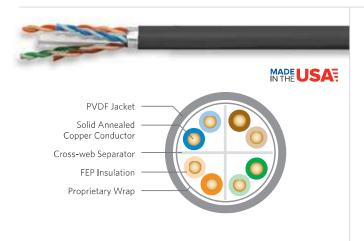
# 10Gain® XP+ Category 6A

CMP/CMX Indoor/Outdoor





SPECIFICATIONS	
Configuration	Copper pairs surrounded by proprietary wrap
Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	23 (0.57)
Insulation	FEP
Insulation Colors	Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
Separator	Cross-web
Core Wrap	Proprietary construction
Jacket	PVDF
Characteristic Impedance Ohms	100 ± 15
Nominal Velocity of Propagation %	71
Performance Compliance	UL 444 CSA C22.2 No. 214-08 ANSI/TIA/EIA-570-B NFPA 262 ANSI/TIA-568.2-D Article 800, NEC (NFPA 70) ROHS-compliant/ROHS 2-compliant
NRTL Programs	UL Verified CAT 6A UL, c(UL) Listed CMP UL, c(UL) Listed CMX

ENVIRONMENTAL SPECIFICATIONS AND TESTS									
Operation	-40°F to +302°F (-40°C to +150°C)								
Installation	-40°F to +302°F (-40°C to +150°C)								
ANSI/ICEA S-100-685-2009 Tested down to -67°F (-55°C)	Section 7.1: -4°F (-20°C) cold bend test Section 7.2: +14°F (-10°C) cold impact test Section 7.3: -40°F (-40°C) anvil test								

Outdoor Sunlight Resistant



### **CAUTIONARY INFORMATION**

- Do not use as a substitute for Outside Plant (OSP) cables or direct burial.
- Technical Guideline TG114 "Installation of CMP/CMX & CMP/ Indoor Outdoor Rated Cables in Conduit" must be followed to keep water out of cable ends to ensure warranty compliance. Refer to the "Resources" section on our site for the Technical Guideline "Installation of CMP/CMX & CMP/Indoor Outdoor Rated Cables in Conduit" for more information.

### PRODUCT DESCRIPTION

The Superior Essex 10 Gain XP+ Category 6A CMP/CMX Indoor/ Outdoor cable is specifically designed for applications including Ethernet interconnect cable for Wi-Fi or retrofit cable installations that employ exterior runs having long-term outdoor exposure between two environmentally protected points. CMX Outdoor cables are designed to extend the run between the Network Interface Unit and the point of entry into the interior of a residence or a premises. In addition, the CMP listing allows the cable to be used in riser spaces per NFPA 262, eliminating the need to transition to fire resistant cable and is ideal for slab application when installed correctly.

10 Gain XP+ Category 6A CMP/CMX Indoor/Outdoor black premises cable has been tested and listed as UL® 444 Sunlight Resistant compliant. This designation requires the cable to resist 720 hours of harsh UV and heat, which is more than twice the exposure time of the standard 300 hours required in the CMX Outdoor test. Sunlight resistance is designed for extreme sunlight and temperature applications. The level of UV blocking compounds is the same as in traditional Outside Plant (OSP) cable products, with the black color preventing damage from long-term UV sunlight exposure.

Category 6A CMP/CMX Indoor/Outdoor, swept out to 650 MHz, meets or exceeds ANSI/TIA-568-C.2 for CAT 6A cables, a requirement for 10GBASE-T applications. The cable is UL® Verified CAT 6A and has an excellent Alien Crosstalk margin due to the proprietary core wrap design. This cable fully complies with UL 444 requirements for an unshielded twisted pair product.

