

**Dark Fiber Market by Single-mode Fiber, Multimode Fiber (Step-index, Graded-Index), Network Type (Metro, Long Haul), Material (Glass, Plastic), End User (Telecommunication, BFSI, Aerospace, Oil & Gas, Healthcare) & Region - Global Forecast to 2028**

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**Report description:**

The dark fiber market is projected to grow from USD 6.6 billion in 2023 and is projected to reach USD 11.9 billion by 2028; it is expected to grow at a CAGR of 12.5% from 2023 to 2028. Rising demand for 5G network, increasing demand for internet bandwidth, growing demand for reliable and secure network is expected to fuel the growth of the dark fiber market. However, High initial investment and regular maintenance is limiting the growth of the dark fiber market.

"BFSI end user segment of the dark fiber market to hold second largest market share during the forecast period."

The private dark fiber network provides the control and security required for data center connectivity by financial institutions. Dark fibers are used to improve and make business continuity (BC) and disaster recovery (DR) reliable and painless. Dark fiber offers scalability to meet the growing bandwidth demands of BFSI institutions. As data requirements increase, dark fiber can support higher data rates without the need for significant infrastructure upgrades. This scalability allows BFSI organizations to adapt to evolving technology trends, increasing data volumes, and emerging applications without disruption or major investments in new network infrastructure. Dark fiber can play a crucial role in a BFSI organization's disaster recovery and business continuity strategy. By establishing redundant connections through dark fiber, institutions can create geographically diverse and independent network paths. In the event of a network failure or a disaster in one location, traffic can be seamlessly rerouted to alternative paths, ensuring uninterrupted services and minimizing downtime. Banks and financial services companies are increasingly turning to dark fiber for their bandwidth-intensive core transport, including file sharing, large file transfers, business intelligence applications and data analysis.

"Long haul network segment to witness higher growth for dark fiber market during the forecast period." The deployment of

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long-haul networks has been increasing to meet the growing demand for high-speed and reliable connectivity across different regions. The proliferation of digital services, cloud computing, streaming media, and Internet of Things (IoT) devices has led to an exponential increase in data traffic. Long-haul networks are essential for transporting this massive volume of data over long distances efficiently. The growth of IXPs has led to increased demand for long-haul networks. IXPs serve as major interconnection hubs, where multiple networks exchange traffic. To facilitate efficient exchange of data between networks located in different regions, robust long-haul networks are required. The deployment of 5G networks requires a robust backhaul infrastructure to support the increased data rates and low latency. Long-haul networks, especially fiber-optic networks, play a crucial role in providing high-capacity backhaul connections for 5G base stations. To keep up with the increasing demand, telecommunication companies, infrastructure providers, and governments are continuing to invest in expanding and upgrading long-haul networks, deploying new submarine cables, expanding fiber-optic networks, and exploring innovative technologies to enhance long-distance connectivity.

"Market for plastic material is expected to exhibit higher growth during the forecast period " The plastic material segment is expected to exhibit a higher growth during the forecast period. Plastic fibers are used for very short-range and consumer applications, whereas glass fibers are used for short/medium-range and long-range telecommunications. Plastic fibers are immune to electromagnetic interference (EMI) and radio frequency interference (RFI). Unlike glass fibers, they do not conduct electricity, making them more resistant to external interference sources. This characteristic makes plastic fibers suitable for environments with high levels of electromagnetic noise or where grounding and shielding requirements are challenging. The primary advantage of plastic fiber over glass fiber is its robustness under bending and stretching.

"Europe to hold a significant share of the dark fiber market during the forecast period" Europe is expected to hold a significantly large share for dark fiber market during the forecast period. Europe held the second-largest share of the global dark fiber market in 2022. The rapid growth of the ISPs and Telecommunications Industry is one of the major factors driving the market in this region. The new digital applications such as teleworking, remote medical consultation, and video on demand has accelerated the demand for dark fibers.

In the process of determining and verifying the market size for several segments and subsegments gathered through secondary research, extensive primary interviews have been conducted with key industry experts in the dark fiber market space. The break-up of primary participants for the report has been shown below: By Company Type: Tier 1 - 40%, Tier 2 - 40%, and Tier 3 - 20% By Designation: C-level Executives - 40%, Directors -40%, and Others - 20% By Region: North America -30%, Asia Pacific- 40%, Europe - 20%, and RoW - 10%

The report profiles key players in dark fiber market with their respective market ranking analysis. Prominent players profiled in this report include AT&T (US), Verizon Communications, Inc. (US), CenturyLink (Lumen Technologies) (US) Colt Technology Services Group Limited (UK), Comcast Corporation (US), Consolidated Communications (US), Exa Infrastructure (GTT Communications, Inc.) (US), CenturyLink, Inc. (US), NTT Communications Corporation (Japan), Verizon Communications, Inc. (US), Windstream Communications (US), and Zayo Group, LLC (US). GlobalConnect Group (Denmark), Dark Fibre Africa (Pty) Ltd (South Africa), Frontier Communications Corporation (US), Cologix (US), Crown Castle (US), Dinesh Engineers Limited (India), FirstLight (US), UFINET (Spain), Dobson Technologies (US), Sterlite Power (India), Sorrento Networks (US), Microscan (India) are among a few emerging companies in the dark fiber market.

Research Coverage: This research report categorizes the dark fiber market on the basis of type, network type, material, end user, and region. The report describes the major drivers, restraints, challenges, and opportunities pertaining to the dark fiber market and forecasts the same till 2028. Apart from these, the report also consists of leadership mapping and analysis of all the companies included in the dark fiber market ecosystem.

Key Benefits of Buying the Report The report will help the market leaders/new entrants in this market with information on the closest approximations of the revenue numbers for the overall dark fiber market and the subsegments. This report will help stakeholders understand the competitive landscape and gain more insights to position their businesses better and to plan suitable go-to-market strategies. The report also helps stakeholders understand the pulse of the market and provides them with information on key market drivers, restraints, challenges, and opportunities.

The report provides insights on the following pointers:

-□Analysis of key drivers (Rising demand for 5G network, Increasing government regulatory Increasing demand for internet

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bandwidth, Growing demand for reliable and secure network ), restraints (Risky installation, High initial investment and regular maintenance), opportunities (Telecommunication industry to create lucrative opportunities, Need for heavy data handling in manufacturing and logistics sectors, Augmented global demand for data centers) and challenges (Lack of proper monitoring systems) influencing the growth of the dark fiber market.

-□Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product & service launches in the dark fiber market .

-□Market Development: Comprehensive information about lucrative markets - the report analyses the dark fiber market across varied regions

-□Market Diversification: Exhaustive information about new products & services, untapped geographies, recent developments, and investments in the dark fiber market

-□Competitive Assessment: In-depth assessment of market shares, growth strategies and service offerings of leading players like AT&T (US), Verizon Communications, Inc. (US), CenturyLink (Lumen Technologies) (US), Consolidated Communications (US), EXA Infrastructure (GTT Communications, Inc.) (US), among others in the dark fiber market.

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