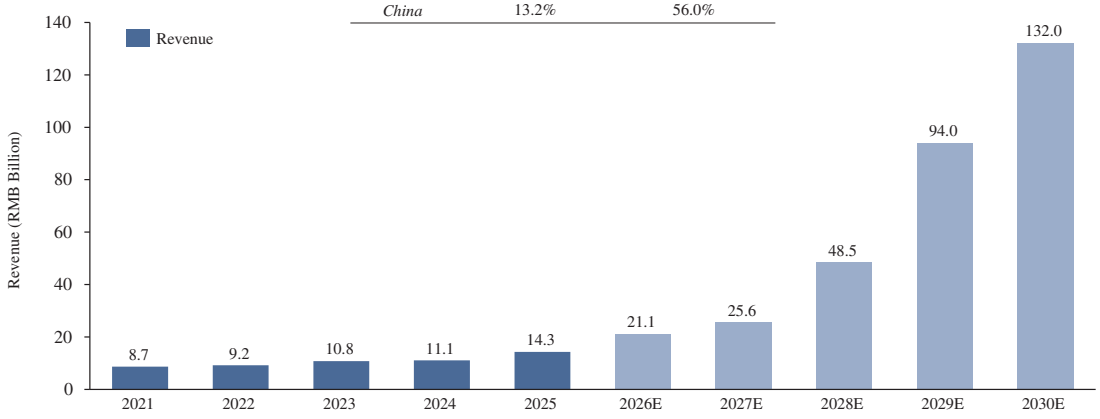
Overview

Satellite production involves the R&D and production of satellite platforms and payloads, along with the assembly of satellite platforms and payloads into a complete satellite. By final product, satellite production can be divided into four categories: the production of (i) whole satellites, (ii) satellite platforms, (iii) satellite payloads, and (iv) specific components. The production of satellite platforms involves constructing systems for telemetry and control, power supply, structural integrity, propulsion, data management, thermal regulation, and attitude control. Payload production includes the production of communication payload, navigation payload, remote sensing payload and AI payload tailored to the satellite's intended function.

Market Size of the Satellite Production Industry in China

Propelled by the acceleration of space infrastructure construction and technological advances, the market size of the satellite production industry in China in terms of revenue has maintained steady growth in recent years.

Total Revenue of the Satellite Production Industry in China, 2021-2030E



Revenue	*CAGR (2021-2025)*	*CAGR (2025-2030E)*
China	13.2%	56.0%

Source: Satellite Industry Association, Frost & Sullivan Report

Development Opportunities of the Satellite Production Industry in China

Advancements in Satellite Production Technologies Promote Satellite Mass Production. With the emergence and application of advanced production technologies such as automated production lines, intelligent production and additive manufacturing, the efficiency of satellite production will be significantly improved, the production costs will be further reduced, and the production cycles will be further shortened, thereby enhancing the satellite producers' profitability and driving the rapid development of the satellite industry.

Development of Miniaturized and Low-cost Satellites. With the accelerated deployment of satellite constellations, the industry is increasingly focusing on the production of small and microsatellites in LEO due to their shorter production times, cost effectiveness and scalability. Additionally, advances in technology and supply chain optimization are reducing satellite production costs. The development of miniaturized and low-cost satellites support rapid constellation development and boosts producers' profits, fueling further technological advancements and the growth of AI space computing satellite constellations.

Integration of Satellite Functions Drives Application Demand. In order to address the expanding spectrum of application demands, offer more comprehensive services and increase revenue opportunities in satellite application market, conventional satellite functions are expected to be further integrated and enhanced with innovative technologies such as AI. For instance, AI satellites, which integrate advanced AI algorithms, provide AI-driven data analysis and computing services for both spacecraft and ground-based applications, offering more diversified services in a more efficient way, thereby promoting the innovative development of satellite production in diversified application scenarios.

