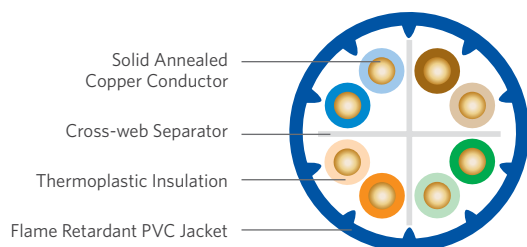


# 10Gain® Category 6A

CMR/CMP



## SPECIFICATIONS

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	23 (0.57)
Insulation	CMR: Polyolefin 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
Jacket	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Velocity of Propagation %	CMR: 65 CMP: 68
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568-C.2 Article 800, NEC (NFPA 70)
NRTL Programs	UL Verified CAT 6A UL, c(UL) Listed CMR UL, c(UL) Listed CMP
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®** cable brings Category 6A UTP performance to a new level. This cable meets the internal and alien cross-talk performance requirements of ANSI/TIA-568-C.2 as tested in a 6 around 1 configuration. With guaranteed performance out to 500 MHz and independently verified and monitored by UL, **10Gain** CAT 6A cable demonstrates superior capability for 10 Gigabit Ethernet (10 GbE) and all other bandwidth intensive and legacy applications.

## APPLICATIONS

- 10BASE-T through 10GBASE-T Ethernet
- Power over Ethernet (PoE) - IEEE 802.3af
- PoE+ - IEEE 802.3at Type 1 and 2
- ATM and token ring
- Backward compatible to legacy protocols and applications

## FEATURES

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™ (HPD™)
- Multi-Attribute Certification by GreenCircle Certified, LLC
- UL Verified CAT 6A
- Tested to 650 MHz
- Exceptional PSACR and PSAACRF (PSAELFEXT) performance
- CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip® circuit identification system

## BENEFITS

- Contributes toward 1 LEED point under the Material and Resources credit (MRc)
- Contributes toward 1 LEED point under the MRc
- Offers an overview of the sustainability of a product, its packaging and manufacturing
- Assures consistent, worry-free performance
- Assures ample bandwidth headroom
- Performance assurance for 10 GbE and multiple high-bandwidth applications
- 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

## 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	6A-272-xA	0.350 (8.9)	51 (76)	1,000' Plywood reel	12
CMP	6A-246-xB	0.295 (7.5)	43 (64)	1,000' BrakeBox®	12
CMP	6A-272-xB	0.295 (7.5)	43 (64)	1,000' Plywood reel	12

## JACKET COLORS

<sup>1</sup>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		
	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex
	Specified	Guar.	Typical	Specified	Guar.	Typical	Calculated	Guar.	Typical	Specified	Guar.	Typical	Calculated	Guar.	Typical
1	2.7	2.0	1.7	74.3	75.3	92.4	72.2	74.3	90.7	72.3	74.3	90.3	70.2	72.3	88.7
4	3.8	3.6	3.4	65.3	66.3	82.2	61.5	63.5	78.9	63.3	65.3	80.5	59.5	61.5	77.2
8	5.3	5.1	4.7	60.8	61.8	78.0	55.5	57.5	73.3	58.8	60.8	76.4	53.5	55.5	71.7
10	5.9	5.7	5.3	59.3	60.3	76.5	53.4	55.4	71.2	57.3	59.3	74.8	51.4	53.4	69.6
16	7.5	7.2	6.7	56.2	57.2	73.8	48.8	50.8	67.2	54.2	56.2	72.0	46.7	48.8	65.4
20	8.4	8.1	7.6	54.8	55.8	71.1	46.4	48.5	63.6	52.8	54.8	69.7	44.4	46.5	62.2
25	9.4	9.1	8.5	53.3	54.3	68.9	43.9	46.0	60.5	51.3	53.3	67.4	41.9	44.0	59.1
31.25	10.5	10.2	9.5	51.9	52.9	68.3	41.4	43.5	58.9	49.9	51.9	67.0	39.4	41.5	57.6
62.5	15.0	14.5	13.6	47.4	48.4	64.3	32.4	34.5	50.8	45.4	47.4	62.3	30.4	32.5	49.0
100	19.1	18.5	17.4	44.3	45.3	61.2	25.2	27.3	44.0	42.3	44.3	59.2	23.2	25.3	42.2
200	27.6	26.8	25.1	39.8	40.8	57.1	12.2	14.3	32.4	37.8	39.8	54.9	10.2	12.3	30.3
250	31.1	30.2	28.2	38.3	39.3	55.9	7.2	9.4	27.6	36.3	38.3	53.3	5.2	7.4	25.4
300	34.3	33.3	31.1	37.1	38.1	53.7	2.8	5.0	22.8	35.1	37.1	51.5	0.8	3.0	20.9
350	37.2	36.3	33.8	36.1	37.1	52.7		1.0	19.1	34.1	36.1	50.1			16.9
400	40.1	39.0	36.3	35.3	37.3	52.4			15.3	33.3	36.3	49.3			13.5
500	45.3	44.1	41.0	33.8	35.8	48.7			7.7	31.8	34.8	46.2			5.8
550			43.2			45.6			2.3			43.7			1.0
600			45.3			44.0						42.2			
650			47.5			42.0						40.2			
700			48.3			41.1						40.8			
750			50.0			40.5						40.3			

