



10GXE92

Part Number: 10GXE92

Enhanced Category 6A Nonbonded-Pair ScTP Cable

Product Description

CAT6A (625MHz), 4-Pair, S/FTP shielded, Premise Horizontal Cable, 23 AWG Solid Bare Copper conductors, Foam Polyolefin insulation, each pair with Beldfoil® shield, tinned copper braid shield (30%), LSZH jacket (passes bundle flame test IEC60332-3-24)

Product Specifications

Technical Specifications

Application 1:	Horizontal and building backbone cable				
Application 2:	Support current and future Category 6A and 6 applications, such as: 10GBase-T (10 Gigabit Ethernet), 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM				

Construction and Dimensions

Conductor:

Element	AWG	Stranding	Material	No. of Pairs
Individual shielded pair	23	Solid	Bare copper	4

Min Elongation at Breakof Conductors:	10 %

Insulation:

Element	Туре	Material	Nominal Diameter
Individual shielded pair	Dielectric	Foamed Polyethylene	1.45 mm
Min Elongation at Breakof Ins	ulation:	100 %	

Color Chart 1:

Number	Color
Pair 1	White & Blue
Pair 2	White & Orange
Pair 3	White & Green
Pair 4	White & Brown

Innershield:

Element	ment Type I		Coverage		
Individual shielded pair Tape		Aluminium / Polyester	100 %		
Aluminum facing outside					

Outershield 1:

Туре	Material	Min. Coverage
Braid	Tinned copper	30 in

Outerjacket 1:

Material	Nominal Diameter	Diameter +/- Tolerance	Ripcord	
FRNC / LSNH	7.2 mm	0.3 mm	Yes	
Min Elongation at Breakof Jac	ket:	100 MPa		
Min Tensile Strength of Jacke	t:	9 lbs		

Electrical Characteristics

Conductor DCR:

Max. Conductor DCR	Max DCR Unbalanced Between Pairs	Max. DCR Unbalanced Within Pair		
95 Ohm/100m	4%	2 Ohm		

Capacitance:

Max. Capacitance Unbalanced	Max. Mutual Capacitance			
1,600 pF/m	56 pF/m			
Min Insulation Resistance:	5000 mOhm/1000ft			

Impedance:

Nominal Characteristic Impedance

100 mOhm/ft

Delay:

Max. Delay Skew	Nominal Velocity of Propagation (VP)
45 ns/100m	78 ns/100m

High Freq:

