The information contained in this section, unless otherwise indicated, has been derived from various official government publications and other publications and the market research report prepared by Frost & Sullivan which we commissioned (the "Frost & Sullivan Report"). We engaged Frost & Sullivan for preparing the Frost & Sullivan Report in respect of the **[REDACTED]**. *We have taken reasonable care in extracting and reproducing such information. We have no reason to believe that such information is false or misleading in any material respect or that any fact has been omitted that would render such information false or misleading in any material respect. We have not, nor have any of the Sole Sponsor,* **[REDACTED]**, *the* **[REDACTED]**, *the* **[REDACTED]**, *the* **[REDACTED]**, *the* **[REDACTED]**, *any of the* **[REDACTED]**, *or any of their respective directors, officers or representatives or any other parties involved in the* **[REDACTED]**, *independently verified the information in the various official government publications nor give any representation as to the accuracy or completeness of such information. As of the Latest Practicable Date, our Directors confirm that, after taking reasonable care, there has been no material adverse change in the market information presented in this section.*

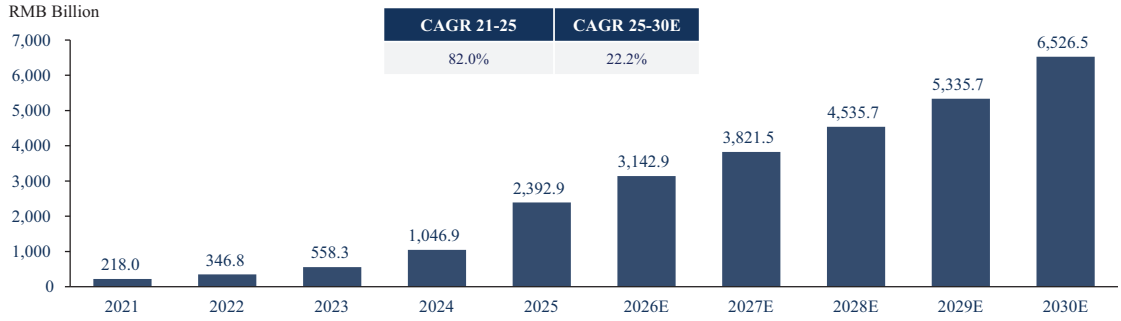
OUTLOOK OF OPTICAL INTERCONNECT INDUSTRY IN THE AI ERA

The Surge in AI Industry Drives Rapid Growth in Optical Interconnect Industry

Optical interconnects use light waves and optical transceivers to enable efficient data transmission and exchange between devices, servers and computing clusters. Driven by the rapid development of the global AI industry and computing networks, optical interconnects have become an important technological pathway for high-speed, high-capacity and low-latency data transmission, providing critical support for data centers, cloud computing and next-generation digital infrastructure.

Demand for AI model training and inference has driven the expansion of computing clusters, large-scale AI computing centers and distributed computing systems. Global tech giants and cloud service providers continue to invest heavily in construction of AI infrastructure. Global AI infrastructure investment increased from RMB218.0 billion in 2021 to RMB2,392.9 billion in 2025, representing a CAGR of 82.0%. Due to the structural shift in computing demand toward inference and the continuous expansion of cloud-based AI services, this growth momentum is expected to continue. By 2030, global AI infrastructure investment is projected to further increase to RMB6,526.5 billion, with a CAGR of 22.2% from 2025 to 2030.