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		
	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex	TIA-568-C.2		Superior Essex
	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical
1	20.0	20.0	27.3	67.8	69.8	83.6	64.8	68.8	81.2	67.0	67.0	94.8	67.0	67.0	71.2
4	23.0	23.0	33.1	55.8	57.8	72.0	52.8	56.8	69.6	67.0	67.0	85.7	66.2	66.2	70.3
8	24.5	24.5	35.3	49.7	51.7	66.2	46.7	50.7	63.7	67.0	67.0	81.2	60.1	60.1	64.3
10	25.0	25.0	36.0	47.8	49.8	64.4	44.8	48.8	61.8	67.0	67.0	79.8	58.2	58.2	62.4
16	25.0	25.0	36.5	43.7	45.7	60.3	40.7	44.7	57.8	67.0	67.0	76.7	54.1	54.1	58.3
20	25.0	25.0	38.4	41.8	43.8	58.4	38.8	42.8	56.0	67.0	67.0	75.3	52.2	52.2	56.4
25	24.3	24.3	37.6	39.8	41.8	56.3	36.8	40.8	54.1	67.0	67.0	73.8	50.2	50.2	54.4
31.25	23.6	23.6	37.8	37.9	39.9	54.3	34.9	38.9	52.1	67.0	67.0	72.4	48.3	48.3	52.5
62.5	21.5	21.5	36.6	31.9	33.9	48.3	28.9	32.9	46.1	65.6	65.6	67.8	42.3	42.3	46.5
100	20.1	20.1	33.5	27.8	29.8	44.5	24.8	28.8	42.3	62.5	62.5	64.8	38.2	38.2	42.4
200	18.0	18.0	30.7	21.8	23.8	38.4	18.8	22.8	36.2	58.0	58.0	60.3	32.2	32.2	36.4
250	17.3	17.3	30.3	19.8	21.8	35.0	16.8	20.8	33.4	56.5	56.5	58.8	30.2	30.2	34.4
300	16.8	16.8	26.9	18.3	19.3	33.8	15.3	19.3	31.6	55.3	55.3	57.6	28.7	28.7	32.8
350	16.3	16.3	27.0	16.9	17.9	32.5	13.9	17.9	30.4	54.3	54.3	56.6	27.3	27.3	31.5
400	15.9	15.9	26.9	15.8	15.8	31.8	12.8	16.8	29.8	53.5	53.5	55.7	26.2	26.2	30.3
500	15.2	15.2	24.8	13.8	13.8	29.8	10.8	14.8	28.1	52.0	52.0	54.3	24.2	24.2	28.4
550			24.2			28.8			26.9			53.7			27.6
600			22.7			28.6			26.4			53.1			26.8
650			19.6			27.2			25.3			52.6			26.1
700			19.1			26.8			24.9			52.1			25.5
750			17.8			26.2			24.3			51.7			24.9

## SUSTAINABILITY LEADERSHIP



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