Global Technology: Accelerating LEO satellite launches; installed base to reach 24k/ 305k units by 2028E/31E; blue sky at 396k by 2031E

Since launching our global Low Earth Orbit (LEO) satellite industry estimates in Feb 2025, we have seen accelerated LEO satellite launches in 2025, with LEO satellite installed base at 10k units by 2025 (vs. our previous estimate of 9.7k). We expect this growth momentum to be sustained, supporting a global LEO satellite installed base of **24k/305k units by 2028E/31E in our updated base case**. Global satellite operators (e.g., Amazon LEO, Guowang, etc.) are actively updating their satellite launch plans, and expanding satellite applications, including in-flight communication and space data centers, to support commercialization. In this report, we present a **blue sky scenario** with an installed base reaching **27k/ 396k units by 2028E/31E**, assuming 200k satellite applications made by Chinese vendors (news link) which have seen intensified competition to secure LEO capacity. **Read more:** Space X Initiation.

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Global LEO satellite installed base: 24k/305k units by 2028E/31E

Following the acceleration in LEO satellite launches in 2025, we expect to see continuous growth of satellite installed base from 10k units in 2025 to 13k/17k units by 2026/27E (vs. our last estimate of 12k/15k units by 2026E/27E). We then project the installed base to reach 24k/305k units by 2028E/31E (vs. our previous estimate of 19k/42k units by 2028E/31E), as more operators start or accelerate their launches to secure ideal altitudes in LEO orbit, and as satellite applications expand for commercial use (e.g., space data centers, in-flight communication, emergency communication, autonomous surface vehicles, smart marine ranching, unmanned industrial robots, etc.).

Global satellite operators have updated their satellite plans for LEO orbit, and increased target volumes. Among operators' filings, Amazon LEO received approval from the US Federal Communications Commission (FCC) to launch 4,500 additional LEO satellites (link) in February 2026. Chinese satellite operators submitted applications to the International Telecommunication Union (ITU) to seek approval for 200k+ medium- and low- Earth orbit satellites (link).

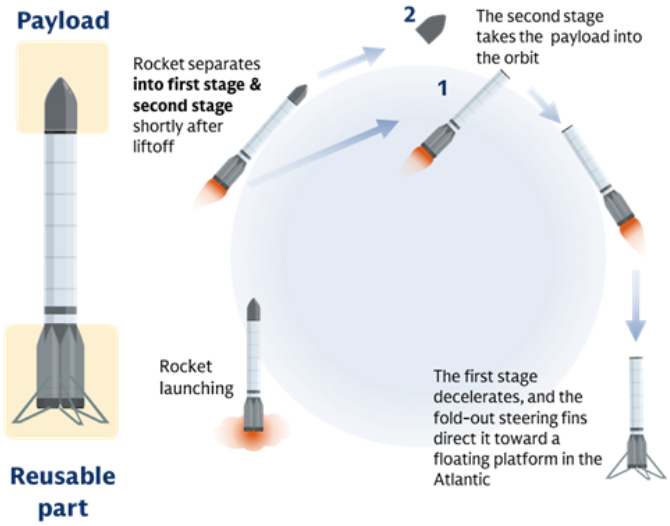
Exhibit 1: We expect the LEO satellite installed base to reach 24k/305k units by 2028E/31E

	2025	2026E	2027E	2028E	2029E	2030E	2031E
Satellite - new estimate							
LEO Satellite installed base (units)	**9,982**	**13,088**	**17,292**	**23,796**	**90,042**	**164,244**	**305,293**
YoY%		*31%*	*32%*	*38%*	*278%*	*82%*	*86%*
Installed base by application (units)	**9,982**	**13,088**	**17,292**	**23,796**	**90,042**	**164,244**	**305,293**
Satellite internet	9,982	13,088	17,292	23,796	33,219	46,697	63,807
Space data center	-	-	-	-	56,823	117,547	241,486
Others	-	-	-	-	-	-	-
Mix by application	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Satellite internet	100%	100%	100%	100%	37%	28%	21%
Space data center	0%	0%	0%	0%	63%	72%	79%
Others	0%	0%	0%	0%	0%	0%	0%
Installed base by vendor region (units)	**9,982**	**13,088**	**17,292**	**23,796**	**90,042**	**164,244**	**305,293**
US	9,077	11,833	15,581	21,419	83,748	150,651	281,050
China	253	603	1,103	1,853	5,780	13,100	23,750
EU	652	652	608	524	514	493	493
Mix by vendor region	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
US	91%	90%	90%	90%	93%	92%	92%
China	3%	5%	6%	8%	6%	8%	8%
EU	7%	5%	4%	2%	1%	0%	0%
New vs. Old	**3%**	**7%**	**16%**	**25%**	**252%**	**399%**	**634%**

Source: Company data, Goldman Sachs Global Investment Research

Rockets are the key to improving launch pace. (1) Accelerating launch frequency can be effective for the faster growth of satellite launches: in 2025, leading LEO satellite operator Starlink launched satellites every three days; in April 2026, leading rocket supplier SpaceX managed to launch two rockets in 19 hours, implying that there is still room to improve efficiency. (2) Improving rocket capacity: Current mainstream reusable rockets can carry a 17,500 kg payload to LEO, while the next-generation rockets can carry up to 100-150 tonnes. (3) Reusable technology is a milestone: For Chinese LEO satellites, we expect a more rapid ramp-up after the successful development of their domestic reusable rockets.