AI Infrastructure Investment, Global, 2021-2030E

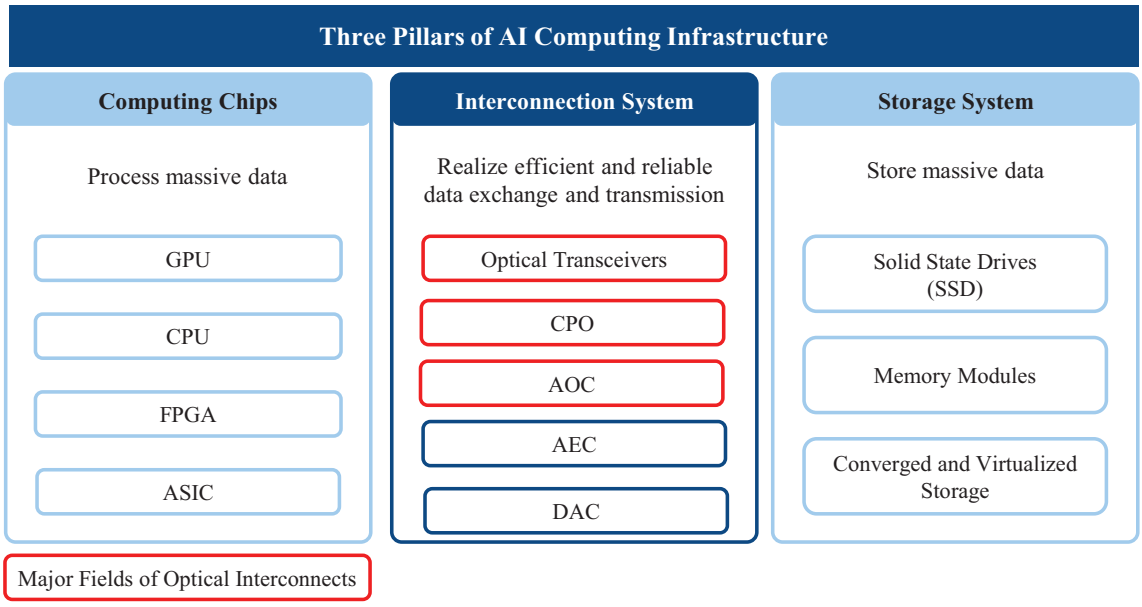


Source: Frost & Sullivan

Optical Interconnects Support the Continuous Evolution of AI Infrastructure

AI computing infrastructure, including AI computing clusters and data centers, forms the foundation for AI development. As AI models continue to grow in parameter scale, demand for data transmission among chips, server clusters and AIDC facilities has increased significantly. Compared with traditional electrical interconnects, optical interconnects provide higher bandwidth, lower latency and lower power consumption, and help AI infrastructure address bandwidth and power efficiency bottlenecks.

AI Computing Infrastructure

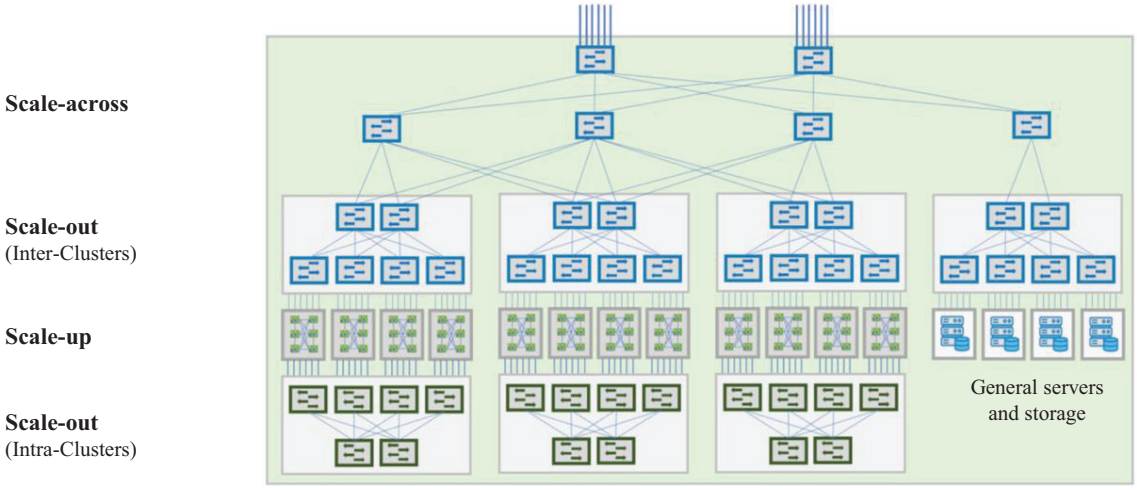


Source: Frost & Sullivan

At the data center network architecture level, optical interconnects have become the foundation for high-speed interconnection within and between data centers. They provide important support for the coordinated scheduling and global optimization of AI-driven distributed computing resources. AI workloads are driving the evolution of traditional network architectures toward greater intelligence and efficiency, imposing higher demands on network capabilities in terms of scale-out, scale-up, and scale-across:

- Scale-out relies on high-bandwidth, low-loss high-speed interconnection between computing nodes, requiring optical transceivers to support low latency, high port density, and per-channel data transmission rates of 100G and above.
- Scale-up focuses on high-speed data exchange at the chip and server levels, imposing stricter requirements on power consumption, latency, and integration of optical interconnects, driving technological evolution toward near-package optics (NPO) and co-packaged optics (CPO).
- Scale-across achieves optical interconnects through coherent optical transceivers and data center interconnect (DCI) systems featuring long-distance, high-bandwidth, and high-stability characteristics. This enables computing resource scheduling and collaborative training across multiple data centers, supports pooling of computing power resources, and drives the evolution of AI infrastructure from single-cluster architectures to distributed computing networks.

