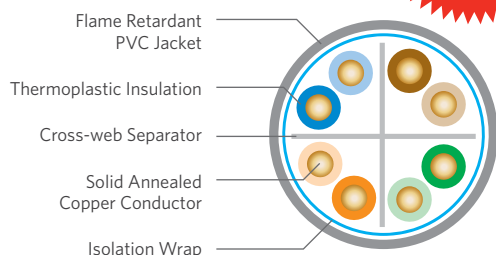


# 10Gain® XP Category 6A

CMR-LP/CMP-LP



## 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
Isolation 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-C.2 Article 800, NEC (NFPA 70) HDBaseT Class A and B
NRTL Programs	UL Verified CAT 6A UL Listed CMR-LP (0.5) c(UL) Listed CMR UL Listed CMP-LP (0.6) c(UL) Listed CMP HDBaseT Certified
Sustainability	UL Certified EPD HPD Multi-Attribute Certification USGBC® Member RoHS-compliant/RoHS 2-compliant REACH-compliant

## PRODUCT DESCRIPTION

**FIRST MANUFACTURER IN THE INDUSTRY**  
to offer products that contribute toward LEED!

**10Gain® XP** is the first Category 6A cable without a continuous shield to offer 7 dB margin over Alien Crosstalk (AXT) performance requirements in ANSI/TIA-568-C.2. Its uniquely designed Isolation Wrap contains discontinuous sections of metallized material, held in place by a polymeric layer. **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. 10Gain XP is certified for HD A/V applications using HDBaseT Class A and B protocol.

## 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

## FEATURES

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™ (HPD™)
- Multi-Attribute Certification by GreenCircle Certified, LLC
- Non-conductive Isolation Wrap
- Tested to 650 MHz
- Nominal 0.25 (CMP) or 0.275 (CMR) inch diameter
- CableID® alpha numeric code printed every 2 feet
- ColorTip® circuit identification system
- Tested up to 100 W in most severe temperature conditions in a bundle of 100 cables
- HDBaseT Class A and B certified
- UL LP listed
- Temperature cable rating: 75°C for CMR and 90°C for CMP

## BENEFITS

- Contributes toward 1 LEED credit under the Material and Resources credit (MRC)
- Contributes toward 1 LEED credit under the MRC
- Offers an overview of the sustainability of a product, its packaging and manufacturing
- 7 dB AXT performance without grounding or bonding
- Assures ample bandwidth headroom
- Higher cable density, smaller bend radius and lowers installation costs
- Easily identifies both ends of a cable run without the need to separately label or tone the cable
- Easily identify conductor mates even in low-light environments
- Offers 82% power efficiency and lowest temperature increase inside a bundle
- Ideal for any A/V application up to 100m channel
- Third-party assurance of product safety in high-heat and high-power applications
- Temperature rating of the insulation AND of the jacket provide improved cable lifespan despite high-heat and high-power applications

## 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
CMR	6H-246-xA	0.275 (6.99)	29 (43)	1,000' BrakeBox®	12
CMR	6H-272-xA	0.275 (6.99)	29 (43)	1,000' Plywood reel	12
CMP	6H-246-xB	0.25 (6.35)	35 (52)	1,000' BrakeBox	12
CMP	6H-272-xB	0.25 (6.35)	35 (52)	1,000' Plywood reel	12

**JACKET COLORS**

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

**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	74.0	96.5	74.0	80.0
4	23.0	25.0	55.8	61.8	52.8	58.8	74.0	87.5	73.2	79.2
8	24.5	26.5	49.7	55.7	46.7	52.7	74.0	83.0	67.1	73.1
10	25.0	27.0	47.8	53.8	44.8	50.8	74.0	81.5	65.2	71.2
16	25.0	27.0	43.7	49.7	40.7	46.7	74.0	80.0	61.1	67.1
20	25.0	27.0	41.8	47.8	38.8	44.8	74.0	80.0	59.2	65.2
25	24.3	26.3	39.8	45.8	36.8	42.8	74.0	80.0	57.2	63.2
31.25	23.6	25.6	37.9	43.9	34.9	40.9	74.0	80.0	55.3	61.3
62.5	21.5	23.5	31.9	37.9	28.9	34.9	72.6	78.6	49.3	55.3
100	20.1	22.1	27.8	33.8	24.8	30.8	69.5	75.5	45.2	51.2
200	18.0	20.0	21.8	27.8	18.8	24.8	65.0	71.0	39.2	45.2
250	17.3	19.3	19.8	25.8	16.8	22.8	63.5	69.5	37.2	43.2
300	16.8	18.8	18.3	24.3	15.3	21.3	62.3	68.3	35.7	41.7
400	15.9	17.9	15.8	21.8	12.8	18.8	60.5	66.5	34.2	39.2
500	15.2	17.2	13.8	19.8	10.8	16.8	59.0	65.0	31.2	37.2
600		16.7		18.2		15.2		63.8		35.6
650		16.4		17.5		14.5		63.3		34.9
700		16.2		16.9		13.9				
750		16.0		16.3		13.3				

**SUSTAINABILITY LEADERSHIP**



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