

CORNING



Netly Fiber

Improving quality and access for all

Founded in 2017, Netly Fiber continues to change the last-mile fiber game in the United States with its future-proof fiber architecture.

"Netly is building digital infrastructure that will support our grandchildren's internet service," says Netly CEO Jack Demers.

Like other open-access developers, Netly builds fiber systems leased to internet service providers (ISPs), wireless carriers, utilities, school systems, and municipalities. However, their business model delivers dedicated unsplit dark fiber strands

to those varied customers, giving them enough flexibility to modify and expand their networks to suit future needs while minimizing failure points.

"We believe a fiber system should be built once, like a utility, and made available to all entities that want to use it," explains Demers.



Funded with private capital, Netly provides much-needed network infrastructure upgrades for municipalities without the commitment of taxpayer dollars.

Demers emphasizes the importance of accessibility in Netly's mission, "we are big believers in the importance of internet access and the need for fiber to every home, business, school, library, and city building in the U.S."

The Challenge

As the internet continues to shape how we live, learn, and work, the need for scalable and accessible network connectivity from ISPs is more important than ever.

ISPs are challenged with ensuring their offerings can handle the ever-increasing bandwidth demands of the present with enough flexibility to accommodate even greater needs in the future without breaking the bank. In terms of solutions, however, the technology is not one-size-fits-all.

"Most open-access networks are really closed because they mandate the electronics used and control the speed and performance available to end users," says Netly's COO, Jim Hanley. "Since all ISPs on those closed systems use the same equipment, they will all have the same features and can only differentiate through pricing. This environment creates a price war, or race to the bottom, where the ISPs don't make sustainable profits or invest in innovations."

The Solution

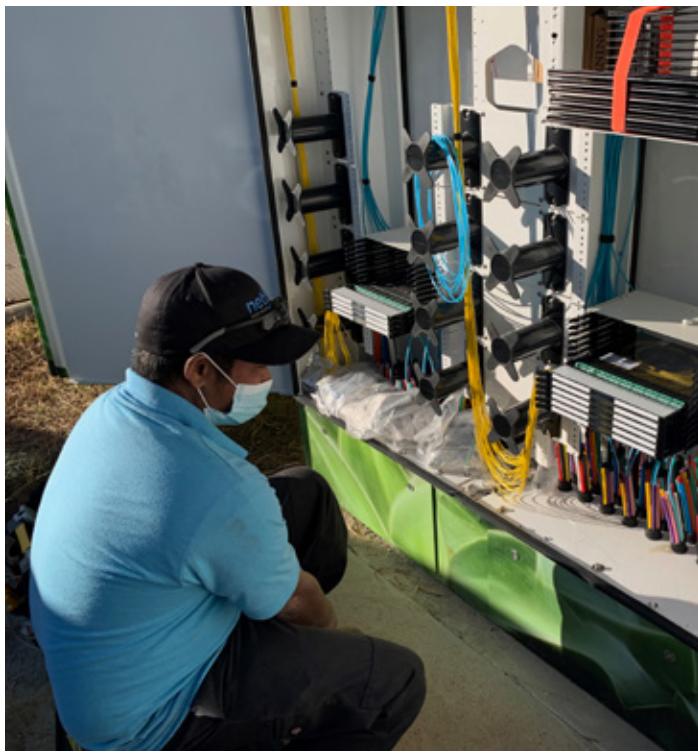
Recognizing the limitations of certain open-access networks, Netly's business model allows ISPs to own and operate the electronics used to light fiber strands and deliver service. By giving ISPs control over their networks, Netly ultimately provides them the ability to innovate and enhance service offerings for years to come.

Additionally, Netly offers providers more control over their economics with their unique pricing philosophy.

"There is a fallacy in the industry that fiber is expensive," says Hanley, "Certainly, the construction is costly, but the fiber itself is, surprisingly, inexpensive."

Delivering dedicated unsplit fiber strands, as Netly does, requires a massive amount of fiber. Luckily for carriers, Netly offers a wholesale price per fiber strand. Regardless of the connection length (non-mileage sensitive) or speed offering, ISPs pay the same price. For example, Netly's Solana Beach system has a 30,000-fiber strand capacity for a city of approximately 6,000 households. The keywords here are "future-proof capacity."





Netly's use of Corning® RocketRibbon® Extreme Density cable gives their customers access to the highest bandwidth capacity with a smaller footprint, 30% faster network installation time, reduced risk, and uncompromising attenuation when compared to other high-fiber-count cables.

The company also uses blown fiber conduit systems, so the network is flexible enough to add fiber capacity over time without additional construction or disruption to the community. If additional fiber is needed, the company is ready to increase strand counts without adding construction impact on the community.

While some individuals in the communications industry refer to "unlit" fiber as "dark fiber," Netly prefers the term "Ready for Light," which connotes confidence in the strength and future-readiness of its system. The single-mode fibers deployed by Netly can support speeds of a terabit per second or more.

"Knowing the capacity of our fiber system, we are confident in saying that a Netly city is truly future-proof," says Demers. "As data speeds and consumption increase over time, our system is ready."

Netly offers long-term leases, typically preferred by service providers who desire predictable costs and Irrefutable Right of Use (IRU) contracts to meet the accounting requirements of regulated companies that wish to make capital investments for their fiber-based systems.

Netly's network build includes an Edge Fiber Center (EFC), which Jack Demers describes as a facility that "enables our service provider customers to operate their chosen network equipment and access fiber strands to any point in the city. Such a facility allows our customers to operate a secure, controlled, plug-and-play environment. You can think of a Netly EFC as part data center, part central office, with the ability to cross-connect to other carrier networks." In Netly's case, management of fiber interconnects to various operators' chosen equipment is enabled by Corning's Centrix™ high-density frames.

With a maximum fiber strand length of 20 kilometers, Netly's EFCs are designed to support the low-latency requirements of certain technologies, including augmented and virtual reality, certain IoT applications, autonomous vehicles, and other emerging applications. The company's goal in providing EFCs for its customers is to ensure every location within the serving area meets or exceeds the latency specifications for autonomous vehicles and 5G networks. Netly reaches these areas by microtrenching in city streets, deploying micro ducts with MiniXtend® micro cables.





The Impact

In December 2021, Netly completed its first open-access system buildout in Solana Beach, California. The company is actively building in Encinitas, California, and is expected to break ground in three additional cities in 2022.

Moving forward, Demers and Hanley want nothing less than to change the way internet infrastructure is built in the United States. Their approach to this mission includes not only building open-access fiber networks but deploying ample fiber for the next 50 years. The system can support unlimited bandwidth everywhere by using dedicated strands without splitters in any part of the network architecture and enable service providers to define, control, and manage their offerings. And EFCs can support all service providers, including wireless carriers. Over the next decade, Netly has set a target of building out as many fiber-underserved cities as possible.

“We believe that fiber in the ground should be a shared resource available to every company that needs connectivity, with fair wholesale pricing,” say Demers and Hanley. “We believe Netly’s Ready for Light systems increase innovation and make America more competitive.”

Learn more about
Netly Fiber’s network builds

Explore our fiber optic cable solutions like Corning’s **RocketRibbon® Extreme Density Cable** or **MiniXtend® Cable Solutions**

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