Three Paths for Optical Interconnects to Boost AI Computing Power



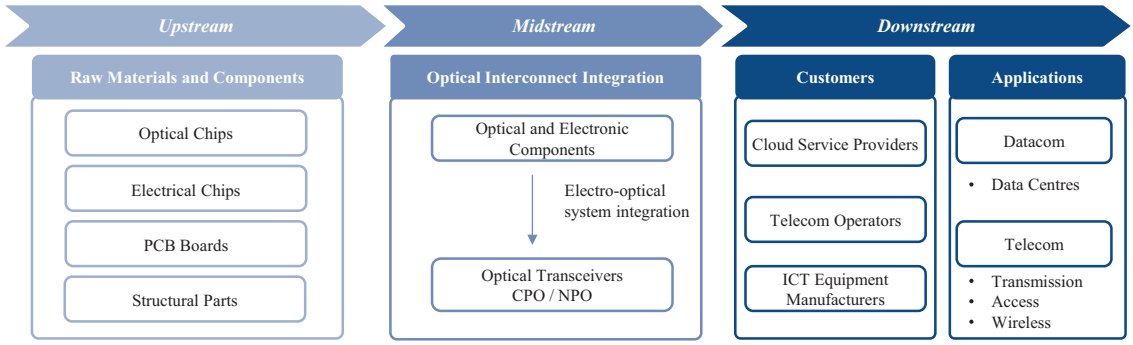
Source: Frost & Sullivan

ANALYSIS OF GLOBAL OPTICAL TRANSCEIVER INDUSTRY

Overview of Global Optical Transceiver Industry

Optical transceivers are core optical communication components that perform electro-optical/ optoelectronic signal conversion, mainly consisting of optical transmit components, optical receive components and functional circuits. The optical transceiver industry chain comprises three core segments: upstream material and component supply, midstream integrated manufacturing and downstream sales and applications. The upstream segment focuses on the supply of materials and components including core parts such as optical chips, electrical chips, printed circuit boards (PCBs) and structural components; the midstream segment undertakes the integration and manufacturing of optical transceivers and realizes high-efficiency data transmission through the integration of optical and electronic components; and downstream customers mainly include cloud service providers, telecommunication operators and information and communications technology (ICT) equipment manufacturers with products mainly applied to the datacom and telecom markets. Downstream demand for high performance and low cost continues to drive upgrades in midstream manufacturing processes and technological innovation in upstream chips.

Value Chain of Optical Transceiver Industry



Source: Frost & Sullivan

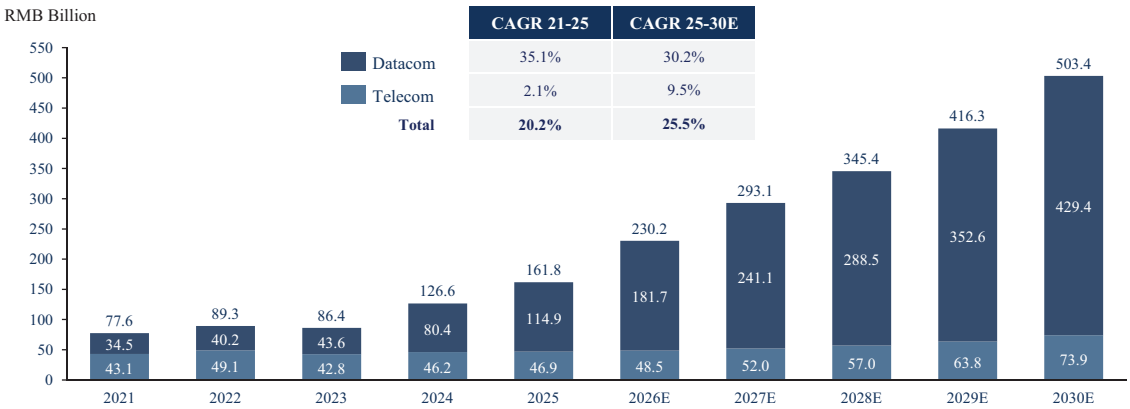
Market Size of Global Optical Transceiver Industry

From 2021 to 2025, global sales of optical transceivers increased from RMB77.6 billion to RMB161.8 billion, representing a CAGR of 20.2%. By 2030, global sales of optical transceivers are projected to further increase to RMB503.4 billion, with a CAGR of 25.5% from 2025 to 2030.