Build-out of Space AI Infrastructures Drives Upgrades in AI Computing Satellites. Policy tailwinds from China's strategies for digital economy and commercial aerospace development are supporting increased investment and capability enhancement across the satellite industry value chain, including emerging space AI infrastructures. New generations of AI computing satellites, integrating high-performance processors and onboard algorithms, enable in-orbit real-time processing for selected missions, and are accelerating a shift from satellites as data-collection terminals toward in-orbit computing nodes. By preprocessing raw data on orbit, such systems can reduce the data volume that must be downlinked to improve efficiency, and redistribute processing workloads between space and ground segments. As LEO satellite constellation deployments scale and inter-satellite links mature, space AI infrastructures are becoming increasingly viable, accelerating product upgrades of AI computing satellites and potentially enhancing China's competitiveness in global commercial space sector.

THE SATELLITE OPERATION AND APPLICATION INDUSTRY IN CHINA

Overview

The satellite operation and application industry leverages satellites, ground stations and data processing centers to acquire, transmit and process a variety of satellite data and information, providing customers with a wide range of satellite-based solutions. The satellite operations and applications include satellite-based solutions and ground equipment production. Satellite-based solutions refer to the provision of diversified satellite data and resources such as communication services, remote sensing images, navigation data and AI computing power, as well as the provision of customized solutions that utilize satellite data and resources and other advanced technologies such as AI computing capabilities. Ground equipment production refers to the production of a variety of ground equipment that ensures the reception and transmission of satellite data, providing ground-based infrastructure for satellite-based solutions.

Satellite-based remote sensing solutions, as one of the primary satellite-based solutions, encompass the utilization of satellite data and its derivatives, including sales, software development and service provision. The process involves data collection, management, processing and analysis to extract pertinent information for diverse sectors including agriculture, forestry, meteorology, oceanography, resource management, emergency response and smart cities. These applications are valued for their broad scope, varied sources, regularity, detail and measurable data. They provide data for tracking environmental trends, aiding crop management, supporting urban development, predicting and assessing natural disasters, exploring natural resources and informing economic analyses for investors.

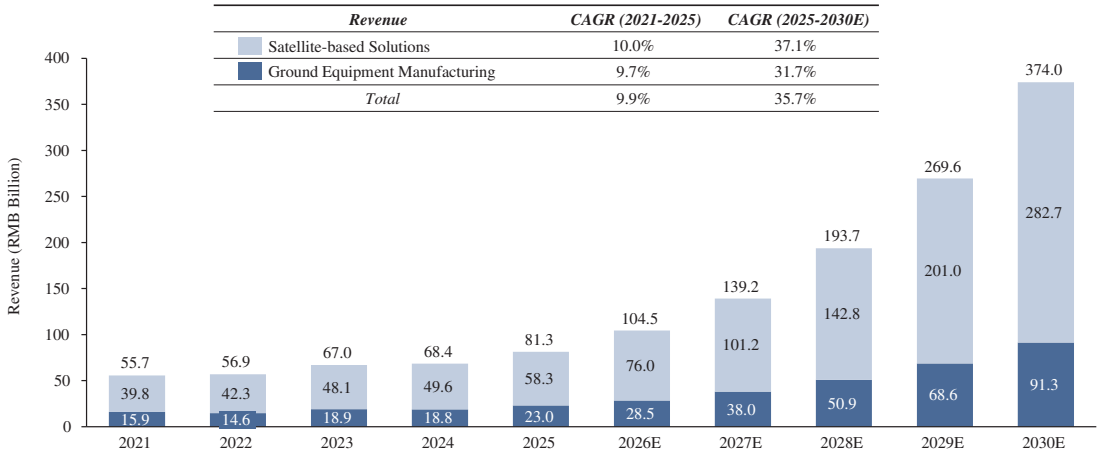
3D remote sensing technology is an advanced spatial data processing technique that can provide 3D spatial information of the Earth's surface. 2D (two-dimensional) raw images captured by satellites are highly reliable and rich in detail, and offer high clarity. When processed by AI algorithms, these images can be efficiently and economically converted into 3D images. Post-processed 3D remote sensing images can provide, multi-dimensional visualizations of surface features, transforming complex geographic information into intuitive and understandable digital models. 3D remote sensing images are widely applied in various fields such as digital city applications, culture, tourism and gaming, among others, providing critical data support for decision-makers. Further, 3D remote sensing images can be integrated into various advanced satellite-based remote sensing solutions, enhancing their analytical capabilities and application values.

