SYSTIMAX®
SOLUTIONS

SYSTIMAX® GigaSPEED® X10D 91 Series Cable

SYSTIMAX® GigaSPEED® X10D Component

The SYSTIMAX® GigaSPEED® X10D 91 series cable exhibits an order of magnitude improvement in alien crosstalk, enabled via patent pending high-technology jacket (finned inner surface of jacket, improves pair separation and also cable flexibility) and an optimized twist and strand scheme, dramatically enhancing high-frequency performance using the SYSTIMAX Labs Cable Twist Accuracy Technology.

The GigaSPEED X10D 91 series cables have been optimized with the GigaSPEED X10D connectors and cords to minimize internal channel crosstalk, and also crosstalk between channels in close proximity. The 91 series cables incorporate a round smooth shape that speeds the handling and termination process. The cables have been designed to withstand an aggressive 6 around 1 channel test that SYSTIMAX Labs believes to be the most challenging test configuration.

This is a powersum computation of the alien crosstalk noise from 24 pairs of 6 channels surrounding a single 4-pair channel. The 91 series cables have been specified out to 500 MHz to support high bandwidth applications operating at 10 Gb/s.

The 91 series cable is offered in plenum, non-plenum and LSZH versions and available in blue, white and slate.

Features and Benefits

- Electrical performance guaranteed to meet or exceed the channel specifications of TIA 568-B.2-1 Category 6, ISO/IEC 11801 Class E, and the current TIA Category 6A and proposed ISO/IEC Class E_A Ed. 2.1 up to 500 MHz when used as part of a GigaSPEED X10D Channel in registered SYSTIMAX installations
- 4-pair construction with finned inner jacket surface and bisector center member provides the extra margin of performance required for high-bandwidth applications
- UL® Listed   - 1091 Riser rated CMR and C(UL) CMG
                      - 2091 Plenum rated CMP
- IEC Certified   - 3091 LSZH rated IEC 60332-3
- Can support network line speeds up to at least 10 gigabits per second
- Qualifies for the SYSTIMAX SCS 20-Year Extended Product Warranty and Applications Assurance when included as part of a registered SYSTIMAX GigaSPEED X10D channel

SYSTIMAX® Structured Connectivity Solutions

Performance Specifications[1]

Electrical Parameter	Guaranteed Channel Margins to ISO/IEC 11801:2002 "Class E"(1 - 250 MHz)	Guaranteed Channel Margins to Draft ISO/IEC 11801 Edition 2.1 Class E_A (1 - 500 MHz)
Insertion Loss	5 %	2 %
NEXT	6 dB	1 dB
PSNEXT	7.5 dB	2.5 dB
ELFEXT	6 dB	6 dB
PSELFEXT	8 dB	8 dB
Return Loss	3 dB	0 dB
PSANEXT	N/A	0 dB
PSAELFEXT	N/A	0 dB

[1] Note: Guaranteed margins when used as part of a GigaSPEED X10D Channel in registered SYSTIMAX installations.

Physical Specifications

Dimensions	
Weight:	1091: 39.0 lb (17.7 kg)
	2091: 47.3 lb (21.5 kg)
	3091: 39.9 lb (18.1 kg)
Outside Diameter:	1091: 0.31 in (7.87 mm)
	2091: 0.31 in (7.87 mm)
	3091: 0.31 in (7.87 mm)
Conductor Diameter:	23 AWG
Insulation Type:	1091: High-density Polyethylene
	2091: Fluorinated-Ethylene-Propylene
	3091: High-density Polyethylene
Jacket Material:	1091: PVC
	2091: Low Smoke PVC
	3091: Low Smoke Zero Halogen compound
Maximum Pulling Tension:	25 lbs.
Nom. Velocity of Propagation @ 10 MHz:	1091: 0.65 2091: 0.68 3091: 0.65
Max DC Resistance:	9.83 Ohms/100m
Mutual Capacitance @ 1kHz:	1091: 5.5 nF/100m
	2091: 5.2 nF/100m
	3091: 5.5 nF/100m
Operating Temperature:	-20 to 60° C
UL Type:	1091: CMR & CMG 2091: CMP
LSZH (3091) Compliant with the Following Tests:	IEC 60754 Part 2,
	IEC 61034 Part 2,
	IEC 60332 Part 3

Ordering Information

Non-Plenum
Listed UL® CMR and C(UL) CMG

Material ID	Color	Package
760021683	BL	1000 ft Reel
760021709	SL	1000 ft Reel
760021717	WH	1000 ft Reel
760021725	YL	1000 ft Reel
760021733	OR	1000 ft Reel
760047597	GN	1000 ft Reel
760047589	RD	1000 ft Reel
760027144	BL	3000 ft Reel
760027151	SL	3000 ft Reel
760027169	WH	3000 ft Reel
760027177	YL	3000 ft Reel
760027185	OR	3000 ft Reel

Plenum
Listed UL® CMP

Material ID	Color	Package
760024190	BL	1000 ft Reel
760024208	SL	1000 ft Reel
760024216	WH	1000 ft Reel
760024224	YL	1000 ft Reel
760024232	OR	1000 ft Reel
760047571	GR	1000 ft Reel
760042788	RD	1000 ft Reel

Low Smoke Zero Halogen
Certified IEC 60332-3

Material ID	Color	Package
760023242	BL	1000 ft Reel
760023226	WH	1000 ft Reel
760023275	BL	3000 ft Reel
760023234	WH	3000 ft Reel

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