Fiber-to-the-X case studies
Greater China

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Fiber-to-the-X case studies

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Fiber-to-the-X (FTTX) case studies—Greater China

The demand for fiber connectivity is unprecedented. Cloud computing, streaming high-definition video, gaming, the "internet of things" and other bandwidth-intensive applications are driving fiber buildouts in networks of all sizes. A scalable, future-ready infrastructure will help support speed and efficiency. The challenge is to plan now for what comes next.

In this e-book, we'll show you what's available today and give you a sneak peek at what's possible tomorrow for FTTX networks around the world. CommScope has both the expertise and solutions to address your unique challenges as you face network upgrades and uncertainties.

We help build networks from the ground up with patented, robust technology that is easy to install and maintain, cost-effective to deploy and built to withstand harsh environments. At the same, we listen to our customers and adapt quickly to meet their needs.

In the success stories that follow, you'll discover how our decades of experience and field-proven products will help you get the job done right the first time—every time.

Networks are constantly changing; trust CommScope to know what's next.

01 - Fast forward to the future

End-to-end solutions

We offer a comprehensive fiber portfolio, spanning the customer premises, MDU, fiber access network, through to central office and head-end equipment.

Fast forward to the future

This telecom operator provides wired and wireless network and infrastructure services. Its investment in fiber optics and a high-speed, high-bandwidth, full-fiber network led to the need for a comprehensive fiber management solution.
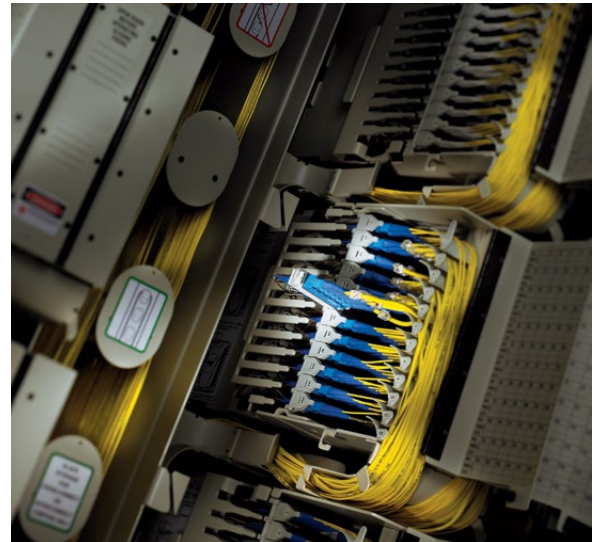
Space race

Over time, the operator purchased off-the-shelf cable management products that couldn't keep up with future growth. Limited access space and lack of cable management features affected the network's flexibility and reliability. An increasing number of optical fiber ports and lack of optical cable management resulted in cluttered cables and low usage rates for device ports.

Clean and lean

CommScope's Next Generation Frame solution would be the ideal upgrade. The modular design features a unified rack structure that has abundant trough space, minimizing fiber pileup and congestion. Accessing cables and connectors is easy with this horizontal platform. The frame also makes it easy for the operator to move or add equipment.
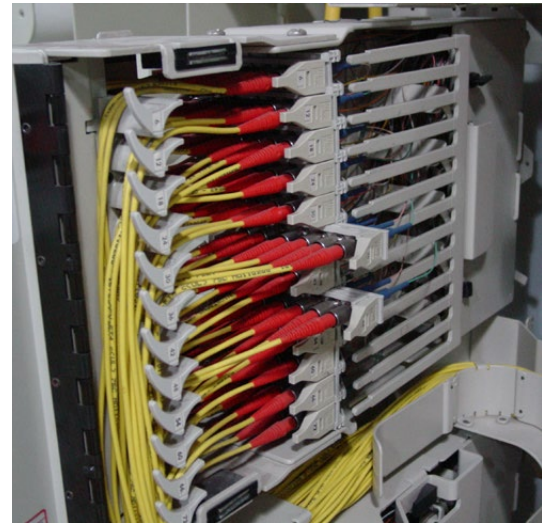

Download our product catalog to learn more about our frame solutions.

How would this telecom operator meet the demands of a full fiber network?

Seeing success

The operator faced a tight deadline to find a reliable and secure solution with an upcoming international conference, "BRICS Summit," that required stable, secure and highly effective communication.
A CommScope partner quickly surveyed 15 central equipment rooms where the frame solution would be installed—identifying exact connector lengths for each site. CommScope helped fulfill the orders, meeting the operator's schedule.

The operator chose a 96-core module with an option to upgrade to 144-core, depending on future needs. The equipment rack can expand up to 40 percent using CommScope's Next Generation Frame. Components such as splitters, couplers and wavelength division multiplexers are also available to help the operator enhance the usage rate for fiber resources.

See how small changes in your network can make a big difference in your efficiency.

Challenges of an evolving network

Complex fiber migration & management

Rising bandwidth demands

Increasing pressure to ensure reliability

Cost containment throughout the network

Reliability on demand

Telecom operators need systems and equipment they can count on and grow with for optimal performance and uptime. CommScope's plug-and-play solutions easily accommodate frequent adds and changes to equipment while promoting speed and efficiency.

The right fiber solutions are scalable and grow with you.

