Are there enough cross-border fiber optic cables

Overview

As of 2025, there are over 600 active and planned undersea internet cables spanning the globe. 4 million kilometres (nearly 870,000 miles), enough to circle the Earth more than 35 times. Nearly all international internet traffic – from cloud workloads to streaming video – voyages along a handful of submarine fibre-optic cable highways. These undersea trunks connect continents, power the internet, and underpin the so-called AI 'supercycle' – they also make terrestrial cross-border. Undersea fiber-optic cables form the foundations of global internet connectivity, transmitting over 99% of international data traffic. These cables, composed of optical fibers encased in protective layers, stretch across oceanic floors, linking major economic centers worldwide. Data moves through. This visualization shows the growth of the undersea cable network, global internet peering capacity, and the distribution of IP addresses via BGP announcements over time. Here's why they're so important to global connectivity.

Article Content

Melting Arctic Ice Opens a New Fiber Optic Cable Route

Additional cable will extend the route down to China and Japan, for a planned total of 10,000 kilometers of new cable.

The physical borders of the digital world

The submarine-cable system carries 99% of intercontinental internet traffic. A subsea fibre-optic cable gets cut every three days or so, according to

There''s a global shortage of fiber optic cable

Fiber optic cabling is not only ubiquitous in AV, it''s a foundational component of everything from high-speed broadband to 5G to the global network

How Different Regions Are Rethinking Their Approaches

Governments, militaries, businesses, and individuals see the nearly 600 fiber optic communication cables—also known as subsea communication

Ocean Internet Cables: Connecting Continents with

Explore the world beneath the waves with EarthLink. Learn how fiber optic cables span oceans, connect continents, and power the global internet.

Internet Infrastructure Map (2026)

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

Everything you need to know about the undersea cables

There is a huge system of fibre-optic cables lying underneath the world''s oceans Andrea Peterson Tuesday 27 October 2015 13:03 GMT Italian

Oceans of Data: The Subsea Cable Projects That

Various subsea cable projects underscored the industry''s push toward higher fiber counts, unprecedented terabit-scale capacity, and geographically

Google''s subsea fiber optics, explained

Today, a single cable can deliver a whopping 340 Tbps capacity; that''s more than 25 million times faster than the average home internet connection.

Global Undersea Internet Cables: Economic Leverage

Undersea fiber-optic cables form the foundations of global internet connectivity, transmitting over 99% of international data traffic. These cables,

The Geopolitics of Cables: US and China''s Subsea War

Geopolitical tensions are growing globally over the cutting of two subsea cables in the Baltic Sea, and a struggle for dominance between the West

Submarine Cable FAQs

Submarine Cable 101 How many cables are there? As of 2026, we track more than 600 active and planned submarine cables. The total number of active cables is

Fiber Map of the World 2026

Fiber maps visualize the global network of fiber optic cables, showcasing how data moves across continents and under oceans. Telecommunications providers rely on these maps to optimize routing,

The physical borders of the digital world

The first is that with 552 (active and planned) subsea cables spanning 1.4m kilometres, there is enough redundancy in most places to make up for cable

Are Americans Getting Enough Fiber?

Fiber connects American cities, but only about 13% of individual homes and businesses, mostly in very affluent places, have fiber optic connections—what''s

Practice and Case Study on Cross-border Cable Project

Fiber Optic Cable is the first cross-border terrestrial cable directly connecting China and Pakistan. It stretches from Urumqi to Rawalpindi through the Khunjerab Pass at the China-Pakistan border.

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

The U.S. is investing billions of dollars in fiber internet. Here''s what makes it run. We tour a North Carolina plant where melted glass is pulled into the

Co-deployment of fibre optic cables along transport ...

The study presented evidences of the cost-effective approach towards implementing regional integration including the co-deployment of fibre-optic cables along road and rail

The U.S. Can''t Make Enough Fiber Optic Cable—And

Fiber optic cables aren''t just powering your streaming and gaming—they''re the invisible infrastructure underpinning global connectivity.

in the Current Fiber Broadband Supply Chain UPDATE

In short, there has been an unfortunate combination of events that have increased the demand for high-speed fiber internet access, while simultaneously decreasing networks operators'' ability to complete

Beyond Fiber-Optic Cables: Securing Seabed Before the

Beyond Fiber-Optic Cables: Securing Seabed Before the Next Crisis Communications cables are only part of the story. A far broader array of systems

Fibre-optic Link Around the Globe

Fibre-optic Link Around the Globe (FLAG) is a 28,000-kilometre-long (17,398 mi; 15,119 nmi) fibre optic mostly- submarine communications cable that connects

In at the deep end: how subsea fibre optic cables keep the world ...

As of 2025, there are over 600 active and planned undersea internet cables spanning the globe. They collectively stretch more

Twenty-thousand leagues under the sea – why sub-sea

Nearly all international internet traffic voyages along a handful of submarine fibre-optic cable highways. They make terrestrial cross-border links

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