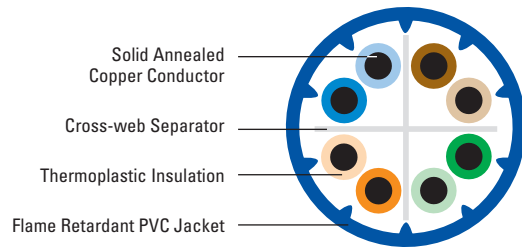


# 10Gain® Category 6A CMR/CMP



## Product Description

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 and all other bandwidth intensive and legacy applications.

## Applications

- 10GBASE-T and legacy applications 10BASE-T through 1000BASE-T ethernet
- ATM and token ring
- Backward compatible to legacy protocols and applications

## Features

- 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

- Assures consistent, worry-free performance
- Assures ample bandwidth headroom
- Performance assurance for 10 Gigabit Ethernet 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

## Specifications

<b>Pair Count</b>	4
<b>Conductor</b>	Solid annealed copper
<b>AWG (mm)</b>	23 (0.57)
<b>Insulation</b>	CMR: Polyolefin CMP: FEP
<b>Insulation Colors</b>	Pair 1: ColorTip™ Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
<b>Separator</b>	Cross-web
<b>Jacket</b>	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
<b>Package</b>	1,000' plywood reel
<b>Characteristic Impedance (Ohms)</b>	100 ± 15
<b>Velocity of Propagation (%)</b>	CMR: 65 CMP: 69
<b>Performance Compliance</b>	UL 444 UL 1666 NFPA 262 ANSI/TIA-568-C.2 RoHS-compliant
<b>NRTL Programs</b>	UL Verified CAT 6A UL Listed CMR UL Listed CMP

## Part Numbers and Physical Characteristics

Listing	Part Number <sup>1</sup>	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Packages Per Pallet
CMR	6A-272-xA	0.35 (8.9)	51 (76)	12
CMP	6A-272-xB	0.32 (8.1)	49 (73)	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	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical
1	2.0	2.0	1.7	74.3	75.3	92.4	72.3	74.3	90.7	72.3	74.3	90.3	70.3	72.3	88.7
4	3.7	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	5.2	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	7.4	7.2	6.7	56.2	57.2	73.8	48.8	50.8	67.2	54.2	56.2	72.0	46.8	48.8	65.4
20	8.3	8.1	7.6	54.8	55.8	71.1	46.5	48.5	63.6	52.8	54.8	69.7	44.5	46.5	62.2
25	9.3	9.1	8.5	53.3	54.3	68.9	44.0	46.0	60.5	51.3	53.3	67.4	42.0	44.0	59.1
31.25	10.4	10.2	9.5	51.9	52.9	68.3	41.5	43.5	58.9	49.9	51.9	67.0	39.5	41.5	57.6
62.5	14.9	14.5	13.6	47.4	48.4	64.3	32.5	34.5	50.8	45.4	47.4	62.3	30.5	32.5	49.0
100	19.0	18.5	17.4	44.3	45.3	61.2	25.3	27.3	44.0	42.3	44.3	59.2	23.3	25.3	42.2
155	24.0	23.4	21.9	41.4	42.4	57.3	17.5	19.5	35.7	39.4	41.4	55.9	15.5	17.5	34.4
200	27.5	26.8	25.1	39.8	40.8	57.1	12.3	14.3	32.4	37.8	39.8	54.9	10.3	12.3	30.3
250	31.0	30.2	28.2	38.3	39.3	55.9	7.4	9.4	27.6	36.3	38.3	53.3	5.4	7.4	25.4
300	34.2	33.3	31.1	37.1	38.1	53.7	3.0	5.0	22.8	35.1	37.1	51.5	1.0	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	40.0	39.0	36.3	35.3	37.3	52.4			15.3	33.3	36.3	49.3			13.5
450	42.7	41.6	38.7	34.5	36.5	50.2			11.6	32.5	35.5	47.8			9.7
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			

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	72.8	83.6	64.8	69.8	81.2	67.0	67.0	94.8	67.0	67.0	71.2
4	23.0	23.0	33.1	55.8	60.8	72.0	52.8	57.8	69.6	67.0	67.0	85.7	66.2	66.2	70.3
8	24.5	24.5	35.3	49.7	54.7	66.2	46.7	51.7	63.7	67.0	67.0	81.2	60.1	60.1	64.3
10	25.0	25.0	36.0	47.8	52.8	64.4	44.8	49.8	61.8	67.0	67.0	79.8	58.2	58.2	62.4
16	25.0	25.0	36.5	43.7	48.7	60.3	40.7	45.7	57.8	67.0	67.0	76.7	54.1	54.1	58.3
20	25.0	25.0	38.4	41.8	46.8	58.4	38.8	43.8	56.0	67.0	67.0	75.3	52.2	52.2	56.4
25	24.3	24.3	37.6	39.8	44.8	56.3	36.8	41.8	54.1	67.0	67.0	73.8	50.2	50.2	54.4
31.25	23.6	23.6	37.8	37.9	42.9	54.3	34.9	39.9	52.1	67.0	67.0	72.4	48.3	48.3	52.5
62.5	21.5	21.5	36.6	31.9	36.9	48.3	28.9	33.9	46.1	65.6	65.6	67.8	42.3	42.3	46.5
100	20.1	20.1	33.5	27.8	32.8	44.5	24.8	29.8	42.3	62.5	62.5	64.8	38.2	38.2	42.4
155	18.8	18.8	33.0	24.0	29.0	40.6	21.0	26.0	38.5	59.6	59.6	61.9	34.4	34.4	38.6
200	18.0	18.0	30.7	21.8	26.8	38.4	18.8	23.8	36.2	58.0	58.0	60.3	32.2	32.2	36.4
250	17.3	17.3	30.3	19.8	24.8	35.0	16.8	21.8	33.4	56.5	56.5	58.8	30.2	30.2	34.4
300	16.8	16.8	26.9	18.3	23.3	33.8	15.3	20.3	31.6	55.3	55.3	57.6	28.7	28.7	32.8
350	16.3	16.3	27.0	16.9	21.9	32.5	13.9	18.9	30.4	54.3	54.3	56.6	27.3	27.3	31.5
400	15.9	15.9	26.9	15.8	19.8	31.8	12.8	17.8	29.8	53.5	53.5	55.7	26.2	26.2	30.3
450	15.5	15.5	26.0	14.7	18.7	30.8	11.7	16.7	28.8	52.7	52.7	55.0	25.1	25.1	29.3
500	15.2	15.2	24.8	13.8	17.8	29.8	10.8	15.8	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