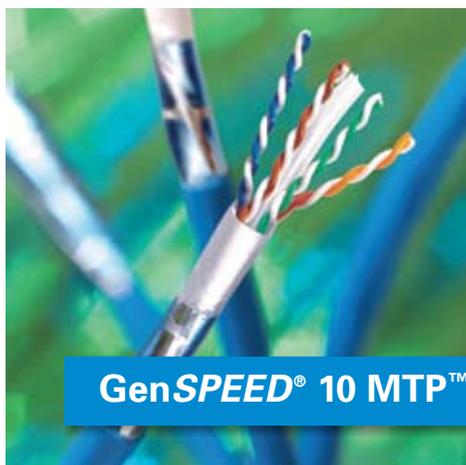


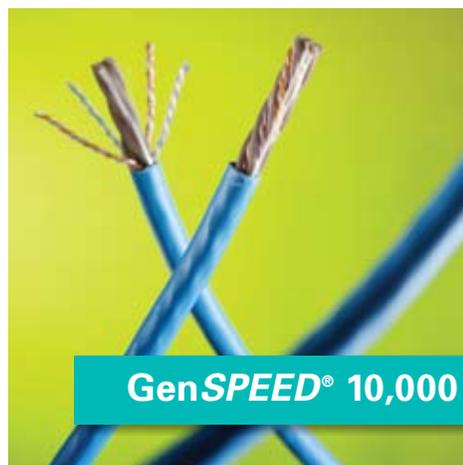
General Cable recognizes that your application and performance needs may vary. That's why we offer four solutions for 10 Gigabit applications.

GenSPEED[®]

10 Gig SOLUTIONS GUIDE



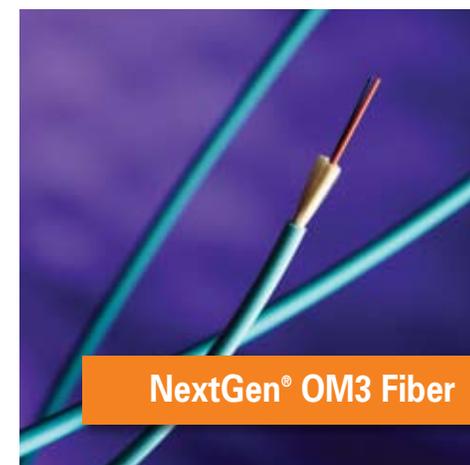
GenSPEED[®] 10 MTP™



GenSPEED[®] 10,000



GenSPEED[®] 10,000 Shielded



NextGen[®] OM3 Fiber

Why is Alien Crosstalk an issue for 10 Gig?

10 Gig systems are more complex than Category 6 or Category 5 systems. A 10 Gig signal contains 16 tightly spaced levels as opposed to the five levels of a typical Cat 6 cable.

A computer that receives the data has to recognize which level the signal is traveling on in order to process the information correctly. In a typical Cat 6 cable, the levels are sufficiently distributed in the frequency band for computer hardware to easily distinguish the differences between these levels. In a 10 Gig system, however, the levels are compressed so closely together that any small variation in the signal can cause the computer hardware to incorrectly interpret the signal. A cable running 10 Gigabit is sensitive to surrounding electromagnetic noise, so it is important to mitigate cable-to-cable crosstalk. Hence, finding a 10 Gig cable that addresses your needs and provides superior PSANEXT and PSAACRF performance is imperative to the success of your application.

PSANEXT vs. TIA

Typical PSANEXT performance vs. TIA 568 B.2-10 @ 100 MHz



Why General Cable?

If there were only one application for 10 Gig, only one solution would be needed. General Cable recognizes that your application and performance needs may vary. That's why we offer four solutions for 10 Gigabit applications.

Select a cable based on your primary needs

		GS 10 MTP	GS 10,000	GS 10,000 Shielded	Fiber OM3
PERFORMANCE	Distance	100m	100m	100m	600m
	Headroom Over Relative Standards	★★★★	★	★★	★★★★
	Size	★★★★	★	★★	★★★★
	Ease of Termination	★★	★★★★	★	★
	Relative Total Cost of Installation	★★	★★★★	★	★
	Heat Dissipation	★★★★	★★	★	N/A
	Bend Radius	★★	★★★★	★	★
	High Noise Environments	★★	★	★★★★	★★★★
	Alien Crosstalk	★★★★	★	★★★★	N/A
	Mix and Match Data Cable**	★★★★	Not Recommended	★★★★	N/A
APPLICATION	Power Over Ethernet	★★★★	★★★★	★★	N/A
	Security	★★	★	★★	★★★★*
	VoIP	★★★★	★★	★★	★★★★*

