

SYSTIMAX® 2.0 FREQUENTLY ASKED QUESTIONS



Q: What is SYSTIMAX 2.0?

As an award-winning brand of premium infrastructure solutions, SYSTIMAX technology is built on four decades of continuous innovation and reliable performance. SYSTIMAX 2.0 new solutions continue that legacy, adding next-generation solutions and services that work to address the emerging challenges faced by our enterprise building and data center customers. More than new and innovative solutions, the SYSTIMAX 2.0 portfolio brings renewed creative energy and vision to the industry.

These new solutions can be copper, fiber, intelligent management, edge architecture and extended reach solutions, and others, all designed to address our customers' biggest connectivity concerns.

Q: How is SYSTIMAX 2.0 different from SYSTIMAX?

SYSTIMAX 2.0 solutions elevate and evolve the SYSTIMAX brand, enabling CommScope Enterprise customers to adapt to increasing network disruption and change. All solutions and services will continue under the SYSTIMAX brand but with an increased focus on the future. With SYSTIMAX 2.0, CommScope raises sustainable innovation, performance and customer support to new levels, inviting customers to reimagine the possibilities of their infrastructure.

Q: What solutions are included within SYSTIMAX 2.0?

SYSTIMAX 2.0 solutions feature all legacy SYSTIMAX solutions, plus the following new additions:

GigaSPEED® XL5™: A premium solution that supports 2.5/5 GbE applications up to 100 meters. The four-connector design is ideal for multigigabit applications like backhaul for next-gen wireless access points.

VisiPORT™: An easy-to-deploy and easy-to-manage solution that monitors the status and capacity of all copper and fiber ports in real time. Intelligent panels and port sensors automatically detect port activity, alerting users to issues such as insufficient capacity, unauthorized patching, device availability and more.

Propel™: An ultra-low-loss fiber platform that provides the modular agility and simplified management to support ongoing network upgrades. With 16-, 8-, 12- and 24-fiber connectivity, the Propel platform is ideal for data center and enterprise networks.

Constellation®: A high-efficiency, edge-based power/data platform that combines fault-managed power, powered fiber

cabling and Constellation Points in a distributed star topology. It delivers 10X more power and 5X longer distances than conventional LAN/IP networks.

SYSTIMAX Assurance™: A 360-degree customer care program that supports the customer across the entire network life cycle. It includes all current SYSTIMAX support and adds online training, project installation and onsite design support, 24/7 tech support, monthly newsletters and more.

Q: Are we abandoning any existing SYSTIMAX products?

No. All legacy SYSTIMAX solutions will continue to be available and supported in the SYSTIMAX 2.0 solutions. For example, there are no plans to discontinue our GigaSPEED XL® copper solution.

Q: When will the new SYSTIMAX 2.0 solutions be available?

GigaSPEED XL5: Will be available in Q2 2024.

VisiPORT: The VisiPORT patch panels are available for immediate installation. The VisiPORT controller and firmware will be available in late Q2 2024.

Demo and proof-of-concept installations can be supported immediately, as well.

Constellation: Constellation solution expansion availability dates (target, not guaranteed): Rack-mountable version and hybrid fiber/DC power indoor/outdoor cable, both for North America, will be available in late Q2 2024.

SYSTIMAX Assurance: Immediate availability

Q: Will CommScope be announcing more solutions for the SYSTIMAX portfolio?

Yes, this first announcement represents “the first wave” of enhanced solutions. Additional solutions are now under development and will be announced in future quarters of 2024 and 2025, closer to their target availability dates.

Q: Will there be any changes to the channel program to support SYSTIMAX 2.0?

Our partners play a critical role in the success of SYSTIMAX 2.0 solutions and our continued portfolio evolution. We are introducing new segmentation to our channel program that will recognize and reward top-tier partners who continue to invest in and promote our leading solutions. Please contact your CommScope account representative, certified channel business partner, or channel partner for more information.

SYSTIMAX[®] **GIGASPEED XL5**[™] FREQUENTLY ASKED QUESTIONS



Q: What is GigaSPEED XL5?

The GigaSPEED XL5 solution is the newest addition to the GigaSPEED family and the SYSTIMAX copper portfolio. It is a Category 6 solution, like the GigaSPEED XL[®] platform, but provides higher bandwidth and assured application performance for 2.5GBASE-T and 5GBASE-T applications with up to 100 meters in channel length.

