Amphenol
NETWORK SOLUTIONS™

# Partnering for Rapid Deployment Multifiber Distribution

## Case Study

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## Customer

**National (USA) MSO-type service provider**

## Background

Collaborating with a national multiple-system operator (MSO), Amphenol Network Solutions developed the LiNC rapid-deployment fiber optic distribution solution for central offices, headends, data centers, and other high-density applications. The MSO sought a comprehensive system that could be deployed efficiently, reduce technician/engineering time and materials, and minimize slack fiber optic cable—all while delivering MPO fiber to equipment in multiple locations in the central office.

## Application

- Large-scale fiber optic deployments utilizing MPO backbone cabling
- Central office/headend facilities

## Challenges

- Need for improved fiber access while maintaining maximum protection
- Connection of MPO cable to equipment over multiple distances
- Desire to accelerate deployment while reducing expenses and required inventory

# The Solution

### LiNC Rapid Deployment Fiber Optic Solution

## Our Approach

It started with a listening session between field engineers at the MSO and the Amphenol Network Solutions product development team. Hearing the engineers' concerns with existing panels and their objectives for future deployments during this brainstorming meeting led to an initial prototype.

From there, the team worked directly with senior engineering managers to further refine the solution to specifications, creating 3D-printed prototypes and other iterations along the way. This process uncovered multiple objectives specifically related to panel usability, all of which LiNC covers.

- Safely protect fiber while improving ease of ongoing use
- Create easier access to individual connectors without disturbing others
- Enable visual inspection of end faces with a scope
- Simplify accessibility for the usage of click cleaners without impacting panel connectivity
- Streamline delivery of MPO trunk cable to racks in various locations within the facility

The partnership resulted in multiple patent-pending technologies engineered into the panel, all of which focus on accessibility and usability in an effort to simplify the daily tasks of field engineers and increase system reliability.

## Results and Benefits

Comprehensive features make LiNC a faster, more elegant platform for trunk cabling in high-capacity applications.

- **Faster deployment.** The most essential LiNC feature. Rather than measuring trunk cable distance requirements then ordering products accordingly (and waiting on delivery lead times), users simply pay out pre-installed trunk cable from the LiNC spool as needed.
- **Four integrated trunk cable spools for delivery to multiple locations.** Applications frequently require connectivity with equipment in a variety of physical locations, over a range of distances. With four individual trunk spools, users can route cable to four independent locations.
- **Extended MPO connectors at rear of panel.** Easier to connect trunk cables, as well as access connectors for maintenance.
- **Self-centering module feature for easier front access.** Patch modules slide forward and center vertically on the front of the panel so users can more readily access connectors. Patent-pending technology locks modules in place for security.
- **Integrated slack storage.** Rewind excess trunk cable onto the spools for seamless storage in no additional rack space.
- **Removable spools and MPO length options to fit the application.** LiNC systems are available with multiple trunk cable lengths available to fit specific requirements. Integrated spools accommodate slack storage.
- **Reduced material stocking.** No need to stock cables at various lengths to fit multiple applications.
- **Double the circuit density.** Compared to similar panels, LiNC doubles the circuit density due to its integrated design, helping to maximize valuable rack space.

## Usage

LiNC systems are deployed nationwide, with multiple customers.

## About the Author

### Harley McAllister

**Product Manager**

Harley McAllister is a Product Manager with a Bachelor of Science degree in Engineering from Dartmouth College, bringing more than 20 years of experience in the tech industry, with a specific focus on telecom for more than a decade. With two awarded patents in telecom, Harley possesses a deep understanding of the field and a knack for problem-solving, particularly when it comes to addressing customer needs. Outside of his professional endeavors, Harley enjoys being a dedicated father to eight children, which helps him stay young at heart.

## About Amphenol Network Solutions

At Amphenol Network Solutions, we are driven by a passion for innovation and a relentless commitment to creating customized solutions that seamlessly integrate with your unique requirements. With our deep understanding of fiber optic technology, we specialize in creating tailored solutions that anticipate and adapt to the rapidly evolving demands of your network. Through our responsive support, unwavering commitment, and ongoing collaboration, we ensure that our solutions are ready to deliver superior performance and reliability.

**For more information, visit amphenol-ns.com**