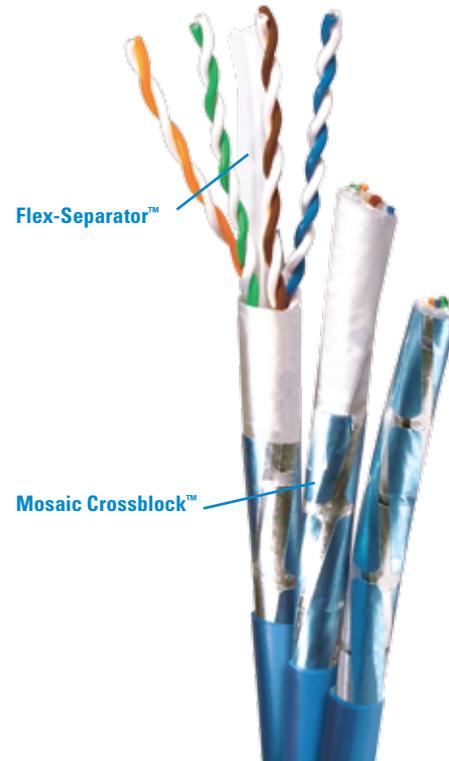
★ = GOOD ★★ = BETTER ★★★ = BEST

* Backbone Traffic

** CAT 5e/6 cables in close proximity to 10 Gig cables

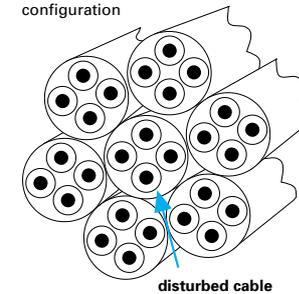
GenSPEED® 10 MTP™

One of the biggest challenges in 10 Gigabit operations is to mitigate noise between individual cables used for high speed data communication. You could incur the costs and time to upgrade to a shielded solution, OR you can install General Cable's industry-leading solution, GenSPEED® 10 MTP™ Category 6A cable. GenSPEED 10 MTP utilizes revolutionary Mosaic Crossblock™ technology to shield the cable from noise coming from external cable sources, referred to as alien crosstalk (PSANEXT and PSAACRF) – without the need for grounding. This patented technology was carefully designed, with metallic blocks separated by an insulating layer. Since there is no metal-to-metal contact, there is no path for current to flow longitudinally, and thus, no need for grounding. Therefore, you get all the benefits of an STP/FTP cable without the cost or risk to your system.

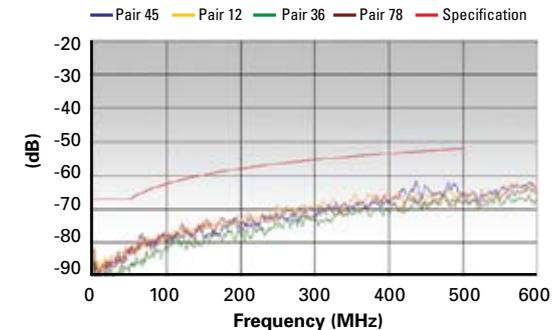


4 Pair Cables: Bundles of 7 Test Results

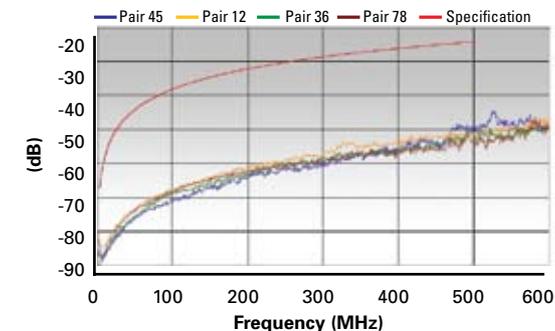
Six-around-one configuration



PSANEXT



PSAACRF



Flex-Separator™

Our Flex-Separator optimizes internal pair geometry to yield superior electrical performance while maintaining cable flexibility. This unique cross-web stabilizes each pair and creates an overall smaller, round cable profile.

Mosaic Crossblock™

The Mosaic Crossblock is made up of individual metallic blocks separated by an insulating layer. Since there is no metal-to-metal contact, there is no path for current to flow longitudinally, and thus, no need for grounding.

GenSPEED® 10,000

GenSPEED® 10,000 Category 6a cable is a cost-effective, standard-compliant 10 Gig UTP cabling option designed to meet ANSI/TIA 568 B.2-10. Perfect for component upgrades, this cable is fully backward-compatible to legacy infrastructures, and it prepares your system for future 10 Gigabit applications. GenSPEED 10,000 solves the One Gigabit limitation of Category 5e and Category 6 and is an ideal solution for bandwidth-intensive applications.



