The SYSTIMAX® GigaSPEED® X10D solution

The infrastructure modern enterprises and data centers depend on

COMMSCOPE®

Extend your network's capabilities with GigaSPEED® X10D

Fast enough just isn't fast enough anymore.

It wasn't long ago that 1000BASE-T offered more than enough speed and capacity for everything the enterprise network needed. But times change, new applications emerge, and demand never stops rising—and what used to be fast enough just isn't fast enough anymore.

For many enterprise networks, 1000BASE-T has become a bottleneck, an unacceptable limiting factor on the evolution of these networks. It's now a business-critical priority to extend the network's capabilities to support new applications and increased demand—and that means stepping up to the next-generation structured cabling technology found in CommScope's GigaSPEED X10D solution.

SYSTIMAX® doesn't just meet the standards—it exceeds them, even before they're published

GigaSPEED® X10D is part of the SYSTIMAX® portfolio that's always been ahead of the curve—and ahead of the standards.

GigaSPEED X10D was launched two years before the 10GBASE-T standards were published.

GigaSPEED X10D success story:

Building a secure network for critical medical research

The new research facility for South Australian Health Medical Research Institute (SAHMRI) needed world-class connectivity, total network visibility and powerful management tools to fulfill their role in critical medical research in Adelaide, Australia.

They chose CommScope solutions, including GigaSPEED X10D Category 6A cabling, LazrSPEED® and TeraSPEED fiber-optic cable, all managed through imVision® intelligence to connect researchers in the 10-story building.

The network infrastructure included nearly 5,000 Category 6A outlets wired with GigaSPEED X10D cabling, linked back to 18 distribution frames via multiple distribution points on each floor for easier reconfiguration as necessary.

In total, the deployment included 366 kilometers (more than 225 miles) of GigaSPEED X10D cable routed above ceilings to dropdowns connecting desk-mounted outlets.

Building or retrofitting, Category 6A is the only real choice

The physical layer remains the most critical determinant of how much performance and flexibility you'll get from your network—both today and tomorrow.

Deploying Category 6A infrastructure is an easy choice because the need already exists—and the outlook for the future makes the business case even stronger. Considering it comes with a minimal price premium over Category 6, it really is the only solution that makes sense.

The NBASE-T Alliance is actively empowering a new networking ecosystem that exceeds 1 Gigabit on copper cabling, promising multi-gigabit performance for high-speed Wi-Fi access points, switches, workstations, server uplinks and more.

The 2.5GBASE-T and 5GBASE-T applications running on legacy cabling are fast becoming old news. That's why, whether building new or retrofitting for the future, next-generation networks need Category 6A cabling.

What technologies are driving the networked world to Category 6A?

- **Higher-performance Wi-Fi backhaul**
- **Distributed compact switches**
- **LAN on motherboard**
- **HD video**
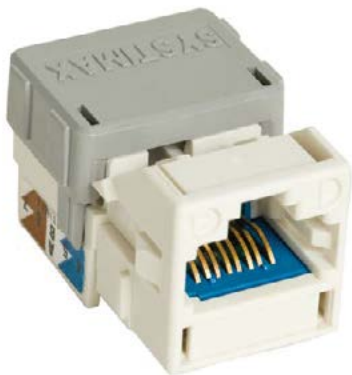- **Expanding PoE applications**

Performance with power

PoE devices and PoE standards: they drive each other higher and higher—expanding what's possible and increasing what's demanded. PoE drives critical devices including Wi-Fi access points, security cameras, telephones, monitors, lighting and more.

While Category 6A can outperform the PoE capabilities of Category 5e and Category 6, GigaSPEED X10D (shielded and unshielded versions) has been tested to show that it offers thermal and electrical performance exceeding even the latest PoE standards—and other Category 6A cabling solutions on the market.