By application scenarios, the global optical transceiver market can be divided into datacom sector and telecom sector. Datacom optical transceivers are primarily used by cloud service providers, internet enterprises and large-scale data center operators, serving high-speed data exchange between AI clusters. Driven by the continuous expansion of global hyperscale data centers and the accelerated deployment of AI technologies, the datacom optical transceiver market reached RMB114.9 billion in 2025 in terms of revenue. It is projected to surge significantly to RMB429.4 billion by 2030, representing a CAGR of 30.2% from 2025 to 2030.

Telecom optical transceivers are mainly used by global telecommunication operators, and are primarily applied to the construction and upgrading of backbone networks, metropolitan area networks and mobile networks. The global market size of telecom optical transceivers reached approximately RMB46.9 billion in 2025 in terms of revenue, with a slight adjustment in 2023 mainly due to a temporary slowdown in telecom infrastructure investment. Driven by the deployment of 5G-Advanced/ 6G networks and next-generation optical access technologies including 50G PON, the market is expected to recover. The market size of telecom optical transceivers is projected to grow to RMB73.9 billion by 2030, representing a CAGR of 9.5% from 2025 to 2030.

Market Size of Optical Transceiver (in Terms of Revenue, by Application Scenarios), Global, 2021-2030E



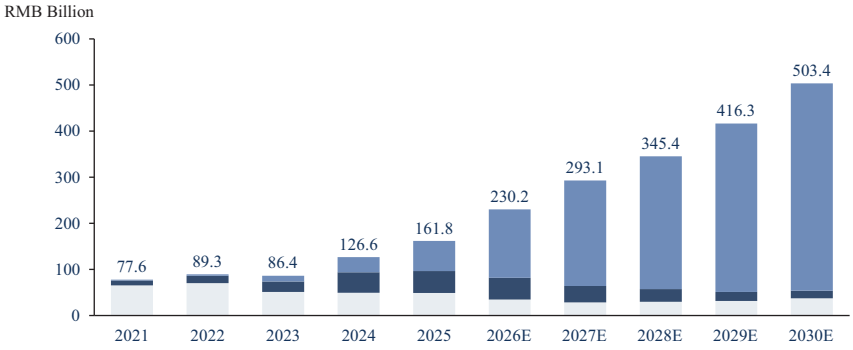
Source: Frost & Sullivan

The rapid expansion of global data centers and cloud computing is driving robust growth in the high-speed optical transceiver market. As highly commercialized advanced solutions, 400G optical transceivers achieved high CAGR of 44.7% from 2021 to 2025. 800G-and-above high-speed optical transceivers, representing the cutting-edge technology, experienced rapid growth with a CAGR of 161.5% from 2021 to 2025.

Looking ahead, the growth momentum of the 800G-and-above high-speed optical transceiver market will continue with an expected CAGR of 47.1% from 2025 to 2030. Key drivers include the increasing demand for greater bandwidth, higher energy efficiency, and more scalable connectivity in

data center and cloud computing networks. The accelerating development of AI, machine learning, and large-scale data processing technologies is further fueling demand for ultra-high-speed optical transceivers. As hyperscale data centers and cloud computing infrastructure continue to expand, 800G-and-above high-speed optical transceivers are expected to become mainstream.

Market Size of Optical Transceiver (in Terms of Revenue, by Transmission Rate), Global, 2021-2030E



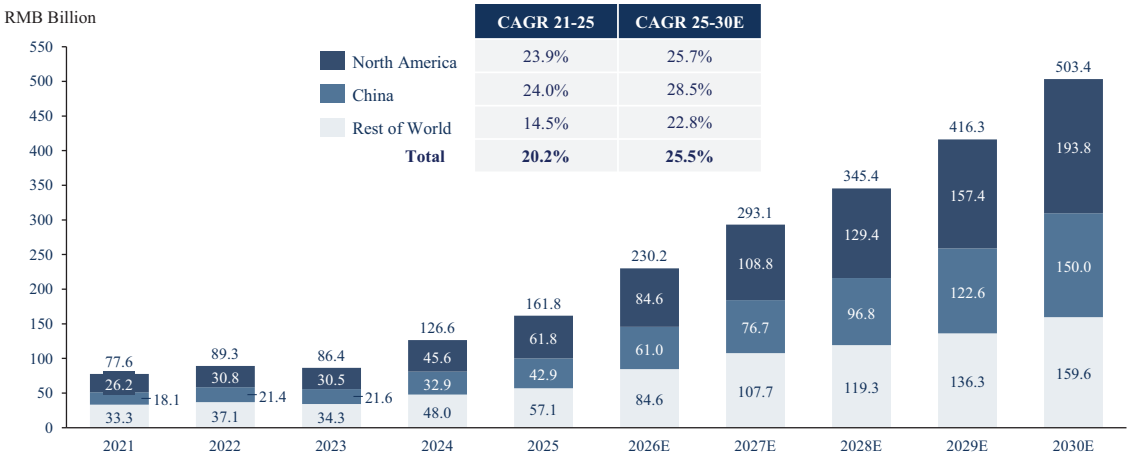
	2021	2022	2023	2024	2025	2026E	2027E	2028E	2029E	2030E	CAGR (21-25)	CAGR (25-30E)
800G and above	1.4	3.2	12.8	33.0	65.3	148.6	229.2	288.2	365.3	449.8	161.5%	47.1%
400G	10.9	16.0	22.4	44.1	47.6	46.7	35.6	27.5	19.4	16.1	44.7%	-19.5%
Below 400G	65.3	70.1	51.2	49.6	48.9	34.9	28.3	29.7	31.6	37.5	-7.0%	-5.2%
Total	**77.6**	**89.3**	**86.4**	**126.6**	**161.8**	**230.2**	**293.1**	**345.4**	**416.3**	**503.4**	**20.2%**	**25.5%**