Frequen [MHz]	Insertion Loss		Min. PSNEXT	Min. ACR	Min. PSACR	Min. ACRF (ELFEXT		(Return		Min. TPSAACR	Min. FTCL	Min. ELTCTL
1 MHz	2.1 db/100	75:3 md B	72.3 dB	73.2 dB	70.2 dB	68 dB	65 dB	20 dB	67 dB	67 dB	40 dB	35 dB
4 MHz	3.8 db/100	66.3 md B	63.3 dB	62.5 dB	59.5 dB	56 dB	53 dB	23 dB	67 dB	66.2 dB	34 dB	23 dB
10 MHz	5.9 db/100	60.3 md B	57.3 dB	54.4 dB	51.4 dB	48 dB	45 dB	25 dB	67 dB	58.2 dB	30 dB	15 dB
16 MHz	7.5 db/100	57.2 nd lB	54.2 dB	49.8 dB	46.8 dB	43.9 dB	40.9 dB	25 dB	67 dB	54.1 dB	28 dB	10.9 dB
31.2 MHz	10.5 db/100	52.9 nd lB	49.9 dB	42.4 dB	39.4 dB	38.1 dB	35.1 dB	23.6 dB	67 dB	48.3 dB	25.1 dB	5.1 dB
62.5 MHz	15 db/100	48.4 md B	45.4 dB	33.4 dB	30.4 dB	32.1 dB	29.1 dB	21.5 dB	65.6 dB	42.3 dB	22 dB	
100 MHz	19.1 db/100	45:3 md B	42.3 dB	26.2 dB	23.2 dB	28 dB	25 dB	20.1 dB	62.5 dB	38.2 dB	20 dB	
125 MHz	21.5 db/100	43.8 nd lB	40.8 dB	22.3 dB	19.3 dB	26.1 dB	23.1 dB	19.4 dB	61 dB	36.3 dB	19 dB	
200 MHz	27.6 db/100	40.8 md B	37.8 dB	13.2 dB	10.2 dB	22 dB	19 dB	18 dB	58 dB	32.2 dB	17 dB	
250 MHz	31.1 db/100	39.3 nd lB	36.3 dB	8.3 dB	5.3 dB	20 dB	17 dB	17.3 dB	56.5 dB	30.2 dB	16 dB	
300 MHz	34.3 db/100	38.1 md B	35.1 dB	3.9 dB	0.9 dB	18.5 dB	15.5 dB	17.3 dB	55.3 dB	28.7 dB		
500 MHz	45.3 db/100	34.8 nd lB	31.8 dB	-10.4 dB	-13.4 dB	14 dB	11 dB	17.3 dB	52 dB	24.2 dB		
625 MHz	51.2 db/100	33.4 mdB	30.4 dB	-17.8 dB	-20.8 dB	12.1 dB	9.1 dB	17.3 dB	50.6 dB	22.3 dB		
	1 MHz 10 MHz 16 MHz 31.2 MHz 62.5 MHz 100 MHz 125 MHz 200 MHz 250 MHz 300 MHz 500 MHz 625	Loss (Attenual 1 MHz 2.1 db/100 4 MHz 3.8 db/100 10 5.9 MHz db/100 31.2 10.5 MHz db/100 62.5 15 MHz db/100 100 19.1 db/100 125 21.5 MHz db/100 200 27.6 MHz db/100 250 31.1 MHz db/100 300 34.3 MHz db/100 500 45.3 MHz db/100 625 51.2	IMHz InsertionNEXT Loss (Attenuation) 1 MHz 2.1	IMHzI Loss (Attenuation) PSNEXT Loss (Attenuation) 1 MHz 2.1 db/100 mlB 75.3 dB 72.3 dB 4 MHz 3.8 db/100 mlB 66.3 dB 63.3 dB 10 5.9 db/100 mlB 57.3 dB 4B 16 MHz 7.5 db/100 mlB 57.2 dB MHz 10.5 db/100 mlB 49.9 dB 62.5 db/100 mlB 45.3 dB 42.3 dB 100 db/100 mlB 45.3 dB 40.8 dB 125 db/100 mlB 4B 40.8 dB 200 db/100 mlB 4B 4B 200 db/100 mlB 37.8 dB 4B 250 db/100 mlB 39.3 dB 36.3 dB 300 db/100 mlB 38.1 dB 35.1 dB 300 db/100 mlB 34.8 dB 31.8 dB 500 db/100 mlB 34.8 dB 31.8 dB 625 db/100 mlB 34.8 dB 31.8 dB	IMHzI Loss (Attenuation) PSNEXT ACR Loss (Attenuation) 1 MHz 2.1 oss (Attenuation) 75.3 oss dB 72.3 oss dB 73.2 oss dB 4 MHz 3.8 oss db/100 rdB 66.3 oss dB 63.3 oss dB 62.5 oss dB 10 oss db/100 rdB 5.9 oss dB 60.3 oss dB 57.3 oss dB 54.4 oss dB 16 oss db/100 rdB 7.5 oss dB 57.2 oss dB 49.9 oss dB 48.4 oss dB 31.2 oss db/100 rdB 10.5 oss dB 45.4 oss dB 33.4 oss dB 62.5 oss db/100 rdB 45.3 oss dB 42.3 oss dB 26.2 oss dB 100 oss db/100 rdB 40.8 oss dB 22.3 oss dB 40.8 oss dB 22.3 oss dB 125 oss db/100 rdB 40.8 oss dB 37.8 oss dB 13.2 oss dB 200 oss db/100 rdB 39.3 oss dB 36.3 oss dB 8.3 oss dB 300 oss db/100 rdB 38.1 oss dB 39.0 oss dB 39.0 oss dB 300 oss db/100 rdB 34.8 oss dB 31.8 oss dB -10.4 oss dB 500 oss db/100 rdB 34.8 oss dB 31.8 oss dB -10.4 oss dB 625 oss db/100 rdB 33.4 oss dB	IMHzI Loss (Attenuation) PSNEXT ACR PSACR 1 MHz Loss (Attenuation) 2.1 75.3 dB 72.3 dB 73.2 dB 70.2 dB 4 MHz db/100 mdB 3.8 db/100 mdB 66.3 dB 63.3 dB 62.5 dB 59.5 dB 10 5.9 db/100 mdB 60.3 dB 57.3 dB 54.4 dB 51.4 dB 16 MHz db/100 mdB 57.2 dB 49.8 dB 46.8 dB 31.2 db/100 mdB 48.4 dB 49.9 dB 42.4 dB 39.4 dB 62.5 MHz db/100 mdB 45.3 dB 42.3 dB 30.4 dB 4B 100 Hz db/100 mdB 45.3 dB 40.8 dB 22.3 dB 19.3 dB 125 MHz db/100 mdB 40.8 dB 37.8 dB 13.2 dB 10.2 dB 200 AMHz db/100 mdB 40.8 dB 40.8 dB 40.8 dB 53 dB 250 MHz db/100 mdB 39.3 dB 36.3 dB 53 dB 300 MHz db/100 mdB 38.1 dB 39 dB 0.9 dB 500 MHz db/100 mdB 48.8 dB -10.4 dB -13.4 dB 625 51.2 33.4 30.4 dB/100 mdB -17.8 -20.8	Insertion NEXT Loss (Attenuation) NEXT ACR PSACR ACRF (ELFEXT ACR ACR ACRF (ELFEXT ACR ACR ACRF (ELFEXT ACR ACR	Insertion NEXT PSNEXT ACR PSACR ACRF PSACRE CELFEXT) (PSELFEX ACRF CELFEXT) (PSELFEX ACRE CELFEXT) (PSEL	IMHz	Insertion NEXT	MHz	MHz

