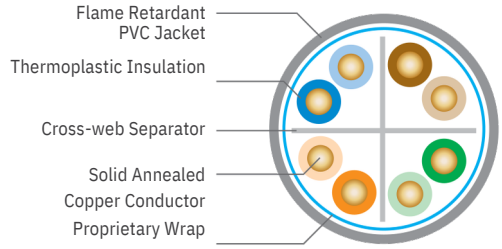
10Gain® XP + Category 6A

CMR/CMP

MADE IN THE USA



Product Description

10 Gain XP+ CAT 6A cable meets or exceeds all industry requirements including ANSI/TIA-568.2-D. This cable utilizes a proprietary core wrap which assures excellent alien crosstalk performance. This cable fully complies with UL 444 requirements for an unshielded twisted pair product. 10Gain XP+ has a nominal 0.25" (CMP) or 0.275" (CMR) diameter that allows for higher cable density than other CAT 6A cable products. 10Gain XP is ideal for PoE applications requiring higher levels of current and simultaneously up to 10 Gigabit Ethernet.

Applications

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

Specifications

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	23 (0.57)
Insulation	CMR: Thermoplastic CMP: 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	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Velocity of Propagation %	CMR: 66 CMP: 71
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568.2-D Article 800, NEC (NFPA 70) UL Verified CAT 6A
NRTL Programs	UL Listed CMR-LP (0.5) c(UL) Listed CMR UL Listed CMP-LP (0.5) c(UL) Listed CMP
Sustainability	UL Certified EPD HPD Multi-Attribute Certification USGBC® Member RoHS-compliant/RoHS 2-compliant REACH-compliant

Features	Benefits
• UL Certified Environmental Product Declaration (EPD)	• Contributes toward 1 LEED credit under the Material and Resources credit (MRc)
• Health Product Declaration™ (HPD™)	• Contributes toward 1 LEED credit under the MRc
• Multi-Attribute Certification by GreenCircle Certified, LLC	• Offers an overview of the sustainability of a product, its packaging and manufacturing
• Guaranteed 15 dB AXT margin	• Guaranteed AXT performance in virtually any installation environment
• UL Verified CAT 6A	• Assures consistent worry-free performance
• Tested to 650 MHz	• Assures ample bandwidth headroom
• Nominal 0.275 (CMR)/0.250 (CMP) inch diameter	• Higher cable density, smaller bend radius and lowers installation costs
• Proprietary core wrap	• Provides substantially more AXT protection without grounding or bonding
• CableID® alpha numeric code printed every 2 feet	• Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
• QuickCount® marking system in feet and meters	• Provides remaining length of cable on reel
• ColorTip™ circuit identification system	• Easily identifiable conductor mates even in low-light environments

Part Numbers and Physical Characteristics

Listing	Part Number[1]	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMR	6B-246-xA	0.275 (6.99)	31 (47)	1,000' BrakeBox®	12
CMR	6B-272-xA	0.275 (6.99)	31 (47)	1,000' Reel	20
CMP	6B-246-xB	0.250 (6.35)	34 (50)	1,000' BrakeBox®	12
CMP	6B-272-xB	0.250 (6.35)	34 (50)	1,000' Reel	20

Jacket Colors

[1]Replace "x" with:	Blue = 2	Gray = 3	White = 4	Green = 5	Yellow = 6	Purple = 7	Red = 9	Orange = D

Electrical Specifications

Frequency MHz	Insertion Loss @ 20°C Maximum dB/100 m		NEXT Minimum dB/100 m		ACR Minimum dB/100 m		PSNEXT Minimum dB/100 m		PSACR Minimum dB/100 m	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	2.1	2.0	74.3	78.3	72.2	77.3	72.3	77.3	70.2	76.3
4	3.8	3.7	65.3	69.3	61.5	66.6	63.3	68.3	59.5	65.6
8	5.3	5.1	60.8	64.8	55.4	60.6	58.8	63.8	53.4	59.6
10	5.9	5.7	59.3	63.3	53.4	58.6	57.3	62.3	51.4	57.6
16	7.5	7.3	56.2	60.2	48.8	54.0	54.2	59.2	46.8	53.0
20	8.4	8.1	54.8	58.8	46.4	51.7	52.8	57.8	44.4	51.2
25	9.4	9.1	53.3	57.3	44.0	49.7	51.3	56.3	42.0	49.0
31.25	10.5	10.2	51.9	55.9	41.4	47.2	49.9	54.9	39.4	46.7
62.5	15.0	14.4	47.4	51.4	32.4	39.0	45.4	50.4	30.4	38.4
100	19.1	18.4	44.3	48.3	25.2	32.4	42.3	47.3	23.2	31.7
200	27.6	26.5	39.8	43.8	12.2	20.1	37.8	42.8	10.2	19.5
250	31.1	29.8	38.3	42.3	7.3	15.5	36.3	41.3	5.3	15.1
300	34.3	32.9	37.1	41.1	2.9	11.4	35.1	40.1	0.9	10.8
400	40.1	38.3	35.3	39.3		4.6	33.3	38.3		3.6
500	45.3	43.0	33.8	37.8			31.8	36.8		
600		47.5		36.4				35.6		
650		49.7		35.9				35.1		
700		51.4		35.5				34.6		
750		53.3		35.1				34.2		

Frequency MHz	Return Loss Minimum dB/100 m		ACRF Minimum dB/100 m		PSACRF Minimum dB/100 m		PSANEXT Minimum dB/100 m		PSAACRF Minimum dB/100 m	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	20.0	22.0	67.8	73.8	64.8	70.8	82.0	96.5	82.0	85.0
4	23.0	25.0	55.8	61.8	52.8	58.8	82.0	87.5	81.2	84.2
8	24.5	26.5	49.7	55.7	46.7	52.7	82.0	83.0	75.1	78.1
10	25.0	27.0	47.8	53.8	44.8	50.8	82.0	83.0	73.2	76.2
16	25.0	27.0	43.7	49.7	40.7	46.7	82.0	83.0	69.1	72.1
20	25.0	27.0	41.8	47.8	38.8	44.8	82.0	83.0	67.2	70.2
25	24.3	26.3	39.8	45.8	36.8	42.8	82.0	83.0	65.2	68.2
31.25	23.6	25.6	37.9	43.9	34.9	40.9	82.0	83.0	63.3	66.3
62.5	21.5	23.5	31.9	37.9	28.9	34.9	80.6	82.0	57.3	60.3
100	20.1	22.1	27.8	33.8	24.8	30.8	77.5	80.0	53.2	56.2
200	18.0	20.0	21.8	27.8	18.8	24.8	73.0	76.0	47.2	50.2
250	17.3	19.3	19.8	25.8	16.8	22.8	71.5	74.0	45.2	48.2
300	16.8	18.8	18.3	24.3	15.3	21.3	70.3	73.0	43.7	46.7
400	15.9	17.9	15.8	21.8	12.8	18.8	69.3	71.0	42.2	44.2
500	15.2	17.2	13.8	19.8	10.8	16.8	68.5	70.0	41.2	42.2
600		16.7		18.2		15.2	67.0	69.0	39.2	40.6
650		16.4		17.5		14.5		68.0		39.9
700		16.2		16.9		13.9				
750		16.0		16.3		13.3				