Fiber to the home solutions

To migrate to FTTH with agility and ease, count on CommScope

Europe, Middle East and Africa reference guide

COMMSCOPE®

Realizing full potential with CommScope

Driven by explosive growth of network data traffic and the ability of fiber optic to deliver more traffic volume than any other medium, the use of fiber is rapidly expanding throughout the world. While the end-user device may be wired or wireless, having an all-fiber network from the central office or headend to the home, business or customer premises ensures the highest network performance—and satisfied customers.

Over the years, hybrid fiber coaxial (HFC) and XDSL technologies have continually evolved and pushed fiber deeper into the network. Today, in greenfield deployments—and specifically in competitive situations—FTTH is already a reality in many regions around the world. In addition, with 5G on the horizon and small cells requiring gigabit-capable backhaul, the concept of one fiber network that can support all service needs is becoming a preferred solution for some communications providers.

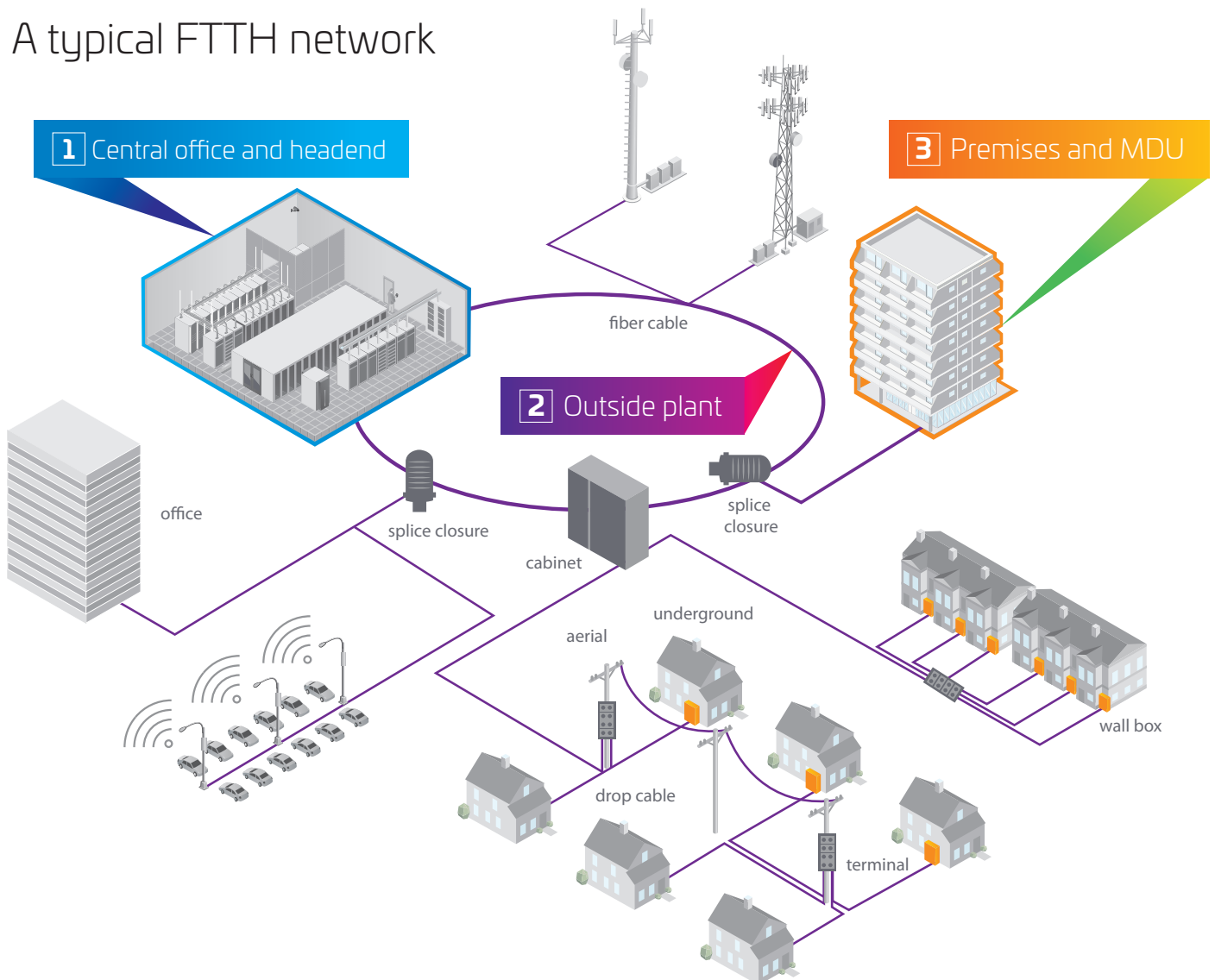At CommScope, we understand not all customers have the same needs—and that technology migration can look very different. Our unique industry experience and history in both fiber and copper put CommScope in a unique position to help customers migrate to FTTH with ease and agility—regardless of their current technology or future needs.