GigaSPEED XL5 is not a Category 6A solution. For 10G capacity and applications, the SYSTIMAX portfolio offers its well-known GigaSPEED X10D[®] solution.

- GigaSPEED XL → up to 1 G
- GigaSPEED XL5 → up to 5 G
- GigaSPEED X10D → up to 10 G

GigaSPEED XL5 is designed for customers who foresee a need for applications up to 5 Gbps within their planning horizon.

Q: What advantage does XL5 provide over XL?

The GigaSPEED XL5 solution deploys our patented variable twist and strand technology which substantially improves internal and alien crosstalk performance. This technology, borrowed from our GigaSPEED X10D cables, supports up to 5 Gbps in four-connector 100-meter channels with fully bundled horizontal cables. All XL5 jacks, panels and cords also use unique patented technology to further support application assurance to 5 Gbps Ethernet.

Q: Is XL5 replacing XL?

No, both solutions will coexist to meet different customer needs.

Q: When should customers choose XL5 instead of XL or X10D?

It depends on the customer's application requirements and technology roadmap. Currently, customers choose between GigaSPEED solutions assured to meet applications up to 1 Gbps (GigaSPEED XL) or applications up to 10 Gbps (GigaSPEED X10D).

The GigaSPEED XL5 solution gives customers a third option that provides application assurance for speeds up to 5 Gbps. Thus, it satisfies the need for a solution that can support 2.5 Gbps and 5 Gbps applications, without mitigation or component upgrades. This makes GigaSPEED XL5 an attractive option for devices that need multigigabit bandwidth without necessarily having to upgrade to a 10 Gbps solution like GigaSPEED X10D.

Note that the need for speed and planning horizon may vary from customer to customer and even building to building for a particular customer.

Q: How does XL5 support access points designed for the latest Wi-Fi standards?

Many suppliers developing Wi-Fi[®] access points (WAPs) capable of Wi-Fi 6 and Wi-Fi 6E (i.e., IEEE 802.11ax) call for 2.5 Gbps and/or 5 Gbps Ethernet backhaul connections to achieve their maximum stated performance. If using Category 6 for backhaul, the devices may automatically fall back to lower speeds since the cabling channel may not support the maximum speed. Previously, customers would need to install a Cat 6A (10 Gbps) backhaul to get the full potential of these Wi-Fi 6 and Wi-Fi 6E WAPs. The GigaSPEED XL5 solution allows customers to realize the maximum capability of these WAPs without upgrading to Cat 6A.

Q: How is XL5 a more sustainable solution than a standard Cat 6 solution?

Since the GigaSPEED XL5 solution provides the required backhaul performance for the latest Wi-Fi 6 and Wi-Fi 6E WAPs, it provides a longer lifespan than traditional Cat 6 connectivity. Infrastructure that is only meeting Cat 6 performance will eventually need to be removed and replaced as bandwidth requirements increase over time. By enabling customers to defer this rip and replace, GigaSPEED XL5 reduces the network's carbon footprint.

Q: How do installation practices for XL5 differ from XL (process/test requirements)?

The same installation and test procedures utilized for the GigaSPEED XL solution can be used for the GigaSPEED XL5 solution. GigaSPEED XL5 is assured by design, so no additional test procedures are required to certify GigaSPEED XL5 installations for 5 Gbps application assurance.

Q: Does the current Application Assurance apply to GigaSPEED XL5 cable and non-SYSTIMAX apparatus, such as jacks, panels, and cords?

No. All components must be SYSTIMAX GigaSPEED XL products or better.

SYSTIMAX® GIGASPEED XL5™

FREQUENTLY ASKED QUESTIONS



Q: Is the XL5 cable thicker than the XL cable?

It's nearly the same diameter, so the same installation practices are to be used. The flexibility is comparable and bend radius restrictions are identical. As a result, GigaSPEED XL customers can use their existing installation tools and processes for GigaSPEED XL5 deployment.

Q: When and where will GigaSPEED XL5 be available?

Q2 2024 and worldwide. Please contact your CommScope account representative, certified channel business partner, or channel partner for more information.

Q: Is there any other similar offer in the market right now?

Not that we are aware of at the present time. To follow NBASE-T standard guidelines, any other Cat 5e or Cat 6 solutions should be properly assessed and, if needed, implement mitigation or upgrade some components. The GigaSPEED XL5 solution requires no mitigation to support 2.5/5G Gigabit Ethernet applications.