### **APPLICATIONS**

- 10BASE-T through 10GBASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3bt Type 1 to Type 4
- ATM and token ring
- Backward compatible to legacy protocols and applications

- Combined indoor/outdoor rating
- UL 444/UL 1581 Sunlight Resistant Listed
- CMP Listed and special jacket material
- · Proprietary wrap
- Exceeds ANSI/TIA-568,2-D specification for CAT 6A cable performance
- CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip® circuit identification system
- UL LP listed

### **BENEFITS**

- Reduces inventory by eliminating multiple cable types
- Increased life in direct, long term sunlight
- · Eliminates the need to transition to fire resistant cable and is ideal for slab application when installed correctly
- · Protects against EMI/RFI
- Excellent Alien Crosstalk performance (guaranteed +15 dB headroom) without bonding and grounding
- Exceeds requirements for Alien Crosstalk performance
- Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
- · Provides remaining length of cable on reel
- Easily identifiable conductor mates even in low-light environments
- Third-party assurance of product safety in high-heat and high-power applications













A-54



## PART NUMBERS AND PHYSICAL CHARACTERISTICS

Listing	Part Number <sup>1</sup>	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMP-CMX	6B-272-ER	0.27 (6.9)	36 (54)	1,000' Reel	12

<sup>&</sup>lt;sup>1</sup> Contact us for other special order jacket colors

White

ELECTRICAL	3FECIFICATION3
	Insertion Loss

	Insertion Loss @ 20°C Maximum dB/100 m			Maximum NEXT Minimum			ACR Minimum dB/100 m			PSNEXT Minimum dB/100 m			PSACR Minimum dB/100 m		
Frequency	TIA-568.2-D	Superi	or Essex	TIA-568.2-D	Superi	or Essex	TIA-568.2-D Superior Essex		TIA-568.2-D Superior Essex			TIA-568.2-D Superior Essex			
MHz	Specified	Guar.	Typical	Specified	Guar.	Typical	Calculated	Guar.	Typical	Specified	Guar.	Typical	Calculated	Guar.	Typical
1	2.1	2.1	2.0	74.3	74.3	76.8	72.2	72.2	74.8	72.3	72.3	74.8	70.2	70.2	72.8
4	3.8	3.8	3.7	65.3	65.3	67.8	61.5	61.5	64.1	63.3	63.3	65.8	59.5	59.5	62.1
8	5.3	5.3	5.2	60.8	60.8	63.3	55.5	55.5	58.1	58.8	58.8	61.3	53.5	53.5	56.1
10	5.9	5.9	5.8	59.3	59.3	61.8	53.4	53.4	56.0	57.3	57.3	59.8	51.4	51.4	54.0
16	7.5	7.5	7.3	56.2	56.2	58.7	48.7	48.7	51.4	54.2	54.2	56.7	46.7	46.7	49.4
20	8.4	8.4	8.2	54.8	54.8	57.3	46.4	46.4	49.1	52.8	52.8	55.3	44.4	44.4	47.1
25	9.4	9.4	9.2	53.3	53.3	55.8	43.9	43.9	46.6	51.3	51.3	53.8	41.9	41.9	44.6
31.25	10.5	10.5	10.3	51.9	51.9	54.4	41.4	41.4	44.1	49.9	49.9	52.4	39.4	39.4	42.1
62.5	15.0	15.0	14.7	47.4	47.4	49.9	32.4	32.4	35.2	45.4	45.4	47.9	30.4	30.4	33.2
100	19.1	19.1	18.8	44.3	44.3	46.8	25.2	25.2	28.0	42.3	42.3	44.8	23.2	23.2	26.0
200	27.6	27.6	27.0	39.8	39.8	42.3	12.2	12.2	15.3	37.8	37.8	40.3	10.2	10.2	13.3
250	31.1	31.1	30.4	38.3	38.3	40.8	7.2	7.2	10.4	36.3	36.3	38.8	5.2	5.2	8.4
300	34.3	34.3	33.6	37.1	37.1	39.6	2.8	2.8	6.0	35.1	35.1	37.6	0.8	0.8	4.0
350	37.2	37.2	36.5	36.1	36.1	38.6			2.1	34.1	34.1	36.6			0.1
400	40.1	40.1	39.3	35.3	35.3	37.8				33.3	33.3	35.8			
500	45.3	45.3	44.4	33.8	33.8	36.3				31.8	31.8	34.3			
600		50.1	49.5		32.6	35.1					30.6	33.1			