One example is the IEC 60512-99-002 and 600 mA to 2000 mA test to ensure connectors can withstand potential arcing during disconnect. While the present standard calls for 600 mA to be applied to each contact in accordance with IEEE 802.3at PoEP (PoE Plus*) standards, CommScope performed extensive testing on its MGS600 connectors and connecting hardware up to 1960 mA—well beyond the current level in the present standard.

Even with an applied current of 1960 mA, the unique lead-frame design of the MGS600 jack diverts the arcing area far away from the contact area so the arcing will not affect the critical contact area. Because of this, CommScope MGS600 jacks can reliably support the IEEE 802.3bt 4PPoE applications.

The MGS600 jack, part of the GigaSPEED X10D Category 6A channel

GigaSPEED X10D success story:

Meeting the Vienna University of Economics and Business' deadlines

With 23,000 students, Vienna University of Economics and Business (WU) is the European Union's largest educational institution for business and economics, business law and social sciences.
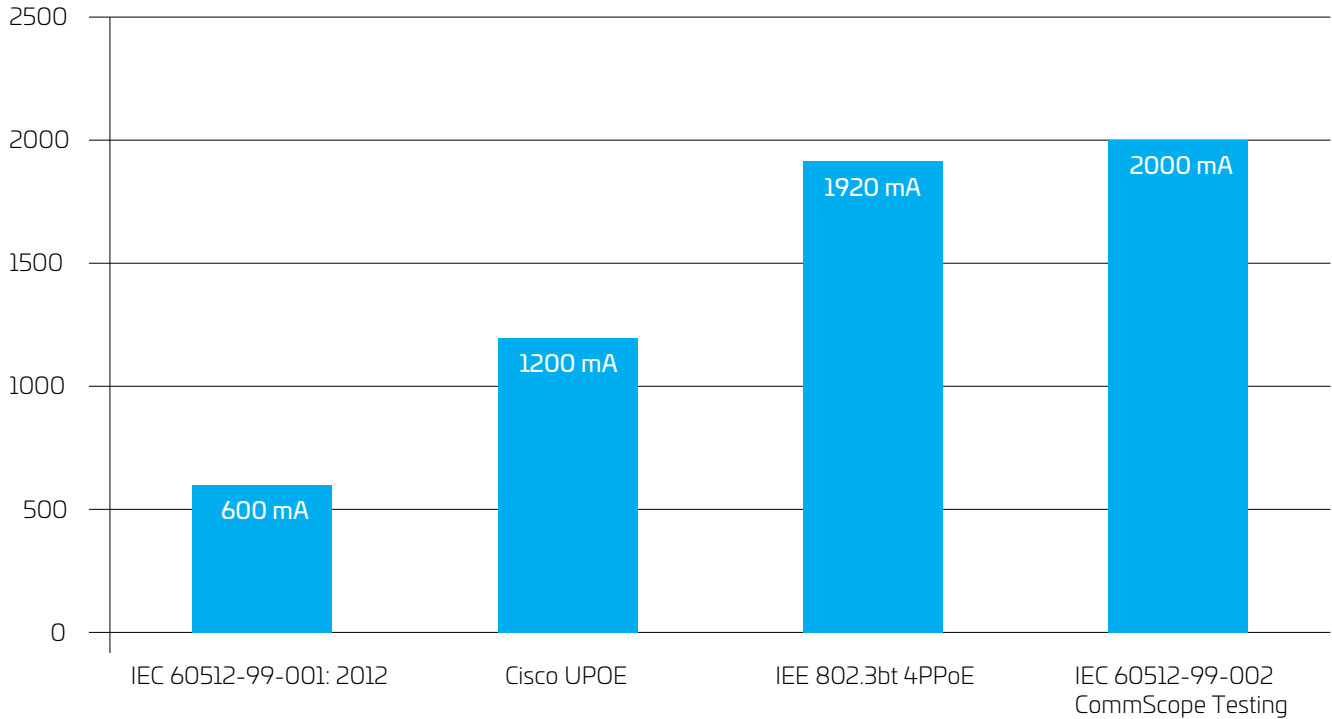
The university needed a next-generation infrastructure for its new campus, it had to supply the speed and bandwidth its users demanded, and it had to be ready the day the new campus opened.