Exhibit 2: Reusable rockets can quickly reduce launching costs



Source: Company data, Goldman Sachs Global Investment Research

Blue-sky scenario

We present a blue-sky scenario for the global LEO satellite installed base, which sees the installed base reaching **27k/396k units by 2028E/31E** (vs. our base case of 24k/ 305k units by 2028E/31E), considering the potential for better-than-expected launch capacity of rockets, faster-than-expected monetization of satellite communications, the long-term goals of LEO satellite operators, and the potential upside from space data centers.

In our blue sky scenario, the major upside comes from China LEO satellites, which we do not include in our base case. While technological feasibility remains to be verified, we see strong potential for space data centers given their unlimited access to low-cost solar power supply and their edge-computing capacity, which can handle satellite data directly. Our blue sky scenario is based on the assumption that the 200K LEO constellation plan submitted by Chinese vendors will be achieved in the long-term to reflect the potential for faster commercialization.

Exhibit 3: Scenario analysis: Our blue-sky scenarios see the global LEO installed base reaching 27k/396k units by 2028E/31E

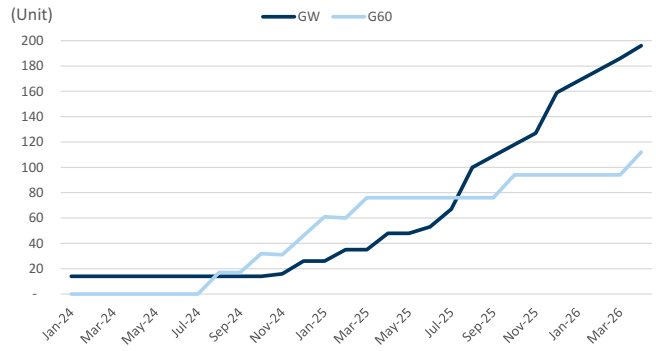
	2025	2026E	2027E	2028E	2029E	2030E	2031E
Satellite - Bluesky							
Blue sky scenario - LEO installed base (units)							
Total	**9,996**	**13,348**	**18,226**	**26,798**	**102,461**	**203,018**	**395,624**
YoY%		*34%*	*37%*	*47%*	*282%*	*98%*	*95%*
Installed base by application (units)	**9,996**	**13,348**	**18,226**	**26,798**	**102,461**	**203,018**	**395,624**
Satellite internet	9,993	13,334	18,195	26,624	40,548	61,874	113,204
Space data center	-	2	3	118	61,823	141,013	282,244
Others	3	12	28	55	90	130	176
Mix by application	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Satellite internet	100%	100%	100%	99%	40%	30%	29%
Space data center	0%	0%	0%	0%	60%	69%	71%
Others	0%	0%	0%	0%	0%	0%	0%
Installed base by vendor region (units)	**9,996**	**13,348**	**18,226**	**26,798**	**102,461**	**203,018**	**395,624**
US	9,078	11,835	15,584	21,537	85,733	156,117	293,808
China	266	861	2,034	4,736	16,183	46,315	101,148
EU	652	652	608	524	545	586	668
Mix by vendor region	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
US	91%	89%	86%	80%	84%	77%	74%
China	3%	6%	11%	18%	16%	23%	26%
EU	7%	5%	3%	2%	1%	0%	0%
Blue sky scenario vs. Base case	**0%**	**2%**	**5%**	**13%**	**14%**	**24%**	**30%**

Source: Company data, Goldman Sachs Global Investment Research

China's progress

Accelerating installed base: We expect LEO satellites operated by Chinese vendors to achieve an installed base of **1.9k by 2028E and 24k by 2031E** in our base case. In our blue sky scenario, the installed base reaches 101k by 2031E. By end-2025, Chinese vendors were operating 253 units of satellites, marking a deployment ramp-up.

Exhibit 4: Operating satellites of GW and G60 (Jan-24 to Apr-26 Actual)



Data as of April 2026

Source: Company data

Leading vendors have already laid out deployment plans: Key Chinese LEO constellations include **GW (Guowang), G60 (or SpaceSail) and Honghu**, all of which are large-scale communication constellations that will launch over 10,000 satellites. The **GW constellation** submitted plans for 12,992 satellites to the ITU in 2020 (per Xinhuanet, link), of which 10% or 1,299 units will need to be launched by 2029. **G60** has planned for 15,000 units of satellites, with the goal of reaching 1,296 units by end-2027 and 15,000 units by 2030 (per Xinhuanet, link). **Honghu** also submitted a plan for 10,000 units of LEO satellites to the ITU in 2024 (per Sina, link), implying that 1,000 satellites need to be in operation by end-2033. Apart from these plans, Chinese satellite operators collectively submitted applications for 200k satellites to the ITU by end-2025 (link), which we view as a strategic move to secure spectrum and orbit resources.

