

# SYSTIMAX<sup>®</sup>

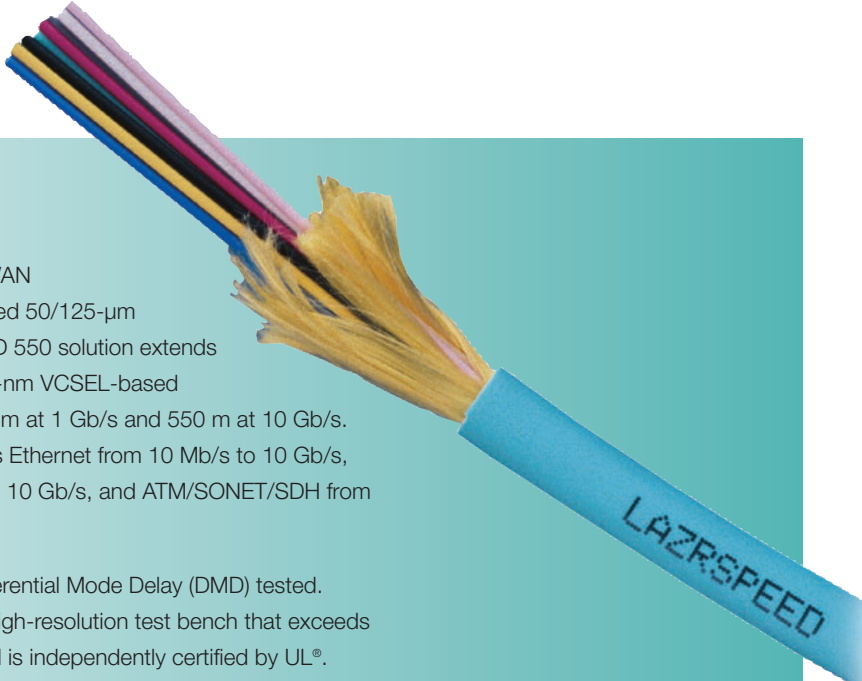
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## SOLUTIONS

### SYSTIMAX<sup>®</sup> LazrSPEED<sup>®</sup> 550 Building Cable

#### SYSTIMAX<sup>®</sup> SCS Component

The SYSTIMAX LazrSPEED<sup>®</sup> Solution boosts performance to a blistering 10 Gb/s while reducing total system costs by eliminating expensive optoelectronics previously needed to achieve 10 Gb/s speeds on multimode fiber. The LazrSPEED 550 Building cable is constructed with tight buffer fibers, aramid strength yarn, and is available in PVC, Plenum and Low Smoke Zero Halogen outer jacket. These cables are designed for point-to-point applications as well as mid-span access, and provide a high-level of protection for fiber installed in the building environment.



The LazrSPEED 550 solution supports current and next-generation LAN, SAN, and WAN applications via laser-optimized 50/125- $\mu$ m optical fibers. The LazrSPEED 550 solution extends the distance of low-cost 850-nm VCSEL-based electronics, supporting 1100 m at 1 Gb/s and 550 m at 10 Gb/s. The application suite includes Ethernet from 10 Mb/s to 10 Gb/s, Fiber Channel from 1 Gb/s to 10 Gb/s, and ATM/SONET/SDH from OC-1 to OC-192.

All LazrSPEED fibers are Differential Mode Delay (DMD) tested. The SYSTIMAX Labs use a high-resolution test bench that exceeds the FOTP-220 standards and is independently certified by UL<sup>®</sup>.