Source: Frost & Sullivan

North America is currently the largest regional market for optical transceivers globally, accounting for 38.2% of the global market share in 2025. The core drivers of this leading position are sustained investments in hyperscale data centers by technology giants such as Amazon and Google, coupled with the exponential growth in bandwidth demand triggered by the generative AI boom. These factors have generated strong long-term demand for high-speed optical transceivers, sustaining North America's dominant position in the market. By 2030, the North American market of optical transceivers is projected to further increase to RMB193.8 billion, with a CAGR of 25.7% from 2025 to 2030.

China accounts for 25.6% of the global market share in 2025. It represents another fast-growing market, with a projected CAGR of 28.5% from 2025 to 2030. This robust growth is driven by the continued implementation of the latest policy initiatives, such as the construction of a nationwide integrated computing network and the deployment of AI computing center clusters, coupled with the boom in ultra-large-scale AI computing center construction fueled by the large-scale deployment of AI foundation models, collectively spurring an explosion in demand for high-speed optical transceivers.

Market Size of Optical Transceiver (in Terms of Revenue, by Region), Global, 2021-2030E



Source: Frost & Sullivan

Drivers and Development Trends of Global Optical Transceiver Industry

Surge in AI computing demand and data centers expansion consolidate the foundation of market demand. The surge in AI computing power is the core driver of the optical transceiver industry. AI models require high-speed interconnection among massive GPU clusters within data centers, directly creating urgent demand for optical transceivers with higher bandwidth and lower latency. As AI capital expenditure, model parameters, and application scenarios continue to expand, demand for high-speed, low-power-consumption optical transceivers will remain robust, with technology iteration cycles significantly shortened. The continued expansion of global data centers and cloud services also provides a solid demand base. Growth in cloud computing, edge computing, and IoT applications increases data traffic and accelerates network upgrades toward higher speed, higher density, and lower power consumption.

Technology architecture upgrades toward high integration and low power consumption. As transmission rates break through to 800G and beyond, traditional pluggable optical transceivers face bottlenecks such as high signal loss, high power consumption, and low integration density. This is driving the industry toward new architectures such as eXtra-dense Pluggable Optics (XPO), near-packaged optics (NPO), and co-packaged optics (CPO). As an upgraded high-density pluggable solution, XPO inherits the flexible front-panel pluggable design of traditional transceivers while effectively improving bandwidth density and power efficiency. By integrating optical engines in close proximity to switch application-specific integrated circuit (ASIC) chips, NPO and CPO shorten electrical trace lengths, reduce signal loss, significantly lower power consumption, and improve signal integrity, with NPO benefiting from high maintainability and feasibility of large-scale deployment. These approaches resolve the performance bottlenecks of next-generation AI clusters and hyperscale data centers, supporting the continued evolution of AI computing networks.

Increasing penetration of silicon photonics and TFLN technologies empowers industry technology upgrades and cost optimization. Increasing penetration of silicon photonics technology supports technology upgrades and cost optimization. Silicon photonics leverages mature CMOS processes and offers advantages in integration, power consumption and cost efficiency, making it an important technology route for high-speed optical transceivers. As production of high-speed optical transceivers expands, silicon photonics solutions are increasingly adopted in AI clusters and hyperscale

data centers. Their wider adoption is expected to support technology iteration, cost optimization and large-scale deployment in the optical transceiver industry. Thin-Film Lithium Niobate (TFLN) is also a critical advanced technology that is gradually applied to next-generation high-speed optical devices. It has achieved rapid breakthroughs in ultra-high-speed modulation and long-haul transmission scenarios, leveraging its characteristics of ultra-high bandwidth, low optical signal loss, and low driving voltage.