A longtime SYSTIMAX customer at its old campus, WU chose CommScope's SYSTIMAX 360 preterminated solution and the slim profile of GigaSPEED X10D to help increase rack density and simplify operations.

GigaSPEED X10D was easy to install and helped keep the deployment on time—a critical objective for WU. The university was also pleased with the extended warranty and application assurance that came with the GigaSPEED X10D solution

* PoE Plus, PoE++ and 4PPoE are trademarks of Cisco

Test Current

2500			
2000			2000 mA
		1920 mA	
1500			
1000	1200 mA		
500			
600 mA			
0			
IEC 60512-99-001: 2012	Cisco UPOE	IEE 802.3bt 4PPoE	IEC 60512-99-002 CommScope Testing

GigaSPEED X10D in the data center

Server virtualization continues to drive higher uplink speeds, and 10GBASE-T provides the most costeffective solution for distances up to 100 meters.

And, with GigaSPEED X10D's reduced diameter and availability as part of the InstaPATCH® Cu preterminated cabling system, it can be the ideal solution for server to access or leaf switch connectivity. The InstaPATCH Cu solution allowed a data center customer to cut their installation time from 1 hour to 15 minutes per rack.

The GigaSPEED X10D difference is the design

CommScope understands that installation environments can be as unforgiving as performance requirements. So we built GigaSPEED X10D to be the smarter, slimmer Category 6A solution.

GigaSPEED X10D UTP connectors and cords minimize internal channel crosstalk as well as alien crosstalk that is a reality for all applications above 1000BASE-T.

This is due to a specially-designed fin isolator that also greatly reduces the cable's overall diameter.

Because of this performance, the cables have been specified out to 500 MHz to support high-bandwidth applications operating at 10 Gbps. GigaSPEED X10D cables are easy to handle and terminate, and are also available in preterminated configurations to speed and simplify deployments even more.

GigaSPEED X10D exceeds Category 6A/ Class E_A standards

- **Reduced-diameter UTP and shielded cables**

- **Eliminates the "15 meter" rule**

- **Robust construction overcomes noisy environments**

- **Available as InstaPatch Cu preterminated solution**

- **Intelligent and intelligent-ready options for imVision® AIM**

GigaSPEED X10D success story:

Closing a better deal for the Hanoi Stock Exchange

Among the newest equities markets in the world, the Hanoi Stock Exchange was designed to be exceptionally efficient.

It depended on fast, reliable networking across its trading and settlement areas, linking everything back to the data center.

When the time came to update their late-1990s infrastructure, they turned to CommScope for the fast, dependable copper and fiber solutions they needed in the GigaSPEED X10D and LazrSPEED solutions.
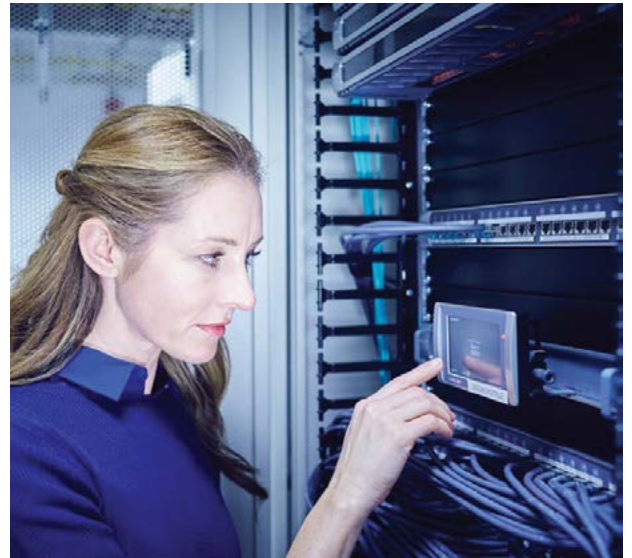
The exchange expected true, end-to-end 10G Category 6A/Class E_A performance over 100-meter copper connections to feed into the high-speed fiber backbone.