^{):} Limits below 4MHz and at 625MHz are for information only.

Current:

May	Decor	mmenc	00	CHEE	ont

1.5 A

Voltage:

Voltage Rating

72 dB

Coupling Attenuation:

Coupling Attenuation

Type II V

Transfer Impedance:

Frequency [MHz]	Description	Transfer Impedance	
1 Mhz	Grade 2	Max.50 mOhm/m	
10 Mhz		Max.100 mOhm/m	
30 Mhz		Max. 200 mOhm/m	
100 Mhz		Max. 1000 mOhm/m	

Use

Burning Load:	750 kJ/m
Max Recommended Pulling Tension:	85 lbs

Safety

ISO/IEC Flammability:	IEC 60332-3-24	
Amt of Halogen Acid Gas; MaxConductivity:	10 μS/mm	
Amt of Halogen Acid Gas; Min pH:	4.3	
Smoke Density; Min Transmittance:	90 %	
Amt of Halogen IEC 60754-1 /EN50267-1:	Zero	

Temperature Range

Installation Temp Range:	o to +50 °C
Operating Temp Range:	-30 to +60 °C

Mechanical Characteristics

Min Bend Radius During Installation:	64 mm
Min Bend Radius During Operation:	32 mm

Standards

ISO/IEC Compliance:	ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)	
ANSI Compliance:	ANSI/TIA/EIA 568-B.2-1 (2002)	
CENELEC Compliance:	EN 50173-1 (2011)	

History

Revision Date:	40961
Revision Number:	2

Product Variants

Part Number	Color	Put-Up Type	Length
10GXE92.06500	BLUE, RAL 5015	Reel	500 m
10GXE92.07500	PURPLE, RAL 4005	Reel	500 m
10GXE92.08500	GRAY	Reel	500 m

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