High-density, flexible optical distribution frames

NGF Product Brochure

White Paper: Fundamentals of fiber cable management

Video:CAPEX and OPEX consideration impacting ODF layouts

Case Study
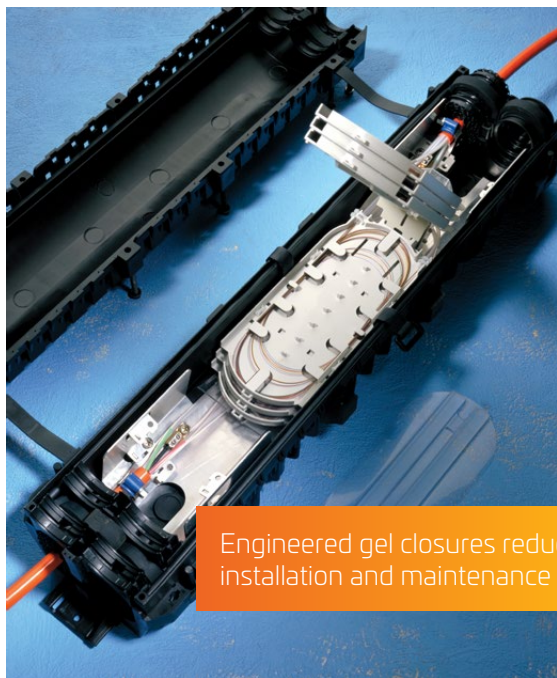# 02 - Going the extra mile

Going the extra mile

Fiber-optic splice closures are essential for modern networks. An Asia-Pacific fiber-to-the-home operator sought a durable and reliable closure solution that would safeguard its broadband network today and beyond.

Moving fiber forward

Closures house and protect fibers and modules at splice points and are critical to expanding network capacity and productivity. The operator chose CommScope's gel fiber-optic splice closures (FOSC™), which combine fiber management hardware with a highly reliable sealing system.

Engineered gel closures reduce installation and maintenance time.

Megatrends drive the need for fiber connectivity

FTTx
IoT
4K video
IPTV
5G
Digital Economy
C-RAN
Big Data
DOCSIS 3.1
Cell Densification
HFC
Wearables
Smart Cities
FTTH
LTE
Cloud
Virtual Reality
Convergence
Gigabit Wi-Fi
Autonomous Vehicles

Installation made easy

CommScope's fiber splice closures are designed for installation without special tools or skills. On-site installation takes 15 percent less time than when installing traditional "horseshoe" gel closures. The operator would also reduce on-site maintenance time by 30 percent using CommScope's FOSC solution.

Passing the weather test

CommScope's fiber-optic splice closures resist moisture, vibration, temperature, chemicals and ultraviolet rays thanks to advanced gel technology that protects connections.

Connections that count

CommScope's technology simplifies splice management and maintenance. Designed for external networks, FOSC closures are reliable and are easy to install and maintain.

Keep your network running even in the harshest conditions.

Splice Closures In-Line

FOSC Product Brochure

White Paper: FTTH Architectures Overview

Blog: Top 10 CommScope Innovations: Outside Plant Closure Solutions
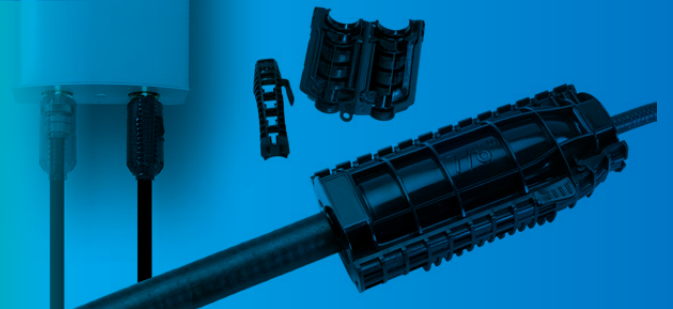
Case Study
03 - Closing the loop

Closing the loop

A state-owned telecom operator had been using conventional adhesive tape to seal feeder line connectors in the country's base stations. The tape needed to be replaced regularly, increasing maintenance costs. Adding to the complexity, space constraints made it difficult for technicians to access antenna terminals.
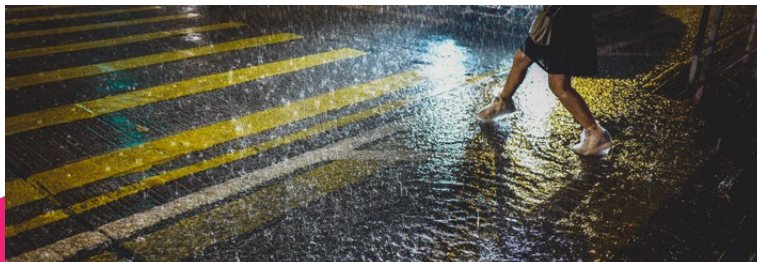
Speed of deployment

Robust products install rapidly, require minimal training and tools, simplify logistics, and streamline maintenance.

Quality counts

High-quality closures are vital for successful installations and performance. The telecom operator quickly needed 110,000 sets of line protection closures for 5,000 base stations. The closures had to be ordered and installed in about three months during the country's rainy season.

The ultimate option

CommScope met the operator's deadline with rugged FAST/GSIC gel-sealed closures. Easy to install and made for tight spaces, they provide long-term waterproof protection. The operator was impressed with the product quality and simple installation and retained CommScope to provide supply line protection closures and related solutions for the near future.

Fiber closures are a key part of any deployment. Be sure to select the right long-lasting solution for your environment.

Flexible Service Terminals

FAST/GSIC Brochure

Blog: Test the Conntection

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CommScope pushes the boundaries of communications technology with game-changing ideas and groundbreaking discoveries that spark profound human achievement. We collaborate with our customers and partners to design, create and build the world's most advanced networks. It's our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com.

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Visit our website or contact your local CommScope representative for more information.

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