Speed and ease of deployment—the smart way

With decades of reliable, proven results in FTTH projects—paving the way for very large or very small customers around the world—we can help you optimize your network design, choose the most suitable products and plan your deployment.

While our global offering is much larger, this quick reference guide was specially created based on a selection of popular solutions used in European, Middle Eastern and African fiber to the home deployments.

A typical FTTH network

1 Central office and headend

3 Premises and MDU

fiber cable

2 Outside plant

office

splice closure

cabinet

splice closure

underground

aerial

wall box

drop cable

terminal

Technology is rapidly changing. Trust us to know what's next.

We have been trusted by service providers globally with what could be considered the very "heart" of the network—the central office—going through many technology evolutions.

As FTTH, DOCSIS 3.1 and G.fast gain momentum, new fiber is added to the inside plant central office/headend (CO/HE). New emerging trends and technologies, such as convergence, NFV and SDN will have an important impact on the future evolution of the CO/HE. In response, we provide high density solutions that are modular to meet the challenges of technology migration evolution.

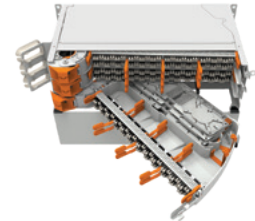For complete central office and headend solutions, please visit:

CommScope solutions
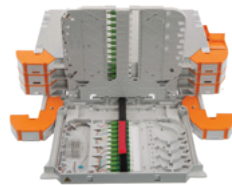
Optical distribution frame system

Convergence-ready, **FACT®** is an advanced ODF solution, yet simple and tool-free. Field or factory terminated, FACT provides connectivity point between outside plant fibers and equipment in CO/HE.

· High density and modular design
· Compatible with passive devices—splitters and WDM

FiberGuide® raceway system

Industry's most comprehensive system, **FGS** provides absolute fiber protection of patch cords and multifiber cable assemblies.

· Fast to install—requires no tools to install or take apart
· Material optimized for high durability

The modular front patching system, **MFPS**, is specifically designed to meet the current and future challenges. Field-or factory-terminated, the MFPS shelf provides front patching flexibility in CO/HE, data centers, high fiber count distribution hubs, and small point-of-presence points.

· High density and modular design
· Plug-and-play splitters

Plug-and-play splitters

NG4access® modules provide splitters and xWDM and are compatible with FACT.

Preferred for its compact design, the **OCM** series provides a pre-connectorized housing system for splitters and passive devices, compatible with enclosures and terminals.

More than fiber connectivity— peace of mind

Service providers are deploying more fiber in the outside plant for residential broadband, business customers, wireless backhaul and fronthaul services. Here, customers face several challenges— from swift response for new service subscriptions to decades of interrupted connectivity.

What makes our outside plant solutions truly valuable is knowing they protect every single connection. In the end, they deliver peace of mind.

Decades of collaboration between our material scientists, resin suppliers, independent test labs, and customers have enabled CommScope to offer a durable enclosure optimally designed to withstand any extreme environment conditions and any location- direct buried, manhole or aerial. With the need for access terminals re-entry, we employ a revolutionary gel sealing technology, highly effective and easy to use without any special tools.

For complete FTTH outside plant solutions, please visit:

CommScope solutions

CommScope offers a diverse fiber cables portfolio. Visit our site for details:

Fiber cables

Trunk closures

The fiber optical splice closure, **FOSC®**, is the original and world-leading integrated enclosure with mass fiber organizer system for long-haul and feeder networks.

· More than 30 years in the field, FOSC has become the standard choice for installers

· Compatible with all cable structures and fiber types

· Superior gel sealing technology and heatshrink

Feeder closures

The fiber splice tray organizer, **FIST®** is the original single-circuit and single-element transient loss-controlled fiber closure and organizer system for the feeder and distribution application.

· FIST is the standard choice for installers

· Configurations available for all environments, without risk of interrupting existing life services and accommodating all cable structures

· Splitter and xWDM integration

Primary distribution node solutions

A street or wall-mount cabinet series, **CAB** is a fiber flexibility point system for the point-to-point and splitter or WDM-based, connection between the feeder and distribution network. Typical supported applications: digital loop carrier, fiber to the curb, remote switching and broadband access.

· Compact, modular design

In response to aesthetic and concealment challenges faced by municipalities deploying urban FTTH, CommScope has designed the sealed **FDH 4000**. This is an underground preterminated fiber flexibility point system for the point-to-point and splitter/WDM-based connection between feeder and distribution point.

· The highest density for its size
· Proven reliability in extreme environmental conditions

Distribution closures

Building on decades of innovation and industry leadership, **TENIO®** closures enable 30 percent faster, future-proof network deployments in 30 percent less space. TENIO is the most reliable and versatile integrated closure and fiber organizer system for deep fiber distribution networks.

· Simple and compact design with tool-free installation
· Capable of handling optical devices and network test access points
· Superior gel sealing technology simplifies training and reduces installation time
· Compatible with all fiber types

The inline splice closure, **SCIL**, is deployed at key splice points in the FTTX distribution and access network. The SCIL series is a family of integrated closure and fiber organizers for the feeder and distribution network connectivity points, which are optimal served with an inline closure design.