In total, the companies installed 1,000 ports in the exchange building—700 of them copper and most of those GigaSPEED X10D. They serve more than 200 exchange employees and intelligent building services.

GigaSPEED X10D extends the value of the SYSTIMAX portfolio

GigaSPEED X10D structured cabling is just part of CommScope's comprehensive portfolio of SYSTIMAX end-to-end solutions—all designed to mesh seamlessly for easier migrations and years of trouble-free operation.
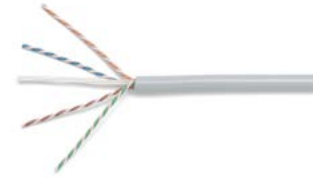
- GigaSPEED X10D x91B cable

    - Reduced outside diameter for all cable types; lightweight, flexible and easy to install

    - Available in plenum, nonplenum and LSZH ratings

    - Shielded and unshielded designs available

    - LSZH cable available in CPR Euroclass ratings of Dca, Cca and B2ca

- GigaSPEED X10D 360GS10E patch cords

    - Anti-snag plugs for easy connections and disconnections

    - Shielded and unshielded designs available

- SYSTIMAX 1100GS6 patch panels

    - Configurations with 24 and 48 ports

    - PatchMAX enables front-side termination

    - Intelligence-ready or intelligent options

- GigaSPEED X10D M-series jacks

    - Simple termination procedure for UTP and shielded jacks

    - "M-series opening" in faceplates enables media flexibility

    - Several modular panel options accommodating 24 or 48 ports

imVision®:The SYSTIMAX advantage

Like all SYSTIMAX infrastructure solutions, GigaSPEED X10D can be ordered with imVision, the AIM solution that tracks all network connectivity in real time. imVision finds available ports and rack space, issues intelligent alarms and automatically documents connectivity changes—all in a clear, web-based interface, onsite or remotely.

Category 6A UTP products

GIGASPEED® X10D U/UTP 1091B NON-PLENUM CABLES

MATERIAL ID	PRODUCT NUMBER	PAIR COUNT	JACKET COLOR	LENGTH	PACKAGING
760107144	1091B WH 4/23 W1000	4	White	1000 ft (305 M)	We Tote Box
760107078	1091B SL 4/23 W1000	4	Slate	1000 ft (305 m)	We Tote Box
760107094	1091B BL 4/23 W1000	4	Blue	1000 ft (305 m)	We Tote Box
760107102	1091B LB 4/23 W1000	4	Light Blue	1000 ft (305 m)	We Tote Box
760107151	1091B YL 4/23 W1000	4	Yellow	1000 ft (305 m)	We Tote Box

GIGASPEED® X10D U/UTP 1091SD NON-PLENUM CABLES

MATERIAL ID	PRODUCT NUMBER	PAIR COUNT	JACKET COLOR	LENGTH	PACKAGING
760240218	1091SD BL 4/23 R1000	4	Blue	1000 ft (305 M)	Reel
760240220	1091SD WH 4/23 R1000	4	White	1000 ft (305 m)	Reel
760240222	1091SD SL 4/23 R1000	4	Slate	1000 ft (305 m)	Reel

GIGASPEED® X10D U/UTP 2091B PLENUM CABLES

MATERIAL ID	PRODUCT NUMBER	PAIR COUNT	JACKET COLOR	LENGTH	PACKAGING
760107268	2091B WH 4/23 W1000	4	White	1000 ft (305 M)	We Tote Box
760107250	2091B SL 4/23 W1000	4	Slate	1000 ft (305 m)	We Tote Box
760107201	2091B BL 4/23 W1000	4	Blue	1000 ft (305 m)	We Tote Box
760107276	2091B YL 4/23 W1000	4	Yellow	1000 ft (305 m)	We Tote Box