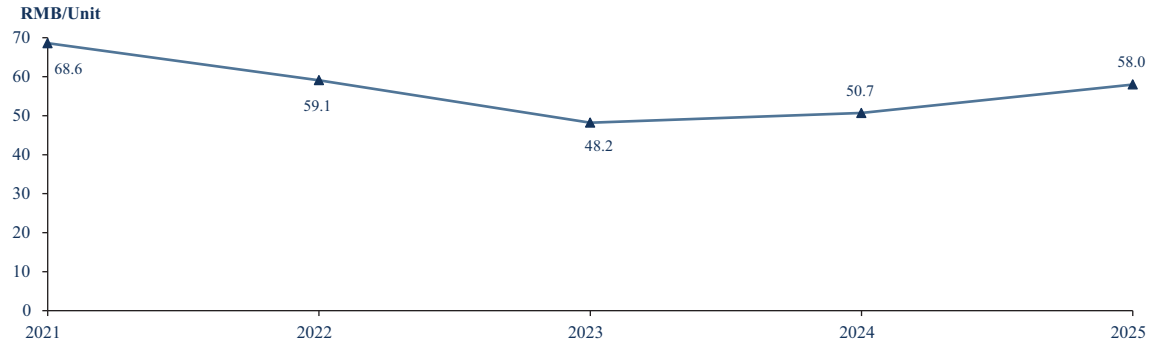
Favorable global digital infrastructure policies support a sustainable industry ecosystem. Major economies have introduced supportive policies for computing infrastructure, broadband networks and digital infrastructure. The U.S. Infrastructure Investment and Jobs Act supports high-performance computing, hyperscale data center buildouts and photonics manufacturing, while China has introduced policies relating to the national integrated computing network and AI computing centers. These policies support demand for data centers and high-speed optical communications, while creating a favorable environment for technological innovation and large-scale industry development.

Cost Analysis of Global Optical Transceiver Industry

Optical chips are a core raw material for optical transceivers and account for a significant portion of the cost structure. To meet the growing demand for higher transmission rates from downstream applications, optical chips continue to evolve toward higher data transmission rates and greater output power and remain as the dominant cost driver of optical transceivers.

There are significant price disparities between optical chips with different transmission speeds. Single-channel 100G EML optical chip's price has gradually declined from 2021 to 2023 due to gradual maturity of the technology and increased shipment volume. Since 2024, robust demand for high-speed optical transceivers has led to supply shortages of single-channel 100G EML optical chips, resulting in a rebound of its average price.

Average Price of Single-Channel 100G EML Optical Chip, Global, 2021-2025



Source: Frost & Sullivan

COMPETITIVE LANDSCAPE OF GLOBAL OPTICAL TRANSCEIVER INDUSTRY

Ranking of Global Optical Transceiver Suppliers

The global optical transceiver market reached RMB161.8 billion in 2025. Leading players maintain competitiveness by large-scale production and customer resources, while smaller players are leveraging technological capabilities to capture market opportunities and deliver robust growth momentum. Measured by optical transceiver revenue, our Company ranked 8th among Chinese optical transceiver suppliers, 11th among global optical transceiver suppliers in 2025, achieving optical transceiver revenue of RMB1.2 billion and representing a global market share of 0.8%.

Ranking of Chinese Optical Transceiver Suppliers (by Optical Transceiver Revenue), Global, 2025

Rank	Company Name	Optical Transceiver Revenue (RMB Billion)	Market Share	Optical Transceiver Revenue CAGR 23-25
1	Company A	37.5	23.1%	91.8%
2	Company B	24.8	15.3%	185.9%
3	Company C	10.5	6.5%	47.3%
4	Company D	6.5	4.0%	54.5%
5	Company E	6.1	3.8%	37.8%
6	Company F	4.8	2.9%	91.8%
7	Company G	1.7	1.0%	93.7%
8	**The Company**	**1.2**	**0.8%**	**43.1%**
	Others	68.8	42.5%	
	Total	161.8	100.0%	