· Closure opens and closes with side latches for quick re-entry
· Superior gel sealing technology
· Compatible with all fiber feeder cables

Hardened terminals

The multiport service terminal (**MST**) series is a preterminated fiber access terminal using full size and small-form hardened connectors.

· Potential integration of passive optical devices and multifiber connectors for a tree-and-branch or star distribution network
· Plug-and-play provisioning without the need to open the terminal
· Low total cost of ownership

The **fiber indexing terminals series** is a preterminated hardened connectivity access terminal used as a building block for an integrated plug-and-play daisy-chain access network for point-to-point, point-to-multipoint and WDM-based FTTH.

· Fast and simple deployment and provisioning
· Scalable with ease, responding to new demand

Specifically designed for tight spaces, the flexible service terminal, **FST**, is a fan-out format of the full size and small-form hardened connector preterminated fiber access terminal.

· Potential integration of passive optical devices and multifiber connectors

· Plug-and-play provisioning and low total cost of ownership

Hardened drop cables portfolio

The outdoor and outdoor/indoor **preterminated drop cables** use full size or small-form hardened connectors or SC/LC-based connectors to deliver ultra-fast and simple deployment. Highly reliable with factory-built and -tested connectors to eliminate install variation.

Splice and patch terminals

The outdoor fiber distribution closure, **OFDC**, series is an integrated outdoor and indoor fiber access terminal for spliced and SC or LC connectorized fiber drops for any style of network layout, with the capability to integrate passive optical devices.

· Dual top cover for demarcation

· Superior gel sealing technology

Using the original and small-form hardened connectivity, the optical terminal enclosure, **OTE**, is an integrated fiber access terminal and closure compatible with passive optical device and multifiber connectors for a daisy-chain distribution network. It is available in a large variety of configurations to fit any network application.

The outdoor fiber drop repair closure, **OFDR**—with its rugged design and high reliability—has become almost an industry synonym for distribution fiber cable repair closure.

· Compatible with all fiber types

· Superior gel sealing technology

Many configurations, one way to build the future—modular

As fiber to the home builds accelerate globally to meet growing bandwidth needs, service providers continue to look for ways to install optical fiber deeper, to reach each subscriber's unit. From single-family units (SFU) to multidwelling/ multitenant units (MDU/ MTU), service providers are challenged by complex layouts, architectural obstacles, local regulations and high customer churn.

Built with the latest in cutting-edge technology, CommScope solutions provide unmatched savings in installation time, labor costs and performance while ensuring minimum lifestyle disruptions for residents.

For complete MDU solutions, please visit:

CommScope solutions

Building entrance boxes

Preferred by installers and almost an industry standard for entrance boxes, the **BUDI** sealed outdoor or indoor wall-mountable terminal provides an integrated single-circuit splicing organizer and connector patch panel for point-to-point, point-to-multipoint and WDM.

· Highly reliable with limitless configuration options and network flexibility
· Configurable for facility network sharing

The multi-operator box, MOBI, allows multiple service providers to connect customers in the same building via shared riser fibers. From a basic MOBI, with one operator and one customer box, an additional operator box to be easily added, at later times. All boxes are installed quickly and are stackable for space savings.

· Reliable, standard choice for installers

Floor distribution and termination boxes

The indoor floor distribution box, **IFDB**, is used for the connection of spliced or SC/ LC connectorized drop cables to the riser cable. In small and medium sizes, this is an all-in-one solution for both connectorized and spliced applications and integration of passive optical network splitters.

· Standard choice for installers
· Compact design

The fiber distribution box, **HFTP**, is an indoor fiber termination box for the spliced or SC/LC connectorized drop cables to the riser cable.

· Standard choice for installers
· Compact design

CommScope and you: let's shape the future together

CommScope collaborates with customers and partners to design, create and build the world's most advanced networks. We offer a winning combination of forward-thinking strategies; advanced technologies in fiber, coaxial and copper; and the following unique advantages:

More than 40 years of experience meeting the most demanding customer needs and deployment environments

Global reach, with more than 30 facilities for manufacturing, R&D, distribution and customer support

Commitment to innovation, with an annual R&D investment of more than $200 million and nearly 10,000 patents and pending applications

Integrated manufacturing and supply chain approach which delivers product quality, capacity and inventory management excellence

Recycle to the greatest possible extent, produce off-peak for enhanced energy efficiency and ISO14001 certification

We understand each aspect of network technology and anticipate what's to come in network design, management, creation, deployment and maintenance. For additional information and to see CommScope's FTTH global offering, please visit us at:

CommScope FTTH

Want to find out how we can work together and develop new solutions that precisely meet your needs and help meet current and future challenges?

Get in touch today.

Connect to the future with CommScope.

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. As a communications infrastructure leader, we shape the always-on networks of tomorrow. For more than 40 years, our global team of greater than 20,000 employees, innovators and technologists has empowered customers in all regions of the world to anticipate what's next and push the boundaries of what's possible. Discover more at commscope.com

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