GIGASPEED® X10D U/UTP 2091SD PLENUM CABLES

MATERIAL ID	PRODUCT NUMBER	PAIR COUNT	JACKET COLOR	LENGTH	PACKAGING
760234859	2091SD BL 4/23 R1000	4	Blue	1000 ft (305 M)	Reel
760234860	2091SD WH 4/23 R1000	4	White	1000 ft (305 m)	Reel
760234861	2091SD SL 4/23 R1000	4	Slate	1000 ft (305 m)	Reel

Category 6A UTP products

GIGASPEED® X10D 1100GS6 PANELS

MATERIAL ID	PRODUCT NUMBER	DESCRIPTION	iPATCH READY
760152587	360-IPR-1100-E-GS6-1U-24	24-Port Evolve Patch Panel	Yes
760152595	360-IPR-1100-E-GS6-2U-48	48-Port Evolve Patch Panel	Yes
760151324	360-IPR-1100A-E-GS6-1U-24	24-Port Evolve Angled Patch Panel	Yes
760151779	360-IPR-1100A-E-GS6-2U-48	48-Port Evolve Angled Patch Panel	Yes
760151183	360-IPR-1100-GS6-DM6	1100GS6 Evolve Distribution Module 6-Port	–
760155739	360-E-KIT-1U	1U Evolve Panel Kit	Yes
760155747	360-E-KIT-2U	2U Evolve Panel Kit	Yes
760152785	360-A-E-KIT-1U	Angled 1U Evolve Panel Kit	Yes
760152793	360-A-E-KIT-2U	Angled 2U Evolve Panel Kit	Yes
760183244	360 and UNP Label Sheet US LTR	Label Sheet for 360 and Universal Panels, US letter	–

GIGASPEED® X10D PATCHMAX GS6 PANELS

MATERIAL ID	PRODUCT NUMBER	DESCRIPTION	iPATCH READY
760102251	360-PM-GS6-2U-24	24-Port Patch Panel	Yes
760128207	360-PM-GS6-2U-48	48-Port Patch Panel	Yes
760102277	360-PM-GS6-DM6	GS6 6-Port Distribution Module	–
760108993	360-PM-KIT-2U-24	2U Panel Kit, 24-Port	Yes
760117408	360-PM-KIT-2U-48	2U Panel Kit, 48-Port	Yes
760183244	360 and UNP Label Sheet US LTR	Label Sheet for 360 and Universal Panels, US letter	–

Category 6A UTP products

GIGASPEED® X10D MGS600 SERIES INFORMATION OUTLET

MATERIAL ID	PRODUCT NUMBER	COLOR
760092361	MGS600-003	Black
760092379	MGS600-112	Orange
760092387	MGS600-123	Yellow
760092403	MGS600-226	Green
760092411	MGS600-246	Ivory
760092429	MGS600-262	White
760092437	MGS600-270	Gray
760092445	MGS600-317	Red
760092452	MGS600-318	Blue
760092460	MGS600-361	Violet
760092478	MGS600-148	Almond

GIGASPEED® X10D 360GS10E MODULAR PATCH CORDS

MATERIAL ID	PRODUCT NUMBER	DESCRIPTION	MODULAR JACK COLOR	CORD COLOR OPTIONS	UOM	CABLE/CORDAGE LENGTH OPTIONS
CPCSSX2	360GS10E	360GS10E Solid Cordage	0	1,2,3,4,6,7,8,9,B,C,Z	F, M	3-100ft / 1-30m
CPCSSY2	360GS10E-P	360GS10E Solid Plenum Cordage	0	1,4,6,7,8,9,C,Z	F, M	3-100ft / 1-30m
CPCS4X2	360GS10E117	360GS10E Single-ended Solid Cordage	0	1,2,3,4,6,7,8,9,B,C,Z	F, M	3-100ft / 1-30m
CO199K2	MiNo6A	MiNo6A reduced Diameter Cat 6A LS-CM Patch Cord	0	1,2,3,4,7,8,9,L,Z	F, M	1-130ft / 1-40m

For information concerning Zone Extension Cords visit our eCatalog at www.commscope.com

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