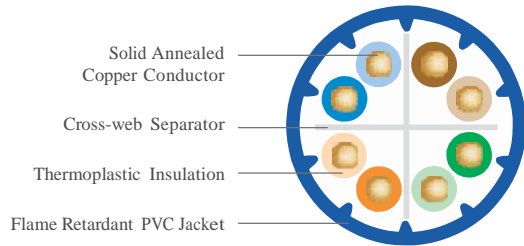


10Gain® Category 6A

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) RoHS-compliant
NRTL Programs	UL Verified CAT 6A UL, c(UL) Listed CMR UL, c(UL) Listed CMP

Part Numbers and Physical Characteristics

Listing	Part Number ¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMR	16A-272-xA1	0.35 (8.9)	51 (76)	1,000' Plywood reel	12
CMP	16A-272-xB1	0.32 (8.1)	49 (73)	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



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 (10GbE) 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 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 10GbE 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

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	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL	
	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					
	TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL		TIA-568-C.2	GRUPO MATEL				
	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