

# Wireline network solutions

Empowering your network evolution. At CommScope, it's our job to know what is next.



# How CommScope helps you realize the potential of your network

Technology advances are transforming how we communicate, work and live. Wireline networks are at the epicenter of this transformation, providing broadband connectivity to subscribers, businesses, and cell sites. An ever-increasing number of platforms and technologies depend on this backbone.

This dynamic environment requires strategies and solutions to increase network capacity and coverage, quickly activate services, and migrate to next-generation access technologies. How should service providers design and build tomorrow's technologies and platforms? Respond to unforeseen market needs? Meet the ever-increasing demand for more capacity and zero downtime? Act quickly in an increasingly competitive environment?



By 2021 there will be 27.1 billion devices connected to IP networks

# Regardless of your migration path, CommScope is your trusted industry partner

Working hand-in-hand with thousands of service providers for decades helps us understand how the evolution of each network is unique. We empower customers to realize potential by offering the industry's widest selection of copper and fiber solutions and a wealth of expertise.

Whatever your migration path, we can provide a solution that meets your needs. Look beyond today's tradeoffs and anticipate the future.

# Anticipate the future with CommScope wireline solutions $\ominus$

# At CommScope, it's our job to know what's next.

We help you select, design and build tomorrow's networks. As there are no 'one-size-fits-all' solutions, we collaborate with service providers to ensure the optimal design and technology blend for each application. Everyone, from our solution architects to field application engineers, provides advice based on real-life experience and technology pros and cons.

#### Future ready

Architectures are changing as separate systems converge. CommScope's proven solutions and expertise ensure your network can support residential, business and wireless services—including small cells, CRAN and 5G. Deliver new services while accelerating return on investment and gaining efficiencies and economies of scale.

#### Scalable

Scalable, updatable, modular solutions improve CapEx, OpEx and ROI. CommScope helps you realize cost-effective network migrations, lay higher fiber count cables, allow for great density through wavelength multiplexing, deploy highdensity solutions and migrate to SDN/NFV and virtualized access architectures.

#### Agile

CommScope's robust products install faster, require less training and tools, simplify logistics and reduce time spent on site.





#### Reliability

What makes our solutions so valuable? Knowing they protect every single connection. Decades of collaboration between our material scientists, test labs, universities, research institutes and customers means our materials and sealants withstand extreme conditions. High UV stability and superior sealing allow products to perform in underground as well as aerial installations in any climate, from extremely cold to very hot and humid.

Trust CommScope to provide the best solution for your wireline migration path.



### CommScope wireline solutions $\ominus$



#### $\left. \mathbf{l} ight|$ Central office and headend solutions $\left( ightarrow$

Four decades at the forefront of innovation gives us an edge when it comes to building strategies and solutions for service providers to migrate to higher speeds, densities and capacity efficiently and evolve to SDN and NFV.

Designed with the future in mind, our range of optical distribution frames, panels and facility entrance cabinets are modular. This allows customers to scale up capacity based on demand and include ultralow loss options for enhanced connectivity methods in the most advanced virtualized environments. Our solutions deliver more than connectivity, as saving floor space and offering easy accessibility also become increasingly critical.



#### $\left. 1 ight]$ Central office and headend solutions $_{ ext{continued}}$ $\left( ightarrow$



**Optical distribution frames** (-The ODF series balances fiber connection density with circuit accessibility, in a spectrum of architectures and environments.

- Fast installation and lower deployment cost
- Splitters, monitors and C/DWDM modules extend functionality
- · Superior cable management

#### Fiber optic panels, modules, patch cords & cables

In response to needs for more bandwidth and lower latency, we have expanded our portfolio to include a new High Speed Migration series, leveraging the SYSTIMAX<sup>®</sup> fiber portfolio.

Bulk cable, pre-terminated assemblies, trunks and patch cords in singlemode or multimode, standard or ultra-low loss connectivity are built for high reliability.



#### Fiber entrance cabinets

Leveraging industry expertise from both outside and inside plant, the fiber entrance portfolio offers cabinets engineered to provide ease of installation from common platforms, superior cable management and bend-radius protection.

Over forty years of proven experience means we can be trusted to anticipate any need, solve any challenge and pursue any opportunity.

