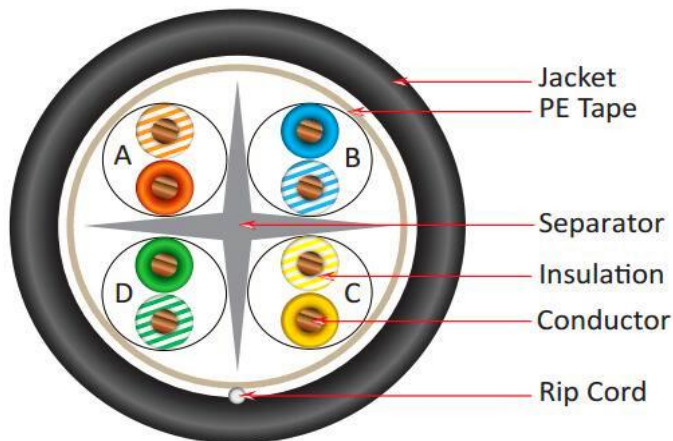


CAT6A AUGMENTED 10Gb UTP UNSHIELDED OUTDOOR CABLE SPEC

DATE:2023.05.12

Cross Section



Description

CAT6A (Augmented) 10Gb, Outdoor CMX Rated, UTP, 23AWG, Solid Bare Copper, 8-Conductor,LLDPE Jacket(UV), 305M, Wooden Spool.

Features

- High-Performance Data Communications Cable
- Suitable for 10Gb High-Speed Data Applications
- Supports PoE/PoE+/PoE++(IEEE802.3af/at/bt) 4PPoE up to 90W
- Category-6A (Augmented) Unshielded Twisted Pair
- 4-Pair , Easily Identified Color-Striped Pairs
- 23AWG Solid Bare Copper Conductors
- Outdoor UV Rated Jacket
- cETLus Listed, RoHS Compliant
- 305M Wooden Spool

Technical Data

Rated Temperature (oC)	-20~75
Application	Horizontal Wiring in LAN
Standard	TIA/EIA-568B.2,ISO/IEC11801/IEC61156.5

Construction

Conductor	Solid Bare Copper
AWG	23
Conductor Dia. (±0.005mm)	0.585
Insulation	HDPE
Average Thickness(mm)	0.2125
Min. Point Thickness(mm)	0.1955
Insulation Dia.(±0.01mm)	1.01
Twisted Pair Dia.(±0.02mm)	2.02
Separator	PE
PE-Tape	Yes
Jacket	LLDPE(UV)
Average Thickness(mm)	0.60~0.65
Outer Dia.(±0.2mm)	6.40
Rip Cord	Yes

Color of Pairs

1 Pair	Orange,White-Orang
2 Pair	Blue,White-Blue
3 Pair	Brown,White-Brown
4 Pair	Green,White-Green

Jacket colors

Black or White

Performance

Electrical Characteristics:

Frequency (MHz)	Return loss (Min dB)	Attenuation Max (dB/100m)	NEXT (Min dB)
1	20	2	65
4	23	4	56
8	25	6	52
16	26	8	47
20	27	9	46
63	25	17	38
100	25	22	35
200	18	32	31
250	17	37	29
300	17	41	28
400	16	49	26
550	15	59	24

Frequency (MHz)	PSNEXT Min (dB)	ELFEXT Min(dB/100m)	PSELFEXT Min(dB/100m)	Delay Max(ns/100m)
1	62	64	61	570
4	53	52	49	552
8	49	46	43	547
16	44	40	37	543
20	43	38	35	542
63	35	28	25	539
100	32	24	21	538
200	28	18	15	537
250	26	16	13	536
300	25	14	11	536
400	23	12	9	536
550	21	9	6	536

Electrical Characteristics:

1.0-100.0MHz Impedance (ohms)	100 ± 12
100.0-250.0MHz Impedance (ohms)	100 ± 15
250.0-550.0MHz Impedance (ohms)	100 ± 22
1.0-550.0MHz Delay Skew (ns/100m)	≤25
Pair-to-Ground Capacitance Unbalance (pF/100m)	≤330
Conductor DC Resistance 20°C (ohms/km)	≤93.8
Resistance Unbalance (%)	≤5

Mechanical Characteristics:

Test Object	Jacket
Test Material	LLDPE
Before Tensile Strength (Mpa)	≥13.8
Aging Elongation (%)	≥100
Aging Condition (°Cxhrs)	100x168
After Tensile Strength (Mpa)	≥85% of unaged
Aging Elongation (%)	≥50% of unaged
Cold Bend(-20±2°Cx4hrs)	No crack

Packaging

305M Wooden Spool

Marking on Jacket

Per request