Q: Will there be EPD/LCA documentation for the new GigaSPEED XL5 products?

Yes, same as with our other copper products.

Q: What safety listings will the XL5 cables be available in?

The safety listing of GigaSPEED XL5 cables will be the same as the current GigaSPEED XL cables. The cables will be designated the 81B series as follows:

- 1081B: CMR (riser) rated.
- 2081B: CMP (plenum) rated.
- 3081B: LSZH (IEC 60332-1, IEC 60332-3, CPR -Dca, Cca, Bca) rated.

They will be available during the second quarter in various popular jacket colors.

Q: Is there any training required to install XL5?

Yes. The training requirements are the same for GigaSPEED XL and XL5 solutions.



Q: What is the VisiPORT solution?

The VisiPORT solution is a plug-and-play port monitoring solution that delivers real-time information regarding port status and port capacity for copper and fiber ports. Intelligent panels and port sensors automatically detect port activity, alerting users to issues such as insufficient capacity, unauthorized patching, device availability and more. It enables faster and more accurate planning and decision making while eliminating the need for manual tracking and auditing.

Q: How does this solution address customer needs?

The VisiPORT solution is an easy-to-deploy and easy-to-use solution that seamlessly complements the customer's existing documentation tools and IT processes. It provides accurate information on port status and capacity with the capability of notifying users about changes to port data in real time.

Q: What are the benefits of the VisiPORT solution?

- **Real-time visibility:** Gain instant insights into port usage and availability.
- **Reduced errors:** Reduce errors when tracking port status data manually and help with data accuracy.
- **Remote administration:** Provide visual guidance via port LEDs when communicating remotely with the onsite personnel.
- **Enhanced efficiency:** Save time and resources by automating port monitoring tasks.
- **Enhanced security:** Automatically detect and alert customers of suspicious changes in port connectivity.
- **Scalability:** Easily expand the system to accommodate growing infrastructure needs.

Q: Which customers should consider VisiPORT?

The VisiPORT solution is designed for customers that require:

- Real-time copper and/or fiber cabling port status for planning connectivity changes.
- Real-time copper and/or fiber port capacity information with the ability to set user-defined thresholds for action.

Q: What are the components of the VisiPORT solution?

Intelligent copper panels and fiber shelves with built-in port sensors and VisiPORT controllers.

Q: What's the difference between the VisiPORT controller and the controller X?

The VisiPORT controller does not include a display and it comes with enabled VisiPORT firmware.

Q: Does the VisiPORT solution require special copper or fiber patch cords?

No. VisiPORT port sensors are designed to detect insertion or removal of standard cords.

Q: Does the VisiPORT solution require separate management software and databases?

No. The VisiPORT solution comes with embedded firmware that is accessible via web UI from computers, tablets, and smartphones.

Q: How long does it take to set it up?

It takes about 10 minutes per rack to configure the VisiPORT system. Certified SYSTIMAX partners are skilled in performing this configuration task.

Q: What are the required skills to operate VisiPORT?

Ability to use an internet browser from a computer, tablet or smartphone.

Q: When will the new VisiPORT solution be available?

VisiPORT patch panels are available for immediate installation. The VisiPORT controller will be available in late Q2 2024. The target availability date for the VisiPORT firmware is late Q2 2024.

Demo and proof-of-concept installations can be supported immediately, as well.

Since the majority of SYSTIMAX patch panels can be upgraded in the field to intelligence using upgrade kits without the need to remove patch cords, existing or new customers may consider this retrofit approach for enabling the VisiPORT solution as well.



Q: How is VisiPORT different from imVision[®]?

The VisiPORT solution is a standalone automated port monitoring hardware solution designed to provide real-time port status and capacity information without external software or databases.

The imVision solution is an integrated hardware and software solution compliant with industry standards for automated infrastructure management (AIM) systems designed for managing network cabling infrastructure.

Q: Is VisiPORT a replacement for imVision?

No. The imVision solution is an AIM solution that integrates into your infrastructure to provide visibility into your network's physical layer and the myriad devices connected to it. It shows you exactly what you have, how different pieces interact, and where you can find new optimization opportunities.

The VisiPORT solution is a standalone automated copper and fiber port monitoring solution that delivers plug-and-play real-time port status and port capacity data.

Q: Is VisiPORT upgradeable to imVision?