#### **2** Fiber connectivity solutions for outside plant $(\rightarrow)$



#### Fiber cables $(\rightarrow)$

CommScope—a trusted supplier of fiber-optic cables to the industry for decades—offers a comprehensive range of solutions for your every application and need: direct burial in trenches, underground and pre-installed in conduit, lashed to aerial utility poles and with options for self-supporting features or installation in pavement.

- · Easy to work: fast and efficient rollout
- · Built to withstand the challenges of their environment
- · Premise and indoor/outdoor cables—rated for all applications

#### Fiber splice closures $(\rightarrow)$

Closures house and protect fibers and value-add modules such as passive splitters and XWDM at splice points. With more than 30 years of experience and millions of units delivered, our solutions meet any feeder, distribution and access network requirement.

- Reduced total cost of ownership, thanks to intuitive design requiring no special tools or skills
- Resistant to moisture, manipulation, vibration, temperature, chemicals and UV rays
- Advanced gel sealing protects connections and allows multiple fast re-entries



Watch our advanced gel sealing video.

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#### Fiber cabinets and hubs ( ightarrow

Linking the last-mile access network to the distribution network requires passive and active cabinets, hubs, terminals and drops in different shapes and sizes. Our broad field-proven portfolio is highly suitable for networks with evolving topologies.

- Industry-leading port density, compact design, built and tested for most stringent environments
- Designed for operational efficiency and scalability, optimized for rural or urban needs
- · Ultimate functionality and flexibility with plug-and-play splitter and value-added modules, such as WDM



#### Fiber access terminals and drops ( ightarrow)

Having created the industry's most versatile portfolio, we provide access terminals for any network topology, any location and any extreme conditions. More, we offer solutions for any installer training level—from spliced to plug-and-play preconnectorized terminals.

- Rapid installation, testing, network reconfiguration
   and ease of access
- · High density and small footprint hardened connectors
- · Most innovative fiber indexing technology

#### Watch our fiber indexing video.



#### 🖪 MDU fiber 🔿



#### In-building fiber connectivity solutions

Complex layouts, architectural obstacles, space constraints, local regulations, high customer churn and access to customer premises are just some of the challenges service providers face when bringing fiber to residential or commercial buildings.

From the building entrance to the premise wall plate, CommScope's solutions for multidwelling units (MDUs) and multitenant units (MTUs) provide customers with splice and preterminated options.

The industry-renowned Rapid Fiber<sup>®</sup> for MDUs is a complete preterminated pull-and-click solution that substantially reduces the time and cost of FTTH installations. Vertical and horizontal fiber cable assemblies such as the RealFlex<sup>®</sup> fiber drop cable family offer small bend radii and are designed for maximum flexibility.





#### **4** Coaxial and RF $\bigcirc$

#### **Coaxial & RF Solutions**

#### Coaxial cables for last-mile access network

CommScope's coaxial cable portfolio offers superior shielding that prevents signal ingress and egress, which can degrade performance and interfere with cellular network performance. In addition, this portfolio provides:

- Superior performance over a wide range of applications—from satellite to residential, video distribution, broadcast and security
- Craft-friendly and fast installation with Advanced Coring Technology, ACT<sup>®</sup>
- · Sturdy construction, resistant to damage

Our residential solutions, HomeConnect<sup>®</sup>, provides a complete family of RF amplifiers and components. CommScope's design, manufacture and testing ensure all components are fully compatible and deliver the highest performance—low noise ingress and egress and common path distortion.

#### 5 Outside plant copper $(\rightarrow)$

#### Copper connectivity solutions

#### **Closures, cabinets and terminals**

New copper technologies such as G.fast promise up to gigabit speeds.

CommScope offers a range of easy-to-install street cabinets, copper splice closures, seals and cross-connect panels to help you maintain and extend the life of your copper plan. Technologies such as durable heat shrink or gel-sealed or self-cleaning contacts provide quick installation and re-entry capability.

LSA-PLUS<sup>®</sup> is a family of quick-connect solutions, now synonymous with security, reliability, quality and economic efficiency.

XAGA<sup>®</sup> splice closure system with SuperSleeve sealing material provides a fast, simple way to seal telephone cable splices in pressurized or nonpressurized telephone cables in aerial, buried and underground applications.





#### Download our FTTX Case Study Series eBook.



#### 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 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. To learn more, visit:

Wireline network solutions

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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