

Fiber Optics Collimating Lens Market by Type (Fixed and Adjustable), Wavelength, Mode (Single Mode, Multimode), Application (Communication, Medical & Diagnostics, Metrology, Spectroscopy and Microscopy), and Geography - Global Forecast to 2026

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Abstracts

The global fiber-optic collimating lens market size is projected to grow from USD 554 million in 2021 to USD 1,081 million by 2026; it is expected to grow at a CAGR of 13.3% from 2021 to 2026. Growing global demand for computer networking drives the demand for free-space communication, which is likely to boost the demand for fiber-optic collimating lenses.

Increasing demand for internet bandwidth

During COVID-19, the work-from-home culture became the new norm and a necessity, resulting in increased demand for reliable internet connectivity from businesses and individuals. This further accelerated the demand for high internet bandwidth, which can be provided using fiber network infrastructure, including fiber-optic collimating lenses. Fiber provides businesses with tailored costs based on wavelengths and strands. It also offers a better cost structure for higher bandwidth needs than traditional internet service provider (ISP) payment approaches.

Growing investment in fiber optics is likely to boost the demand for fiber components, including fiber-optic collimating lenses. For instance, North American broadband providers are projected to invest more than USD 60 billion in fiber-to-the-home (FTTH) projects over the next five years, a figure about twice the amount invested in FTTH buildouts during any previous five-year stretch, according to MarketsandMarkets. Large FTTH players such as AT&T and Verizon are exploring new opportunities for fiber

optics, where they can deploy FTTH despite heavy investments in the past and might even eventually look to expand FTTH beyond their traditional market borders. AT&T has already announced about two million new homes to be passed in 2021. All such investments are likely to drive the demand for fiber-optic collimating lenses.

According to Cisco Visual Networking Index: Forecast and Trends, 2017–2022, IP traffic would grow at a CAGR of 26% from 2017 to 2022. Also, monthly IP traffic would reach 50 GB per capita by 2022, up from 16 GB per capita in 2017. The massive increase in data demand and consumption is because of the increasing number of devices and connections. With this, the demand for internet bandwidth is also increasing.

Growing demand for fiber-optic collimating lenses in telecommunication, BFSI, and healthcare industries is driving the market

The growing demand for fiber-optic collimating lenses in telecommunication, BFSI, and healthcare industries is driving the market. The introduction of 5G networks is expected to bring new revenue sources for companies providing fiber-optic collimating lenses. While many companies are still slow to cash in on market opportunities for 5G networks, AT&T Intellectual Property has launched a 400 gigabit network connection between Dallas and Atlanta to support video, AR, gaming, and other 5G needs of consumers and businesses. Similarly, Verizon Communications, Inc. has conducted a high-speed, long-haul data session by sending 800 Gbps across long-distance fiber in preparation for a significant increase in the amount of data from enterprise and consumer 5G applications. These significant technological advancements in fiber networks are expected to lay the groundwork for managing the blazing-fast gigabit speeds, super-low single-digit millisecond latency, and huge scalability that is expected due to Verizon's 5G ultra-wideband (UWB) network. Such technological developments are expected to create new revenue streams for the companies in the fiber-optic collimating lens market.

Asia Pacific captures largest market share

APAC is expected to hold the largest share of the fiber-optic collimating lens market during the forecast period. There is a high demand for fiber-optic collimating lenses in various applications, such as LIDAR, medical equipment, and spectroscopy. APAC countries, particularly China and India, are expected to offer significant growth opportunities to the manufacturers of fiber-optic collimating lenses.

The breakup of primaries conducted during the study is depicted below:

By Company Type: Tier 1 – 23 %, Tier 2 – 35%, and Tier 3 –42%

By Designation: C-Level Executives – 20%, Directors– 35%, and Others – 45%

By Region: North America– 15%, Europe – 30%, APAC – 48% and ROW – 7%

Research Coverage

The report segments the fiber-optic collimating lens market and forecasts its size, by volume and value, based on region (North America, Europe, Asia Pacific, and RoW), Fiber Optics Collimating Lens Market By Type (Fixed and Adjustable), Wavelength (2000 NM), Mode (Single Mode and Multimode, Application (Communication, Medical & Diagnostics, Metrology, Spectroscopy and Microscopy, and others), Lens Type (Fiber Lenses, GRIN Lenses, Others (C Lens, Aspheric, Others)) and Geography - Global Forecast to 2026). The report also provides a comprehensive review of market drivers, restraints, opportunities, and challenges in the fiber-optic collimating lens market. The report also covers qualitative aspects in addition to the quantitative aspects of these markets.

Key Benefits of Buying This Report

This report includes market statistics pertaining to the lenses type, type, application, mode, wavelength and region.

An in-depth value chain analysis has been done to provide deep insight into the fiber-optic collimating lens market.

Major market drivers, restraints, challenges, and opportunities have been detailed in this report.

Illustrative segmentation, analyses, and forecasts for the market based on lenses type, type, application, mode, wavelength, and region have been conducted to provide an overall view of the fiber-optic collimating lens market.

The report includes an in-depth analysis and ranking of key players.

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