Yes, The VisiPORT solution can be upgraded to the imVision solution by deploying System Management software and following specific upgrade configuration procedures. This allows you to leverage your existing VisiPORT investment while gaining the powerful capabilities of imVision.

Q: I have imVision hardware installed but I am not using the System Manager software. Can I use this hardware for VisiPORT?

Yes, provided your system is using the imVision X controller, which is compatible with the VisiPORT solution. The only additional step is to upgrade the controllers' firmware and to choose the VisiPORT option.

Q: Is there training required to install VisiPORT?

Yes. The VisiPORT installation training is part of the SYSTIMAX certification training, meaning any SYSTIMAX-certified installer can install and configure the intelligent hardware.



Q: What's included in SYSTIMAX Assurance?

The SYSTIMAX Assurance program is a single all-inclusive customer care program designed to support customers across the entire network life cycle. It includes all the product and performance assurances and customer services currently offered to SYSTIMAX customers, plus a wide range of additional ones. 360-degree customer support from 80+ systems engineers around the world and more than 10,000 SYSTIMAX-certified partners in 130 countries.

- 25-Year Extended Warranty and Application Assurance
- 24/7 live premium technical support
- Project installation site survey
- Onsite design support services
- Online warranty certificates
- Online product factory testing results
- Online training academy/CECs
- imVision[®] System Manager trial
- Rack elevation drawings support
- FiberGuide[®] design support
- BOM cross-reference service
- Monthly technical live conferences/CECs
- Online self-service tools
- Monthly technical newsletters

Q: What's the process to get an installation covered by SYSTIMAX Assurance?

There is no special process. The SYSTIMAX Assurance program is not a specific coverage or warranty offering. It is the total support and customer experience we provide from beginning to end to qualified sales opportunities. It is an important way we differentiate the SYSTIMAX brand through premium support—before, during and after the sale.

Q: Does it include the SYSTIMAX 25-Year Extended Warranty and Applications Assurance?

Yes. The SYSTIMAX Assurance program includes our 25-Year Extended Warranty and Applications Assurance. It also encompasses other components of our value-added proposition. For example, at the beginning of the relationship, we meet with the customer and/or business partner to capture and understand network requirements, providing technical recommendations, assist with remote and onsite design and installation support and deliverables, providing at the end the extended systems warranty. As the relationship progresses, we provide live technical training and online resources to enhance and update the customer's skills.

Q: Is SYSTIMAX Assurance available globally?

Yes, though some services may be contingent on the existence of a local office and resources. Same applies to the delivery of some services in local languages. Some of these deliverables and tasks are also provided by our Global Remote Technical Assistance Center (TAC).



Q: What is Constellation?

The Constellation infrastructure platform is a streamlined, modular and adaptable power/data solution designed with today's hyperconnected, edge-based enterprise networks in mind. It combines fault-managed power, hybrid power/data fiber, and ceiling-based Constellation Points deployed in a distributed star topology. The result is a simplified, scalable network that can dramatically reduce the time, cost and complexity of supporting connected devices—in-building and across campus.

Q: Why Constellation? Why now?

Today's enterprise network managers face a daunting array of new challenges:

- Hyperconnected networks that must support people, resources, and building services
- Billions of connected and powered devices at the network edge
- Fewer skilled professionals available to design, deploy and manage the network
- Wide-scale convergence of IT/OT and power/data networks
- Rising demand for sustainable solutions and reduced carbon emissions.

The Constellation platform enables network and facility managers to meet these challenges by redefining power and data delivery; streamlining how new connected devices and systems are deployed, onboarded and managed; and reducing the network's overall environmental impact.

Q: What are the primary components of the Constellation solution?

The Constellation building edge network solution consists of the power sourcing, transmission, and transition equipment, as well as the fiber panel and fiber cross-connect, all located in the equipment room. Ceiling-based, rack-mounted or wall-mounted Constellation Points—which function as mini telecom rooms to service the devices in each coverage area—are deployed throughout the facility and provide up to 16 fiber strands and 1 kilowatt of power. Each Constellation Point houses customer-provided PoE switches and building automation controllers for its specific service coverage area. Powered fiber cabling connects each Constellation Point back to the equipment room up to 500 meters (1,640 feet) away. Device connectivity is provided using Cat 6A patch cords, with each Constellation Point supporting up to 50 devices.