Rockets in fast development: Chinese LEO operators now mainly use LM-6A and LM-12 rockets by China Aerospace Science and Technology Corporation (CASC), which are non-reusable. However, development of reusable rockets is accelerating, with more scheduled test flights in 2026. In February 2026, the LM-10 by CASC successfully achieved a first-stage soft-landing splashdown in the sea (link). The Zhuque-3 rocket by LandSpace achieved partial success in a test flight in December 2025, and another recovery test flight will be conducted in 2Q26 (per CCTV, link). The Hyperbola-3 reusable rocket by i-Space will conduct its first launch by end-2026 (per hket, link). The PALLAS-1 reusable rocket by Galactic Energy will also conduct its first launch in 2026 (per futurephecda.com, link).

Supply chain snapshot

Global satellite supply chain

THE ECOSYSTEM OF SATELLITES

Operators

LEO Satellite Internet

SpaceX/ Starlink ■
Eutelsat ■
Amazon ■
Iridium
China Satcom
GalaxySpace
Telesat
Globalstar
Hongqing Tech
Siddus Space
MEASAT
JSAT

GEO Satellite Internet

VIASAT
China Satcom
Telesat
JSAT
MEASAT

Satellite components

RF & microwave components

UMT ■
Win Semi ■
Great Microwave
ChengChang
Aerospace Huanyu
Yaguang
Jushri
Tongyu ■
NEC ■
C&Q
Filtronic
Apollo Microwaves
Tong Hsing Electronic
Guobo Electronics
Rapidtek

Power supply

TSEC
ChiconyPower

Cables/ Connectors

Hon Hai ■

PCB & CCL

Tong Hsing
Parpro
Compeq
Unitech PCB
Elite material ■

Semiconductors

Chengchang Tech
Great Microwave

Structural parts

Aerospace Huanyu

Laser comm.

China Aerospace Times Electronics

Satellite manufacturing

Platform and subsystems

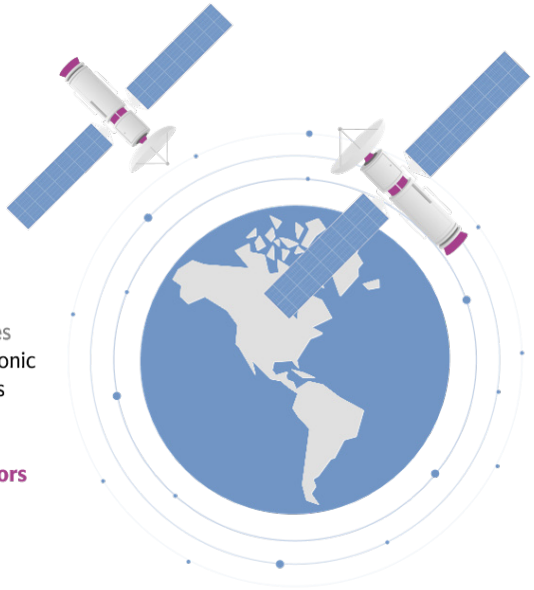
Hon Hai ■
China Aerospace
ChangGuang
GalaxySpace
Zero Lab
MinoSpace

Design/ Assembly/ Testing

Hon Hai ■
Boeing ■
Rapitek
China Spacesat
Hugong
SHGS
Astranis
Guoxing Aerospace

Satellite launching

Rocket Lab
BlueOrigin
Landspace
GalacticEnergy
Orien Space
Relativity Space
CAS Space
HyImpulse
Arianespace
Orbex
Virgin Orbit
i-Space
Ariane Group
PLD Space



Sensing service

LEO/MEO/GEO

Piesat
Aerospace Microchips
Gepvos
Zhongke Remote Sensing
Elipspace
Kongberg Gruppen ASA
Maxar
Airbus ■
Planet Labs ■
Spire Global
Pixxel

Location service

MEO navigation

Trimble
Hexagon
Topcon
Haige
Huace ■
Comnav

MEO locating

HiTarget

Ground stations

Facility & System solution

China Satcom
Kratos ■
Thales Group

Communication equipment

Genew
China Spacesat
Haige
Jushri
MTI
Kinpo
Hon Hai ■

Antenna

Aerospace Huanyu
Tongyu ■

User terminals

Terminal and service

BDStar
Fibocom
Hytera
Auden
APT Satellite
Nextplat
ZTE ■
MTI

ODM

WNC ■
Hon Hai ■
Compal ■
Jushri

Antenna

M&S electronics
Innolux
Sunway
Aerospace Huanyu
Tongyu ■
Rapidtek

Baseband

Hwa create
Cygnusem

Memory

Micron ■

Analog

STMicro ■

MOSFETs

Infineon ■

RFFE

Maxscend ■
Vanchip ■
Sanan

GS covered Privately owned
■ **BUY** ■ **SELL** ■ **Neutral**

We note that the list of companies across the ecosystem we present above is not exhaustive, and the universe of companies involved is likely to be larger than what is presented.

Hon Hai is on the Asia Conviction List

Source: Company data, Goldman Sachs Global Investment Research

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