New Infrastructure Optical Cable



Overview

New subsea cable developments, Q1 2026 | S&P GlobalSubsea cable infrastructure is undergoing a rapid and sustained expansion, reflecting how important cros.

Key Takeaways

The global optical cable infrastructure is rapidly expanding, driven by subsea cable projects, hyperscale data center connectivity, and AI-driven demand, with major investments from companies like Meta and Google.

Subsea Cable Expansion

Submarine optical fiber cables remain the backbone of global internet traffic, carrying over 95% of international data. The market is projected to grow from $5.31 billion in 2025 to $8.95 billion by 2030, reflecting a CAGR of 11.02% due to rising demand for high-capacity, low-latency, and resilient networks. Recent projects include the Humboldt Cable linking Chile and Australia, the 2Africa system expanding Africa's connectivity, and the Bifrost cable connecting Singapore to the U.

S. West Coast via Indonesia. These projects emphasize redundancy, geographic diversity, and support for cloud and AI workloads.

Hyperscale and Private Investments

Hyperscale companies are increasingly investing in private subsea cables to enhance control over capacity, latency, and global connectivity. Meta plans a $10 billion “W” cable spanning over 40,000 km, connecting the U. S., South Africa, India, and Australia, marking its first fully private global-scale cable.

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Similarly, Google, Amazon, and Microsoft are expanding private networks to interconnect their data centers, leveraging advanced technologies like wavelength-division multiplexing (WDM) and higher fiber pair counts. These investments ensure predictable performance for cloud services and AI workloads.

Fiber-

Optic Supply and AI Data CentersThe surge in AI and cloud computing has driven massive demand for fiber-optic cables. Meta has committed up to $6 billion to Corning for fiber-optic supply through 2030, supporting its AI data centers and global infrastructure expansion. Corning is scaling production to meet hyperscale demand, making it the largest fiber-optic cable plant in the world.

This reflects a broader industry trend where optical cable deployment is closely tied to AI, cloud, and hyperscale computing growth.

Strategic and Geopolitical Considerations

New optical cable projects are increasingly aligned with national digital strategies, regional partnerships, and economic development goals. Governments and private entities are investing in underserved regions to improve digital inclusion, network redundancy, and resilience against disruptions in critical maritime corridors. Established hubs like Singapore, Marseille, and Florida continue to consolidate as global connectivity gateways, while new Arctic, Red Sea, and Pacific routes expand global reach.

Conclusion

The new infrastructure optical cable landscape is characterized by high-capacity subsea systems, hyperscale private networks, and strategic fiber-optic deployments for AI and cloud services. These developments are reshaping global connectivity, enhancing redundancy, and supporting the exponential growth of digital communication and data-intensive applications.

Article Content

New subsea cable developments, Q1 2026 | S&P Global

Subsea cable infrastructure is undergoing a rapid and sustained expansion, reflecting how important cross-border connectivity has become to the modern economy. Undersea fiber-optic cables already

Subsea cable systems: the new high-capacity, high

Introduction: The subsea cable industry is entering a high-growth, high-complexity phase driven primarily by AI, hyperscale cloud expansion, and

Internet Infrastructure Map (2026)

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Explore the physical backbone of the internet with our interactive map of undersea fiber optic cables, peering exchange points, and more.

The Future of Fiber Deployment: 6 Trends Transforming

As the industry looks ahead, six major trends are shaping the future of fiber deployment—from smarter buildouts and next-gen cables to workforce

Meta plans to build a $10B subsea cable spanning the world, sources

TechCrunch has confirmed with sources close to the company that Meta plans to build a new, major, fiber-optic subsea cable extending around the world — a 40,000+ kilometer project that

Building Tomorrow''s Internet: A 2026 Update on Cable

With the exception of a few anomalous years, we haven''t seen this level of investment in subsea cable infrastructure since 2000-2001, and it''s not

How will fiber and equipment vendors meet the increased demand for ...

Fiber optic vendors are employing a mix of manufacturing expansion, technological innovation in high-density and next-generation fibers, and strategic supply chain alignment to meet

Start of mass production of 13824 count optical fiber

Furukawa Electric Group company Lightera has started mass production of 13824 count optical fiber cable for hyperscale data centers

Optical fibre and cable: Top ten industry shifts in 2025

The optical fibre and cable market is shifting in several directions at once. In 2025, AI-driven data centre investment rapidly emerged as the strongest driver of

Apple supplier Corning wins $6 billion from Meta for AI optical ...

Corning, a 175-year-old glassmaker known for supplying iPhone glass, is now at the center of the AI infrastructure boom with a new type of fiber-optic cable

NVIDIA and Corning Announce Long-Term Partnership

NVIDIA (NASDAQ: NVDA) and Corning Incorporated (NYSE: GLW) today announced a multiyear commercial and technology partnership to

Optical Networking: The Next Mega Trend in AI

Networking unlocks computing capability for single AI chips, connecting multiple chips (working together), enabling seamless data exchange

Fiber Optic Infrastructure: A Connection Is Made | KKR

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Yet, the infrastructure that supports connectivity is largely out of sight and out of mind. The fastest and most reliable internet connection is through fiber optic cable, which moves data at the speed of light

The U.S. is investing in fiber-optic internet. Here''s

The Build America Buy America Act, part of the Bipartisan Infrastructure Law, requires that BEAD funds be spent only on American-made

Fiber Optic Network Construction: Process and Build Costs

Fiber optic network construction links together digital infrastructure ensuring optical telecommunications traffic reaches end users at the lowest cost.

Boosting Subsea Cables with Multi-Core Fiber Technology

Today we are deep-diving into one of the latest innovations in subsea cables: multi-core fiber (MCF) technology. First, some brief history. With traditional subsea cables, power comes from

Fiber Optic Network Design & Deployment Guide

As the world races toward faster, more reliable digital communication, Fiber optic networks stand at the core of telecom innovation. Fiber optics bandwidth,

Building Tomorrow''s Internet: A 2026 Update on Cable

A steady stream of investment has driven tremendous growth in subsea cable infrastructure to keep pace with ever-increasing bandwidth

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