		Loss Minii 3/100 m	mum	ACRF Minimum dB/100 m			PSACRF Minimum dB/100 m			PSANEXT Minimum dB/100 m			PSAACRF Minimum dB/100 m		
Frequency	TIA-568.2-D	Superio	or Essex	TIA-568.2-D	Superi	or Essex	TIA-568.2-D Superior E		or Essex	TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex	
MHz	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical
1	20.0	20.0	20.6	67.8	67.8	71.8	64.8	64.8	68.8	67.0	82.0	96.5	67.0	82.0	85.0
4	23.0	23.0	23.7	55.8	55.8	59.8	52.8	52.8	56.8	67.0	82.0	87.5	66.2	81.2	84.2
8	24.5	24.5	25.3	49.7	49.7	53.7	46.7	46.7	50.7	67.0	82.0	83.0	60.1	75.1	78.1
10	25.0	25.0	25.8	47.8	47.8	51.8	44.8	44.8	48.8	67.0	82.0	83.0	58.2	73.2	76.2
16	25.0	25.0	25.8	43.7	43.7	47.7	40.7	40.7	44.7	67.0	82.0	83.0	54.1	69.1	72.1
20	25.0	25.0	25.8	41.8	41.8	45.8	38.8	38.8	42.8	67.0	82.0	83.0	52.2	67.2	70.2
25	24.3	24.3	25.1	39.8	39.8	43.8	36.8	36.8	40.8	67.0	82.0	83.0	50.2	65.2	68.2
31.25	23.6	23.6	24.3	37.9	37.9	41.9	34.9	34.9	38.9	67.0	82.0	83.0	48.3	63.3	66.3
62.5	21.5	21.5	22.2	31.9	31.9	35.9	28.9	28.9	32.9	65.6	80.6	82.0	42.3	57.3	60.3
100	20.1	20.1	20.7	27.8	27.8	31.8	24.8	24.8	28.8	62.5	77.5	80.0	38.2	53.2	56.2
200	18.0	18.0	18.5	21.8	21.8	25.8	18.8	18.8	22.8	58.0	73.0	76.0	32.2	47.2	50.2
250	17.3	17.3	17.8	19.8	19.8	23.8	16.8	16.8	20.8	56.5	71.5	74.0	30.2	45.2	48.2
300	16.8	16.8	17.3	18.3	18.3	22.3	15.3	15.3	19.3	55.3	70.3	73.0	28.7	43.7	46.7
350	16.3	16.3	16.8	16.9	16.9	20.9	13.9	13.9	17.9	54.3	69.3	71.0	27.3	42.2	44.2
400	15.9	15.9	16.4	15.8	15.8	19.8	12.8	12.8	16.8	53.5	68.5	70.0	26.2	41.2	42.2
500	15.2	15.2	15.7	13.8	13.8	17.8	10.8	10.8	14.8	52.0	67.0	69.0	24.2	39.2	40.6
600			15.1		12.2	16.2		9.8	13.8			68.0			39.9

### PRINT LEGENDS

CAT 6A xxxx FT (xxxx.xM) ID yyyy CAT 6A ScTP 4PR 23 SUPERIOR ESSEX (UL) CMP-LP (0.6A) 90C or c(UL) CMP 90C VERIFIED (UL) CAT 6A XXX-\_-H MADE IN USA PAT p.spsx.us CAT 6A XXXX FT (XXXX,XM) ID JYYYY CAT 6A SCTP 4PR 23 SUPERIOR ESSEX (UL) CMR-LP (0.5A) 75C or c(UL) CMR 75C VERIFIED (UL) CAT 6A XXXY.\_\_-H MADE IN USA PAT p.spsx.us







