



Fiber and connectivity platform for data centers



Data center infrastructures are being pushed to the limit

Trying to improve your data center's capacity and response time or stay ahead of the explosive growth in demand? Sometimes it feels like the faster you run, the further behind you fall. If it's any consolation, you're not alone.

The pressure to increase bandwidth, ensure greater agility, improve availability, and accelerate deployment cuts across every data center environment—enterprise to hyperscale. It affects everyone up and down the IT chain: owners, network managers, integrators, installers, you name it.

Satisfying today's demands while preparing for tomorrow's changes is a full-time job. It involves all layers in the IT stack—starting at the bottom, with your physical layer infrastructure. When it comes to the fiber cabling and connectivity to support your evolving network, the list of requirements keeps growing.

Fast and reliable isn't enough anymore; you need a physical layer infrastructure that can pretty much do it all.

Port shipments in millions 15 Google, Amazon, Microsoft Other Tier 2/3 Cloud SPs Large Enterprises Google Google Amazor Amazor (end of 2019) Google 0 2018 2020 2021 2022 2019 2023 2024 Source: Copyright Dell'Oro Group

400 GE Switch port shipments by market segment

That's why CommScope developed Propel, our newest high-speed fiber platform. Modular, ultra-low loss and optimized for 16-fiber applications, Propel gives evolving data center networks a flexible, open path to 400G/800G and beyond.

- Create a path to 400G/800G and beyond
- Support 16-fiber applications
- Modular design
- Highly adaptable
- Quick to deploy
- Simple to manage
- High-speed migration path

- Ultra-low loss performance
- Method B Enhanced polarity
- Compact footprint
- Easily scalable
- Day-2 operational efficiency
- Guaranteed link performance

That's why CommScope developed Propel, our newest high-speed fiber platform for evolving data center networks.





Go beyond with Propel fiber and connectivity platform

Propel is a modular, ultra-low loss, end-to-end fiber platform capable of supporting your data center's growth through multiple upgrades and migration cycles. It features high-density fiber panels, modules, adapter packs and fiber assemblies and interchangeable components that deliver more functionality and speed with fewer parts. Now you can maximize design options and manageability while reducing deployment time, cost and complexity. As a member of the CommScope SYSTIMAX[®] family of solutions, Propel provides the innovation, value and support for which SYSTIMAX is known. Add CommScope's global availability, consistent quality, and on-call technical expertise, and you and your customers have the confidence to keep evolving—no matter how the market changes.



An end-to-end, future-ready, high-speed platform

Propel provides a single-source structured cabling and connectivity solution with all the bandwidth, headroom, design flexibility and ease of installation you need to keep pace with your evolving data center demands. With MPO16 fiber cabling and connectivity, you can seamlessly migrate to more efficient 400G/800G deployments, while fully supporting your legacy 8-, 4- and 2-fiber applications.

Fiber assemblies

The Propel fiber assembly portfolio provides ultra-low loss fiber and ease of installation for any application. It includes singlemode, OM4 and OM5 multimode trunks, ruggedized fan-outs, arrays, and patch cables that support faster, more accurate deployment.

Panels

Propel high-density panels are designed to adapt and grow as your needs change. Like all Propel components, the panels are completely modular and interchangeable. They support 16-fiber connectivity and up to 144 LC-connected fibers per RU (or 288 fibers using SN connectivity) giving you the flexibility and density to seamlessly advance to 400 Gb, 800 Gb and beyond.

Propel panels incorporate unique design features that make them faster to deploy and easier to manage than older generation panels. For example, panel blades can be removed with one hand for easier maintenance and changes by a single technician. When inserted, the blades lock in place on both sides to provide more secure patching. A re-designed rear cable management system allows more cable to be securely stored and attached.

At the same time, each panel is highly versatile. Module and adapter pack sizes can be scaled or mixed on each panel or blade.



Modules and adapter packs

Four sizes of interchangeable Propel fiber modules and adapters provide the breadth of capabilities for virtually any configuration. Modules support ultra-low loss OM4, OM5 wideband and singlemode fiber applications. MPO modules provide plug-and-play fiber connectivity—enabling greater flexibility, faster deployment, and easier moves, adds and changes. With 8-, 12-, 16- and 24-fiber modules and a wide range of MPO, LC and SN adapter/connector options, the Propel portfolio delivers the versatility your network demands with a minimum number of components.