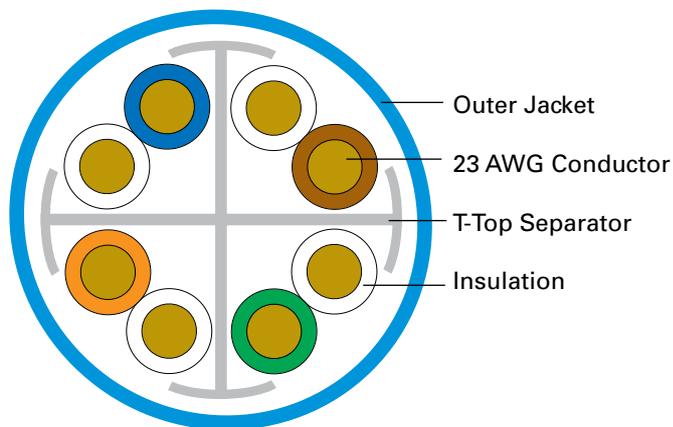
Features & Benefits

Extensive design development conducted to find the perfect blend of product performance and consistent manufacturability

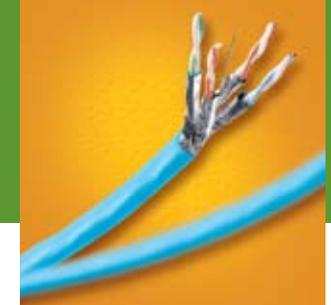
Innovative T-Top Crossweb provides superior internal electrical characteristics by locking the pairs into a systematic orientation within the cable

Superior flame and smoke characteristics achieved through innovative design and careful selection of materials with our certified suppliers

Typical GenSPEED® 10,000 Category 6a Cross-Section



GenSPEED® 10,000 Shielded



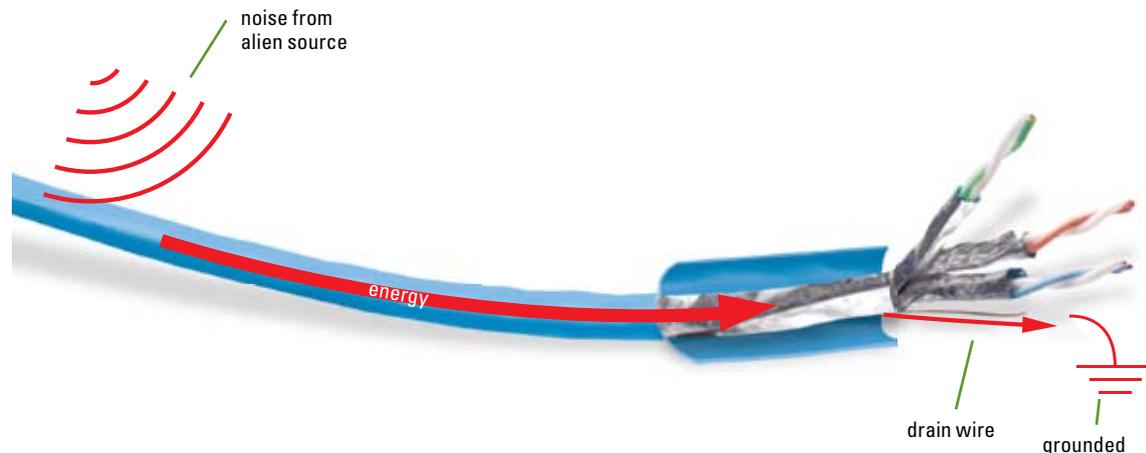
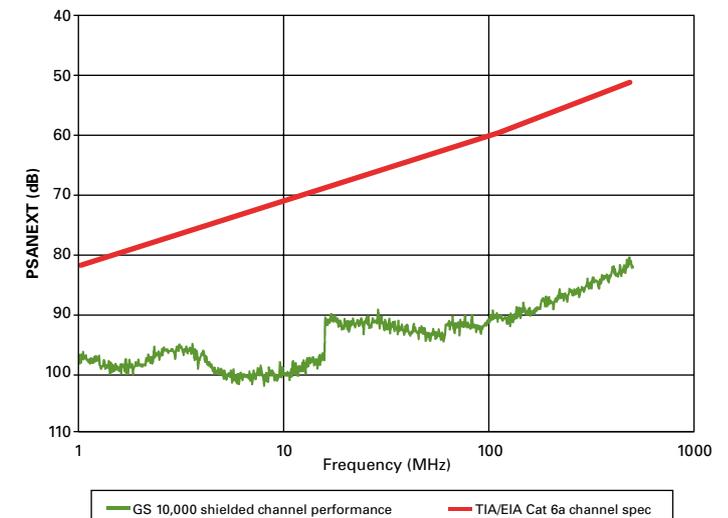
GenSPEED® 10,000 Shielded is an STP cable with individually shielded pairs for optimized isolation between pairs and immunity from external noise characterized by powersum alien crosstalk (PSANEXT) in cable bundles.