Note:
1. *Including optical transceivers sold externally only.*
2. *Any discrepancies between totals and sums of amounts listed are due to rounding.*
3. *Company A is a company listed on the Shenzhen Stock Exchange and established in 2005, with a business focus on the development and manufacturing of optical transceivers.*
4. *Company B is a company listed on the Shenzhen Stock Exchange and established in 2008, which is a manufacturer of optical transceivers.*
5. *Company C is company listed on the Shenzhen Stock Exchange and established in 2001, which is a developer and manufacturer of optoelectronic components and modules, including optical transceivers.*
6. *Company D is a private company founded in 2003, specializing in the development and manufacturing of optical transceivers, optical chips, and optical network terminals. Company D is a subsidiary of a diversified business group focusing on smart home appliances and technology industries.*
7. *Company E is a public company listed on the Shenzhen Stock Exchange and founded in 1999. It develops and manufactures optical transceivers and other optoelectronic products.*
8. *Company F is a subsidiary of a listed company and was established in 2001. It mainly manufactures optical communication products and related components.*
9. *Company G is a supplier of ICT terminal equipment and high-speed optical transceivers founded in 2006 and listed on the Shanghai Stock Exchange.*

Source: Annual Reports of Listed Companies, Frost & Sullivan

Ranking of Optical Transceiver Suppliers (by Optical Transceiver Revenue), Global, 2025

Rank	Company Name	Optical Transceiver Revenue (RMB Billion)	Market Share	Optical Transceiver Revenue CAGR 23-25
1	Company A	37.5	23.1%	91.8%
2	Company B	24.8	15.3%	185.9%
3	Company H	20.5	12.7%	22.2%
4	Company C	10.5	6.5%	47.3%
5	Company D	6.5	4.0%	54.5%
6	Company E	6.1	3.8%	37.8%
7	Company F	4.8	2.9%	91.8%
8	Company I	3.3	2.0%	7.4%
9	Company G	1.7	1.0%	93.7%
10	Company J	1.3	0.8%	18.6%
11	**The Company**	**1.2**	**0.8%**	**43.1%**
	Others	43.7	27.0%	
	Total	161.8	100.0%	

Note:
1. *Including optical transceivers sold externally only.*
2. *Any discrepancies between totals and sums of amounts listed are due to rounding.*
3. *Company H is a company listed on the New York Stock Exchange and established in 1966, which is a vertically integrated manufacturing company that develops, manufactures, and markets lasers, transceivers, and other optical and optoelectronic devices, modules, and systems, as well as engineered materials, for use in the communications, industrial, instrumentation and electronics markets.*
4. *Company I is a supplier of optical and photonic products founded in 2015 and listed on NASDAQ stock exchange.*
5. *Company J is a company founded in 1997 and listed on the NASDAQ stock exchange in the United States, which provides fibre optic access network solutions.*

Source: Annual Reports of Listed Companies, Frost & Sullivan

By 400G-and-above high-speed optical transceiver revenue, our Company ranked 11th among global optical transceiver suppliers in 2025. The Company achieved 400G-and-above high-speed optical transceiver revenue of RMB0.7 billion with a CAGR of 247.6% between 2023 and 2025, which is the third fastest revenue growth rate among the top eleven global high-speed optical transceiver suppliers in 2025.

Ranking of Optical Transceiver Suppliers (by 400G-and-above High-Speed Optical Transceiver Revenue), Global, 2025

Rank	Company Name	400G-and-above Optical Transceiver Revenue (RMB Billion)	Market Share	400G-and-above Optical Transceiver Revenue CAGR 23-25
1	Company A	33.0	29.2%	136.3%
2	Company B	20.3	18.0%	309.3%
3	Company H	9.2	8.2%	64.0%
4	Company C	7.0	6.2%	120.1%
5	Company D	3.8	3.4%	135.3%
6	Company F	2.9	2.5%	232.3%
7	Company I	2.3	2.0%	64.0%
8	Company E	1.9	1.7%	83.8%
9	Company G	1.0	0.8%	227.0%
10	Company K	0.9	0.8%	360.4%
11	**The Company**	**0.7**	**0.6%**	**247.6%**
	Others	30.1	26.6%	
	Total	112.9	100.0%	

Note:
1. *Including 400G-and-above optical transceivers sold externally only.*
2. *Any discrepancies between totals and sums of amounts listed are due to rounding.*
3. *Company K is an enterprise founded in 2011, specializing in the R&D and manufacturing of optical transceivers and optoelectronic interconnection products.*

Source: Annual Reports of Listed Companies, Frost & Sullivan

By 800G-and-above high-speed optical transceiver revenue, our Company ranked 10th among global optical transceiver suppliers in 2025. The Company achieved 800G-and-above high-speed optical transceiver revenue of RMB0.3 billion with a CAGR of 1,069.0% between 2023 and 2025, which is the fastest revenue growth rate among the top ten global high-speed optical transceiver suppliers in 2025.

