

Reasons for Optical Cable Oversupply



Overview

Fiber optic manufacturers are competing for a limited supply of glass, cladding, connectors and a range of plastics.

Key Takeaways

Optical cable oversupply is primarily driven by overcapacity in manufacturing, misaligned demand forecasts, and rapid infrastructure investment cycles.

Overcapacity in Manufacturing

One of the main reasons for optical cable oversupply is excess production capacity. Many manufacturers, particularly in China and other major production hubs, have invested heavily in fiber drawing towers, preform preparation, and high-volume cable assembly to meet anticipated demand from broadband, 5G, and data center expansions. When actual demand growth lags behind these projections, the market experiences a surplus of optical cables, leading to downward pressure on prices and inventory accumulation.

Misaligned Demand Forecasts

Oversupply often results from inaccurate demand forecasting. While global demand for fiber remains robust, especially for hyperscale data centers and AI-driven applications, the timing and scale of deployments can vary regionally. For example, infrastructure projects in certain regions may be delayed due to regulatory, logistical, or labor constraints, leaving manufacturers with excess inventory that was produced in anticipation of immediate uptake.

This mismatch between production schedules and actual deployment contributes to temporary oversupply.

Supply Chain and Material Dynamics

The optical cable industry relies on critical raw materials such as ultra-pure glass, silica tetrachloride, and helium for fiber drawing. While shortages of these inputs can create temporary supply constraints, periods of material abundance or improved local sourcing can lead to rapid production ramp-ups, sometimes exceeding market absorption capacity. Additionally, innovations like smaller-diameter microduct cables allow more fibers per drum, increasing production efficiency but potentially contributing to oversupply if demand does not scale proportionally.

Investment Cycles and Market Speculation Large-scale investments in fiber infrastructure, particularly for 5G and AI data centers, often prompt manufacturers to expand capacity aggressively to secure market share. However, these expansions are based on projected long-term demand rather than immediate consumption. If multiple manufacturers expand simultaneously, the market can temporarily experience oversupply until demand catches up, creating cyclical imbalances.

Regional and Technological Factors

Oversupply can also be influenced by regional disparities and technological adoption rates. Some regions may have slower deployment of FTTH or 5G networks, while others rapidly consume available fiber. Similarly, the adoption of next-generation technologies like multicore or hollow-core fiber may temporarily reduce demand for conventional cables, leaving existing production capacity underutilized.

Conclusion

In summary, optical cable oversupply arises from a combination of overcapacity, misaligned demand forecasts, supply chain dynamics, investment cycles, and regional deployment variations. While global demand continues to grow, these factors can create temporary imbalances, leading to excess inventory and downward pressure on prices. Strategic alignment between production planning, material sourcing, and deployment schedules is essential to mitigate oversupply risks and stabilize the market.

Article Content

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Insights and Strategies for 2025 and Beyond

Role: Provide essential materials like silica glass or dopants for fiber optics, plastics for cables, and metals for components . Challenges: Limited access to rare materials, environmental compliance,

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Fiber Optic Cable Market Analysis by Mordor Intelligence The Fiber Optic Cable Market size was valued at USD 12.82 billion in 2025 and is estimated to grow from USD 14.22 billion in 2026

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