Q: How does Constellation support device densification at the edge?

The Constellation platform's distributed star topology divides the building into multiple service areas with a single Constellation Point serving each area. Each Constellation Point connects to the main equipment room via one powered fiber cable carrying 1 kW of fault-managed power. Each run can span up to 500 meters, delivering 10X more power and 5X longer reach than a traditional LAN/IP network. Each Constellation Point supplies up to 50 devices with AC and/or DC power and up to 10 Gbps of data over short runs of Category 6A cabling.

Adding new devices is as easy as connecting a patch cord back to the nearest Constellation Point. As the network expands, new Constellation Points can be easily deployed with a single run of powered fiber from the equipment room.

Q: How does Constellation support a customer's need for speed of deployment?

The Constellation platform is based on modular components deployed in a simplified, repeatable architecture. This significantly reduces deployment time as well as the design and installation resources required.

Q: Is Constellation more sustainable than other solutions?

The platform's simplified architecture untangles traditional cabling complexities—cutting the amount of copper required. It also uses less than half the number of components while providing greater design flexibility and cost savings. This reduces the need for raw materials and cuts labor cost and installation time by up to 57 percent. The result is fewer truck rolls and less fuel consumption and greenhouse gas emissions. The use of short Cat 6A patch cables also lowers thermal loading and, for PoE devices, reduces power loss over distance. This further reduces energy consumption and the effects of the building network on the environment.

Q: What are the advantages of Class 4 (fault-managed) power?

Class 4 power systems use less copper or wiring, support higher voltage limits, and are inherently intelligent and safe for both installers and users.

Q: Is Constellation available to purchase globally?

It's available in North America only at the moment. **Stay tuned.**



COMMSCOPE

Propel frequently asked questions



What is Propel™?

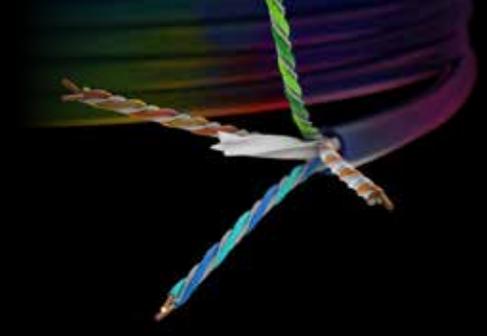
Propel is a modular, flexible, high-speed fiber platform that easily evolves to support faster data speeds, lower latency and more efficient deployment across multiple upgrades, for all networks, within the same panel.

- High-density fiber panels
- Four MPO-aligned interchangeable ULL module adapter sizes
- 8- and 16-fiber MPO assemblies
- 12- and 24-fiber legacy assemblies
- QF-coded performance verification
- Visit the [Propel solutions page](#) for a deeper dive.



Please refer to the Propel frequently asked questions document at <https://www.commscope.com/globalassets/digizuite/977665-propel-faq-co-118030-en.pdf>

SYSTIMAX® GIGAREACH™ XL FREQUENTLY ASKED QUESTIONS



Q: How does GigaREACH XL compare to 22 AWG extended-reach cables?

Our patented twisted-pair construction enables use of a thinner conductor insulation, and the placement of the tape between the conductors ensures the required 100-ohm impedance. The result is insulated 21 AWG conductors that are no larger than typical 23 AWG insulated conductors.

Q: Will MGS400 jacks and 1100 panels support GigaREACH XL 21 AWG conductors?

Yes, GigaSPEED® XL® and XD10® apparatus are fully compatible with GigaREACH XL 21 AWG conductors because they easily fit into the holding slots of our jacks, panels and CCA connectors. The prongs in our IDC connectors cut through the thin insulation to create a solid gas-tight connection to the conductor. Conductors in a conventional 21 AWG pair are too large for the holding slots of standard jacks and panels.

Q: What is the estimated timeline of availability for the GigaREACH XL rollout?

We anticipate (with 90% confidence) rolling out the initial GigaREACH XL (73 series) solutions as follows:

- Riser (1073A) early Q3
- Outdoor (1573A) early Q3
- LSZH (3073A) mid Q3
- Plenum (2073A) mid/late Q3

Q: How do we respond to the 100-meter distance limitation recommended in the ISO/IEC 11801 and CENELEC EN 50173 standards?