LC and MPO 8-, 12- and 24-fiber components feature internal shutters to provide enhanced dust protection without the need for disposable dust caps. The shutters are carefully designed to prevent contact with connector ferrules and are translucent to allow light from a VFL to show through. Modules and adapter packs of varying sizes can be mixed on each blade for a best-fit panel configuration. All modules are standardized on Method B Enhanced polarity for easier, faster deployment of duplex and parallel applications.

Modules



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Fast, flexible deployment

All components in the Propel portfolio are designed and engineered to save time and space during planning and deployment, while ensuring the optical performance and agility to adapt your configurations on the fly. As a structured cabling portfolio, it enables network managers to scale quickly, easily and safely.

8I C

12LC

16LC



Guaranteed optical performance

When it comes to optical performance, Propel goes well beyond the minimum standards to ensure plenty of operating margin and superior network performance. Each component is labeled with a QR code linked to the component's unique serial number. Using CommScope WebTrak® product tracking platform, you can easily verify the optical performance of any element when it left the factory. For added peace of mind, all Propel components are backed by our SYSTIMAX 25-year extended product and Application Assurance warranty.



Access performance testing and specifications for Propel products utilizing our WebTrak system.



Ultra-low loss optical performance

Precision connector polishing, state-ofthe-art fiber alignment and process consistency drive factory efficiency with consistently high product quality and cleanliness. Enables connection flexibility and/or extended distance for applications.



Higher data transfer speeds

Supports customer migration from 25 Gbps to 50 Gbps, 100 Gbps, 200 Gbps lanes and beyond to enable faster applications like 400 Gbps, 800 Gbps, 1.6 Tbps and greater network capacity.



Guaranteed optical performance

CommScope Application Assurance verifies critical applications will work on our platform and backs them with a full parts, labor, and application warranty.

Management made easy

Propel is designed to help you better manage, maintain and plan your evolving infrastructure.

Day-2 operational efficiencies

Provides greater connectivity flexibility; able to support multimode or singlemode and serial or parallel deployments, including quad (eight-fiber) or octal (16-fiber) parallel/breakout applications.

Technology agnostic

Designed for next-generation network speeds and topologies, Propel supports you where and when you're ready to upgrade to demanding applications like artificial intelligence or machine learning.

Sustained momentum across the data center spectrum

Propel is unique in its ability to provide market-leading technology benefits regardless of your role or data center's environment. It can add value to all areas of your data center—from hyperscale and multi-tenant data centers (MTDCs) to large, small and medium enterprise facilities.

Hyperscale and cloud-based data centers

With the ability to gracefully support high speed migrations to 400 Gb and 800 Gb and flexibly scale to any size, Propel helps hyperscale and cloudbased data centers meet the explosive demands of a hyperconnected world.

Large enterprise data centers

Large enterprise data centers: Propel delivers the ultra-low loss optical performance and high-speed data transfer that larger data centers need to leverage new and emerging technologies.

Multi-tenant data centers

To support more hyperscale providers and edgebased tenants, MTDCs need the flexibility to ensure higher-bandwidth, lower-latency performance. Propel's modular component design and guaranteed application performance do just that.

Small to medium enterprise data centers

Small to medium enterprise data centers: As part of the SYSTIMAX family of solutions, the Propel modular fiber platform gives smaller enterprise data centers the high-speed performance and simplified portfolio to easily adapt and manage their infrastructure.



The support and strength of a global leader

Hyperscale, cloud-scale or enterprise, your data center is moving fast. CommScope has the global infrastructure technology, experience and professional services to keep you ahead of the changes.

We don't just set the standards; we help create them working with every major standards body to define the trajectory of the technologies that shape your future. That insight also informs our development roadmap. With global agility and 40+ years of experience, we're able to quickly transform your vision into powerful solutions.

When you need help, we're there with a worldwide partner network, 100+ in-region field application engineers, and the technical strategies and services to keep your infrastructure operational and optimized. CommScope provides the global strength and confidence to face the future without fear.

Let's get started

Always on, always ready—it's our job to know what's next. Working together, we'll meet your challenges head-on and help you maximize the potential in your network.

For more information on CommScope's Propel portfolio for hyperscale, cloud-scale and enterprise data centers, contact your CommScope representative or visit www.commscope.com/propel.

Let's get started.



CommScope pushes the boundaries of communications technology with game-changing ideas and ground-breaking 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 is our passion and commitment to identify the next opportunity and realize a better tomorrow. Discover more at commscope.com



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