

Category 6+ F/UTP (ScTP)

CMR/CMP



Flame Retardant PVC Jacket

Thermoplastic Insulation

Solid Annealed
Copper Conductor

Cross-Web Separator

Tin-Coated Drain Wire

Aluminum Foil Tape Shield



SPECIFICATIONS

Configuration	Copper pairs surrounded by aluminum PET foil with an outer drain wire and jacket
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
Shield	Aluminum/PET with 10% overlap
Drain Wire	Tinned copper
Jacket	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Nominal 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 ANSI/TIA/EIA-TSB-155 Article 800, NEC (NFPA 70) HDBaseT Class A and B
NRTL Programs	UL Verified CAT 6; UL, c(UL) Listed CMR; UL, 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!

Category 6+ F/UTP (ScTP) cable, with guaranteed performance out to 500 MHz, exceeds ANSI/TIA-568.2-D for CAT 6 cables. The cable is UL Verified CAT 6 and has a typical Alien Crosstalk margin of 18 dB. The cable can be used for 10GBASE-T applications for up to 55 meters per ANSI/TIA/EIA-TSB-155.

The cable consists of four (4) balanced 23 AWG copper pairs around a flame retardant cross-web. The core is wrapped with a Mylar® backed aluminum foil. A drain wire is applied longitudinally against the tape. The cable is then protected with a flexible riser or plenum rated PVC jacket. Category 6+ F/UTP (ScTP) is certified for HD A/V applications using HDBaseT Class A and B protocol.

APPLICATIONS

- 10GBASE-T (up to 55 meters), 1000BASE-T, 100BASE-T and legacy Ethernet applications
- Power over Ethernet (PoE) - IEEE 802.3bt Type 1 to 4
- ATM and token ring
- HDBaseT Class A and B

FEATURES

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™ (HPD™)
- Multi-Attribute Certification by GreenCircle Certified, LLC
- Overall shielded core
- Guaranteed performance to 500 MHz
- Exceeds ANSI/TIA-568.2-D specification for CAT 6 cable performance
- CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip® circuit identification system
- HDBaseT Class A and B certified

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
- Protects against EMI/RFI
- 18 dB typical margin Alien Crosstalk performance
- Assures ample headroom for existing and future high bandwidth applications
- Allows for 10GBASE-T applications up to 55 meters
- 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
- Ideal for any A/V applications up to 100m channel

PART NUMBERS AND PHYSICAL CHARACTERISTICS

Listing	Part Number ¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMR	6T-246-xA	0.29 (7.3)	32 (48)	1,000' BrakeBox®	12
CMR	6T-272-xA	0.29 (7.3)	32 (48)	1,000' Plywood reel	12
CMP	6T-246-xB	0.28 (7.1)	37 (55)	1,000' BrakeBox®	12
CMP	6T-272-xB	0.28 (7.1)	37 (55)	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

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		
	TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex	
	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
1	2.0	2.0	1.7	74.3	74.3	82.9	72.3	72.3	82.2	72.3	72.3	81.9
4	3.8	3.8	3.4	65.3	65.3	77.6	61.5	61.5	74.2	63.3	63.3	75.0
10	6.0	6.0	5.4	59.3	59.3	70.1	53.3	53.3	64.7	57.3	57.3	68.3
16	7.6	7.6	6.9	56.2	56.2	69.6	48.6	48.6	62.5	54.2	54.2	67.1
20	8.5	8.5	7.8	54.8	54.8	68.7	46.3	46.3	60.7	52.8	52.8	65.7
25	9.5	9.5	8.8	53.3	53.3	66.1	43.8	43.8	58.7	51.3	51.3	64.7
31.25	10.7	10.7	9.8	51.9	51.9	67.8	41.2	41.2	56.2	49.9	49.9	63.4
62.5	15.4	15.4	14.2	47.4	47.4	64.0	32.0	32.0	47.8	45.4	45.4	59.1
100	19.8	19.8	18.2	44.3	44.3	58.0	24.5	24.5	38.7	42.3	42.3	55.0
200	29.0	29.0	26.6	39.8	39.8	53.8	10.8	10.8	26.5	37.8	37.8	50.6
250	32.8	32.8	30.1	38.3	38.3	51.0	5.5	5.5	21.1	36.3	36.3	48.7
300		35.5	33.4		36.2	53.8		0.6	19.4		34.8	49.1
400		42.1	39.5		34.4	49.1			8.0		32.5	44.5
500		48.0	45.1		32.9	42.9					31.0	41.7

Frequency MHz	PSACR Minimum dB/100 m			Return Loss Minimum dB/100 m			ELFEXT (ACRF) Minimum dB/100 m			PSELFEXT (PSACRF) Minimum dB/100 m		
	TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex		TIA-568.2-D	Superior Essex	
	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical
1	70.3	70.3	80.2	20.0	20.0	26.0	67.8	67.8	78.7	64.8	64.8	76.6
4	59.5	59.5	71.6	23.0	23.0	31.1	55.8	55.8	65.9	52.8	52.8	64.2
10	51.3	51.3	62.9	25.0	25.0	36.3	47.8	47.8	58.1	44.8	44.8	56.4
16	46.6	46.6	60.2	25.0	25.0	37.7	43.7	43.7	54.0	40.7	40.7	52.2
20	44.3	44.3	58.1	25.0	25.0	36.0	41.8	41.8	52.1	38.8	38.8	50.3
25	41.8	41.8	56.1	24.3	24.3	38.6	39.8	39.8	50.2	36.8	36.8	48.4
31.25	39.2	39.2	53.6	23.6	23.6	38.3	37.9	37.9	48.1	34.9	34.9	46.4
62.5	30.0	30.0	45.0	21.5	21.5	32.8	31.9	31.9	41.4	28.9	28.9	40.3
100	22.5	22.5	37.0	20.1	20.1	30.7	27.8	27.8	36.8	24.8	24.8	35.2
200	8.8	8.8	24.0	18.0	18.0	27.6	21.8	21.8	32.6	18.8	18.8	31.8
250	3.5	3.5	18.8	17.3	17.3	28.5	19.8	19.8	32.5	16.8	16.8	31.3
300			15.8		15.9	28.6		17.5	30.8		14.5	28.9
400			5.0		14.9	24.9		14.9	24.7		11.9	23.5
500					13.7	25.0		12.5	22.5		9.5	21.5

SUSTAINABILITY LEADERSHIP



UL and the related logo are registered trademarks of UL LLC. Health Product Declaration, HPDC and the related logo are trademarks of Health Product Declaration Collaborative. GreenCircle Certified logo is a registered trademark of GreenCircle Certified, LLC. USGBC and the related logo are registered trademarks of U.S. Green Building Council. Mylar is a registered trademark of E. I. du Pont de Nemours and Company or its affiliates.