Shields are an extremely effective way of protecting the cable from outside noise (“alien sources”) by moving the energy through the shield and drain wire to the ground. Of course, STP cables are only effective if they are properly grounded. Shields are excellent at absorbing the electromagnetic energy around the cable and directing it away from the pairs. However, that energy needs a place to go. On a shielded cable, the grounding is what gives it a path away from the cable and into the earth.

Shielded Checklist

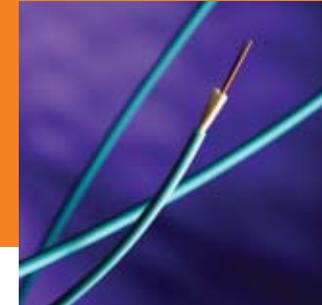
- ✓ Current infrastructure and electronics must support shielded product application
- ✓ Requires the use of shielded connectors
- ✓ Good equipment, grounding and bonding are essential (especially for multi-level buildings)
- ✓ Experienced installers
- ✓ Drain wire terminated at the source end to prevent current flow in the shield due to ground potential differences

GenSPEED® 10,000 Channel Worst Case PSANEXT



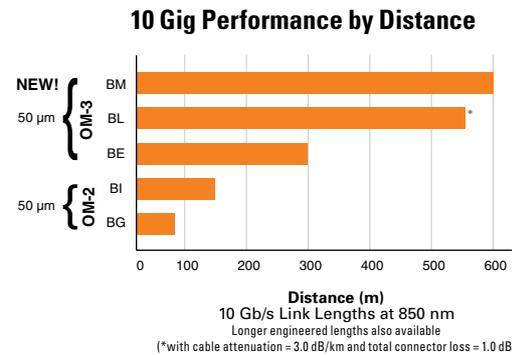
NextGen® OM3 Fiber

For the optimum in 10 Gb/s fiber, turn to General Cable. We are partnered with Corning® Optical Fiber to supply you the world's most technologically advanced optical fiber cables. The bandwidth is ensured by minEMBc, and uniformity ensures field performance of shorter lengths. With 100% testing for this product, you don't have to worry about performance and reliability. Your cabling system will be future-proofed, because all NextGen® 10 Gb/s fiber sold exceeds the specifications to which it is sold, typically allowing for more system margin and extended reach. By meeting or exceeding industry-standard 10 Gig link length specifications, NextGen fiber cables allow you more system margin and extended reach.



NextGen® BI, BE, BL and new BM multi-mode fiber cables are laser-optimized to provide 10 Gig performances at distances up to 600 meters. Long distances make fiber an economical choice today for 10 Gig data rates.

Today's NextGen BL & BM multi-mode fiber cables are prepared for the speeds of tomorrow, capable of 100 Gig.

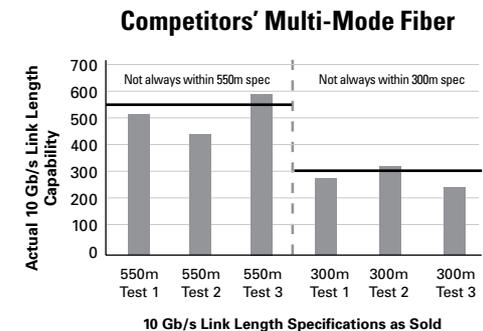
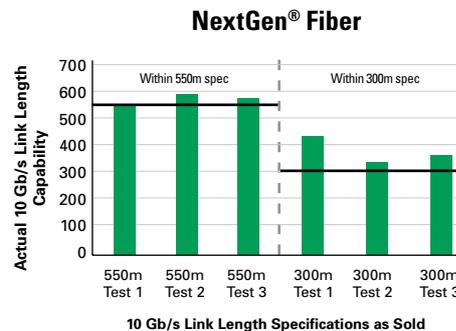


Compared to copper-based 10 Gig systems, NextGen® fiber cables have:

- ✓ 40% smaller outside diameter
- ✓ 90% greater tensile strength
- ✓ 70% less weight
- ✓ 60% less power consumption per port, enabling 6X more ports per line card
- ✓ Immunity to EMI, RFI and crosstalk
- ✓ Future scalability to 40 Gig, 100 Gig and beyond

Bandwidth reliability you can trust

General Cable specifications reflect true laser bandwidth, whereas the competitors' multi-mode fiber does not pass specification.





Delivering 10 Gig Solutions
that keep you connected.

GLOBAL REACH

General Cable serves customers through a global network of 46 manufacturing facilities in 23 countries and sales representatives and distribution centers worldwide. The Company is solely dedicated to the production of high quality energy, industrial, specialty and communications wire and cable products. In addition to its breadth of product line and strong brand recognition, the Company offers competitive strengths in such areas as technology, manufacturing, distribution and logistics, and sales and customer service. This combination enables General Cable to better serve its customers as they expand into new geographic markets.



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