### Physical Specifications

Fiber Count	Outer Diameter in. (mm)	Weight lbs/ft (kg/km)	Minimum Bend Radius in. (cm)		Max. Tensile Load lbs. (Newtons)		Maximum Vertical Rise Feet (Meters)
			Loaded	Unloaded	Short Term	Long Term	
6	0.19 (4.7)	14 (21)	3.7 (9.5)	1.9 (4.7)	300 (1335)	90 (400)	1640 (500)
12	0.22 (5.7)	21 (31)	4.5 (11.4)	2.2 (5.7)	300 (1335)	90 (400)	1640 (500)
24	0.55 (13.9)	107 (160)	11.0 (27.8)	5.5 (13.9)	600 (2670)	180 (801)	1640 (500)

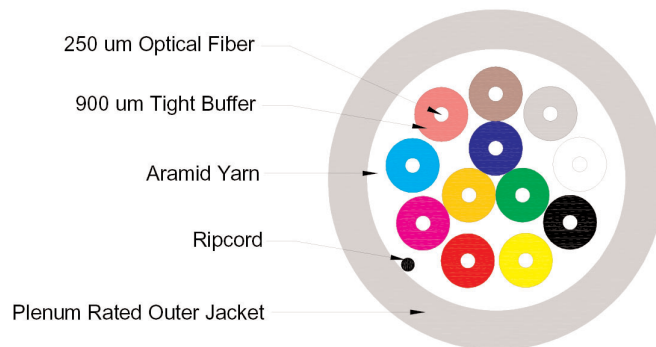
### Environmental and Mechanical

	Specification	Test Method
Operating Temperature	-40° to +70° C	FOTP - 3
Installation Temperature	0° to +70° C	N/A
Storage Temperature	-40° to +70° C	N/A
Crush Resistance	10 N/mm	FOTP - 41
Impact Resistance	20 Impacts of 2.94 N.m.	FOTP - 25
Flexing	Exceeds	FOTP - 104
Twist Bend	Exceeds	FOTP - 85

### Cable Identification

Buffer Tubes and Fibers are identified with standard color coding:		
1 - Blue	5 - Slate	9 - Yellow
2 - Orange	6 - White	10 - Violet
3 - Green	7 - Red	11 - Rose
4 - Brown	8 - Black	12 - Aqua

### Cross Section



## Optical Specifications

	850 nm, max	1300 nm, max
Cabled Attenuation	3.0 dB/km	1.0 dB/km
Bandwidth by OFL	3500 MHz-km	500 MHz-km
Effective Modal Bandwidth	4700 MHz-km*	500 MHz-km
Differential Mode Delay	See Table below	1 0.88 ps/m

\* Effective modal bandwidth for laser transmitters compliant to TIA/EIA-492-AAACA Annex C.1, such as those in IEEE 802.3 10-Gigabit Ethernet (10GBASE-S), INCITS 364 10-Gigabit Fiber Channel (1200-MX-SN-I), and OIF-VSR4-04 10-Gigabit SONET/SDH (OC-192 Serial Shortwave).

**Table 1 Differential Mode Delay Specifications at 850 nm**

DMD Template for $R_{INNER} = 0 \mu\text{m}$ to $R_{OUTER} = 23 \mu\text{m}$	DMD Interval Mask for radial intervals: 7 – 13 $\mu\text{m}$ 9 – 15 $\mu\text{m}$ 11 – 17 $\mu\text{m}$ 13 – 19 $\mu\text{m}$
<b>0.14 ps/m, max.</b>	<b>0.11 ps/m, max.</b>

## Ordering Information

Product	Material ID	Fiber Count	Fiber Type
<b>Plenum</b>			
5201 006A XPAQ	760 012 138	6	LZ550
5201 012A XPAQ	760 006 411	12	LZ550
5201 024A XPAQ	760 012 146	24	LZ550
<b>Low Smoke Zero Halogen</b>			
5202 006A XHAQ	760 012 153	6	LZ550
5202 012A XHAQ	760 012 161	12	LZ550
5202 024A XHAQ	760 012 179	24	LZ550
<b>Riser</b>			
5200 006A XRAQ	760 012 104	6	LZ550
5200 012A XRAQ	760 012 112	12	LZ550
5200 024A XRAQ	760 012 120	24	LZ550

\* Additional fiber counts are available upon request

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SOLUTIONS

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