There are three ways to comply with the International and European standard:

1. Build a compliant channel that can exceed 100 m, depending on the installation.
2. Build a compliant permanent link that can exceed 90 m depending on the installation.
3. Use the reference implementation that allows up to four mated connections, 90 m of fixed cabling, up to 10 m of cord and an ambient temperature of 20 degrees Celsius.

ISO/IEC 14763-2 (international) and EN 50174-1 and -2 (European) installation standards have requirements for planning and installing remote powering up to 100 watts and for length reduction at temperatures above 20° C. GigaREACH XL complies to the channel and PL requirements of these standards. In fact, CommScope has been instrumental in driving most of the key standard requirements over the past 40 years.

Q: How are GigaREACH XL test procedures being developed?

We will be working with hand-held tester vendors to include custom limits for GigaREACH XL that reflect Category 6 channel limits with adjustments for direct current (DC) resistance and insertion loss. We also plan to provide specific custom test limits for 190 m permanent links and 200 m channels for 100 Mbps. Tester options for 10 Mbps and 1 GbE applications will likely also be included, reflecting the maximum supported lengths for each.

Q: What current is being transmitted to reach 72 W at 200 m?

The short answer is that the typical maximum current is 433 milliamps per conductor. The detailed answer is more complex and requires some background.

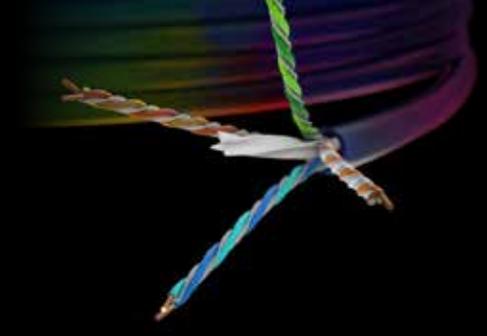
Power (Watts) = Voltage (Volts) x Current (Amperes)

PoE++ (Class 8 PoE) is designed to transmit up to 90 W of power at a minimum voltage of 52 volts, which translates to a loop current of 1.73 amperes (i.e., $90/52 = 1.73$). The loop is created by two transmit pairs (four conductors) and two receive pairs (four conductors). Thus, each conductor carries an average of one-quarter of the 1.73 A, or 433 mA. Conceptually, a PoE++ vendor could build a compliant device that transmits the maximum allowed wattage (100 W) at the minimum allowed voltage (52 V) by transmitting 1.92 A for an average of 480 mA per conductor. But since, for a given wattage, it is more efficient to transmit a higher voltage and lower amperage (to minimize transmission loss), such a device would be impractical.

Q: Will GigaREACH XL be available in outdoor cable jackets/constructions?

Yes, it will be available for outdoor, plenum, riser and LSZH applications. The outdoor version is a gel-filled, UV-resistant construction that also makes GigaREACH XL suitable for direct buried applications.

SYSTIMAX[®] GIGAREACH[™] XL **FREQUENTLY ASKED QUESTIONS**



Q: Will GigaREACH XL carry ETL, UL or any other certifications?

Yes. All GigaREACH XL indoor cables will be UL-listed for safety and independently verified by ETL to meet the Category 6 cable requirements. In addition, we plan to include an LP designation on the cable jacket for riser and plenum versions and will release specification sheets as soon as the testing is complete. We do not plan to delay product release for this separate UL test; therefore, the LP designation may be added shortly after the initial product launch.

Q: Is GigaREACH XL compatible with SYSTIMAX reduced diameter patch cords?

Yes, Mino 6 cords are fully supported but the channel distance will need to be derated due to the higher loss per meter of Mino cordage. The exact derating factor will be included in the upcoming engineering rules.

Q: Will our Application Assurance Warranty cover GigaREACH XL applications?

Yes, GigaREACH XL applications will be added to the existing Application Assurance documentation with applications up to 1 Gbps being supported. The outdoor cable must be buried or placed in conduit to be eligible for the 25-year warranty.

Q: Is GigaREACH XL impacted by other cables in the bundle? Does it require a separate pathway to ensure full capability?

GigaREACH XL can be bundled over its entire length with other fully energized GigaREACH XL and/or GigaSPEED cables without impacting the bundle's performance or coverage of the Application Assurance Warranty¹.

Note: An ambient temperature above 20° C or heating from other cables carrying remote power may influence the transmission performance of all cables in the bundle.

¹ Assuming the application being run on each cable is covered by the Applications Assurance Warranty.