Compared to the generation of 3D remote sensing images through traditional methods, using satellite technology to generate 3D remote sensing data provides technical and cost benefits. From a technical perspective, satellites provide extensive geographic coverage and are equipped with high-resolution sensors and multi-spectral imaging capabilities, which enable the capture of more detailed and informative surface features and support the generation of 3D models. From a cost perspective, the use of satellite data can significantly reduce the cost of fieldwork, especially in remote or hazardous areas. For large-scale 3D modeling, the cost-effectiveness of satellite remote sensing data is significant. As the coverage area of satellite remote sensing increases, the cost of data acquisition per unit area decreases accordingly.

Market Size of the Satellite Operation and Application Industry in China

Propelled by the policy support, rapid development of the geographic information industry, technological innovation and application expansion, the market size of the satellite operation and application industry in China in terms of revenue has witnesses continual increase.

Total Revenue of Satellite Operation and Application Industry (China), 2021-2030E



Source: Satellite Industry Association, Frost & Sullivan Report

Development Opportunities for the Satellite Operation and Application Industry in China

AI Empowering Remote Sensing Data Processing. AI plays a significant role in the precise processing of remote sensing data, spatiotemporal analysis and feature classification and recognition. It can effectively improve the efficiency of processing satellite data, reduce the cost of data processing, and achieve automation and intelligentization of satellite data processing, thereby enhancing operational efficiency for businesses. For example, in-orbit AI super-resolution algorithms allow satellites to process images on-board, achieving clarity and detail enhancement in space, which significantly improves image quality and application value while enhancing processing efficiency. Additionally, in response to various customers' needs, advanced AI algorithms are employed for additional analysis of satellite data to process, analyze and refine the images and data for specific application scenarios in the data processing center on the ground, which can enable multi-temporal analysis, precise object detection and feature extraction, thereby producing tailored insights for diverse industries.

Digital Twin Technology. Based on remote sensing data, 3D modelling and digital twin technology can be used to rapidly construct highly realistic urban scenes at different scales. This provides technical support for the refined management of natural resources and the precision governance of cities and can be widely applied in natural resources, smart cities, power line inspections, construction monitoring, emergency command and cultural tourism. By presenting various data sources such as geographic information, remote sensing data and surface feature modeling in a visual format, the application of digital twin technology can not only enhance the customers' decision-making capabilities but also significantly boost operational efficiency. In the future, the continuous advancement of digital twin technology will play an increasingly important role in the satellite-based remote sensing solution industry.

Satellite-Based Computing Solutions. With the growing demand for computing power driven by AI development, satellite applications are gradually evolving towards computing infrastructure. Satellite-based computing solutions, including space-based data centers, in-orbit computing nodes and related services, are emerging as a key development direction. By deploying computing resources in orbit, space computing is expected to complement terrestrial data centers, particularly in applications requiring wide-area coverage and cross-regional coordination. Meanwhile, declining launch costs and satellite platform standardization are enhancing the economic viability of space computing infrastructure. Overall, satellite-based computing solutions are expected to support the transition towards an integrated space-ground distributed computing architecture and become an important component of future digital infrastructure.

SOURCE OF INDUSTRY INFORMATION

We engaged Frost & Sullivan, an independent market research consultant, to conduct an analysis of, and to prepare a report, the satellite industry, which was commissioned by us for a fee of RMB820,000. Frost & Sullivan prepared its report based on data released by government institutions and non-government organizations and its primary research.

Forecasts and assumptions included in the Frost & Sullivan Report are inherently uncertain because of events or combinations of events that cannot be reasonably foreseen, including, without limitation, the actions of government, individuals, third parties and competitors. Specific factors that could cause actual results to differ materially include, among other things, risks inherent in the satellite industry, financing risks, labor risks, supply risks, regulatory risks and environmental concerns.

Except as otherwise noted, all data and forecasts contained in this section are derived from the Frost & Sullivan Report. Our Directors confirm that after taking reasonable care, there is no material adverse change in the overall market information since the date of the Frost & Sullivan Report that would materially qualify, contradict, or have an impact on such information.