Ranking of Optical Transceiver Suppliers (by 800G-and-above High-Speed Optical Transceiver Revenue), Global, 2025

Rank	Company Name	800G-and-above Optical Transceiver Revenue (RMB Billion)	Market Share	800G-and-above Optical Transceiver Revenue CAGR 23-25
1	Company A	25.5	39.0%	167.3%
2	Company B	13.6	20.9%	374.0%
3	Company H	5.1	7.9%	57.8%
4	Company C	3.7	5.6%	125.0%
5	Company D	2.3	3.5%	135.9%
6	Company F	1.7	2.5%	258.9%
7	Company I	0.8	1.2%	20.0%
8	Company G	0.4	0.6%	206.2%
9	Company E	0.4	0.6%	187.7%
10	**The Company**	**0.3**	**0.5%**	**1,069.0%**
	Others	11.6	17.7%	
	Total	65.3	100.0%	

Note:
1. *Including 800G-and-above optical transceivers sold externally only.*
2. *Any discrepancies between totals and sums of amounts listed are due to rounding.*

Source: Annual Reports of Listed Companies, Frost & Sullivan

Entry Barriers of Global Optical Transceiver Industry

Customer Barrier. The core customers of optical transceiver companies include large-scale cloud service providers, telecommunications carriers and equipment manufacturers, which impose stringent requirements on supplier certification, product performance, reliability, volume delivery capabilities and technical support. New suppliers typically need several years of validation testing, pilot deployment and relationship cultivation before securing large-scale orders and establishing long-term partnerships. Such long-term cooperation creates strong customer stickiness and switching costs, forming a significant entry barrier.

Supply Chain Barrier. The competitiveness of optical transceiver companies relies on the supply chain stability and cost competitiveness of key raw materials and components. The optical transceiver industry also features a global supply landscape, requiring companies to establish integrated capabilities spanning cross-border R&D, manufacturing, sales and service. Leading enterprises can leverage large-scale procurement and global logistics networks to ensure mass production and timely delivery, while new entrants find it difficult to break the existing resource monopoly, forming significant supply chain barriers.

Technology Barrier. The optical transceiver industry is characterized by rapid technological iteration and high technical thresholds in areas such as low-power high-speed optical communications and high-density integration. Related R&D requires multidisciplinary expertise in materials science, optoelectronic integration, advanced packaging and microelectronics. Companies that achieve high manufacturing yield and product stability can establish significant technological barriers, as consistent quality and reliability are critical for high-speed optical transmission. Companies with a solid R&D foundation in the telecom industry are also able to transfer relevant technologies to datacom product development. New entrants without long-term technological accumulation face high entry barriers.

Large-scale Production Barrier. Large-scale production of optical transceivers imposes stringent requirements on supply chain integration, production process control, and capacity flexibility. Leading enterprises have built mature manufacturing platforms and integrated digital systems to support high-volume production, enabling them to deliver products with stable quality, high yields, and consistent on-time delivery performance. Enterprises with insufficient mass production experience and system capabilities often face challenges in achieving the same level of delivery reliability, quality consistency, and cost efficiency as industry leaders, resulting in significant barriers to entry in terms of scalable manufacturing and timely product delivery.

Product Comprehensiveness Barrier. Competition in the optical transceiver industry has shifted from single-product competition to competition in comprehensive capabilities. Leading companies build advantages through broad product portfolios, large-scale manufacturing, vertical integration and integrated solutions. These capabilities support supply chain resilience, product iteration, cost optimization, mass production and yield control, and are difficult for new entrants to replicate in the short term.

SOURCE OF INFORMATION AND RESEARCH METHODOLOGY

We engaged Frost & Sullivan for preparing an independent industry report in respect of the global optical transceiver market. The information from Frost & Sullivan disclosed in this document is extracted from the Frost & Sullivan Report, a report commissioned by us for a fee of RMB500,000, and is disclosed with the consent of Frost & Sullivan. The Frost & Sullivan Report has been prepared by Frost & Sullivan independently without any influence from us or other interested parties. Frost & Sullivan is an independent global consulting firm founded in 1961 in New York. Its services include, among others, industry consulting, market strategic consulting and corporate training. Frost & Sullivan conducted (i) primary research, which involved discussing the status of the industry with certain leading industry participants, and interviews with industry experts on a best-effort basis to collect information in aiding in-depth analysis; and (ii) secondary research, which involved reviewing government statistics, industry association publication, company reports, independent research reports and data based on its own research database.