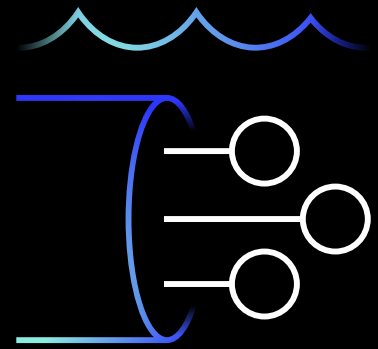


Optical Fiber



Scale for growing bandwidth demand with optical fiber

High-speed, high-quality connectivity is no longer optional - it is the key to productivity, efficiency and even the very existence of every successful business today.

With high volumes of traffic, the ability to upgrade your bandwidth capacity as soon as you need it is no longer negotiable. For large, fast-growing networks, an optical fiber backbone is often the best option.

However, digging and deploying new fiber routes is both costly and logistically challenging, which means that optical fiber is typically deployed with a high fiber count. By selling surplus fibers, network providers can offer their customers the opportunity to acquire their own optical infrastructure - with its unrivalled security and scalability, but without the cost and complexity of building it themselves.

Arelion's well-established optical network infrastructure facilitates critical network connectivity and we operate, manage and maintain all of it ourselves. It also boasts an extensive portfolio of subsea cables and landing stations in strategic locations - enabling seamless cross-border connectivity and making it a pivotal part of the global communications infrastructure.

Whether it be financial hubs, technology centers or cultural capitals, Arelion's network provides the digital highways that facilitate high-quality data transfer and digital communications across the world.

Optical Time Domain Reflectometer (OTDR) testing - Before handing over fiber in accordance with customer specific requirements, we conduct OTDR performance testing. Once all tests have been completed, our customers are granted direct operational control of their own fiber and can start using it at once.

Arelion's robust duct network Arelion's duct infrastructure enhances the reliability and resilience of the entire network. Ducts provide protective channels for optical fibers, ensuring they remain intact and unaffected by external factors. This secures a stable and uninterrupted flow of data for critical applications. We have multiple ducts along each of our own routes which means we can pull new fiber cables and upgrade to the latest specifications whenever the need arises.

Benefits in brief

Scalability

Whether to accommodate increased data traffic or extending reach into new locations, optical cables can be easily upgraded as demand arises.

Low investments cost

Cost-effective over the long term. While initial investments may seem significant, low operational and maintenance costs deliver a cost-effective solution overall.

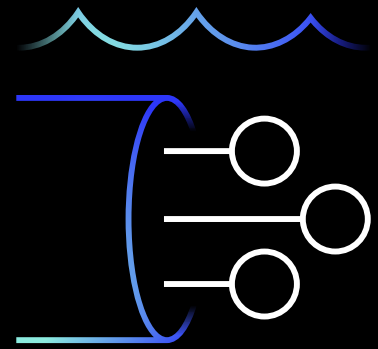
Future-proof

With the capability to support high data rates and advanced technologies, optical fibers ensure that your network infrastructure stays relevant and efficient as technology continues to advance.

Did you know?

In March 2019, Arelion worked with Infinera to successfully complete an industry-first production network field trial demonstrating Autonomous intelligent Transponder (AIT) technology. The live field trial demonstrated the ability of fiber optic transmission systems to autonomously adapt to changing network conditions in real time - to support optimal service quality and performance while simplifying operations.

Optical Fiber



Technical highlights

We are fully committed to the high-quality standards needed to get the best out of optical fiber technology. We deploy the latest testing technologies and best practice, and with transparent delivery processes and flexible contracts, endeavor to make dark fiber a viable and wise investment for you.

- Optical fiber in accordance with G.652 ITU-T
- Fiber routes within Europe
- Full OTDR testing and documentation at handover
- Short, medium or long-term (IRU) leases to provide you with secure infrastructure between key destinations
- Rack space in amplifier sites
- Performance, power loss and attenuation tests to ensure operation within specific limits
- Indoor fiber tails with subscriber connectors (SC) at each site
- Service demarcation point at the end of the fiber tail connected to the ODF
- Optional customer-specified fiber tests for attenuation and dispersion

Why Arelion?

Arelion boasts an extensive history of optical fiber networking, with expertise from over 25 years of operations.

Our optical fiber experience is well-documented - a testament to our relentless pursuit of quality and precision, built on knowledge accumulated over many years.

Arelion takes pride in its award-winning customer service support which sets a benchmark for the industry. Dedication to providing an effortless customer experience has given Arelion a Net Promoter Score (NPS) of 72 - one of the highest in the market.

At the end of the day, Arelion's expertise in optical networking isn't simply about the number of years spent working in the industry - it is about fostering deeper knowledge and understanding, an unwavering commitment to quality and unrivalled customer support.

Use cases

High-speed Internet and data transmission

Optical fibers are capable of handling large data volumes of data, making them ideal for connecting businesses, homes and data centers within metropolitan regions and long-haul across countries and continents.

Interconnecting data centers

Metro connections often require the interconnection of multiple data centers to facilitate seamless data sharing and backup. Optical fiber plays a vital role here, providing low-latency and high-capacity.

Telecommunication networks

In urban areas, optical fibers are the backbone of the network - supporting a variety of services from voice and video, to data transmission, ensuring a high-quality experience.

ISPs

Long-haul connections often involve international data transfer, and subsea optical fibers are the go-to solution. These cables span vast distances beneath the ocean - enabling fast and efficient global internet connectivity.

Cross-country networks

Long-haul optical fibers connect successfully major cities and regions across long distances.