



Category 6 UTP CMP/Plenum Cable

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Category 6 cabling solution supports the operation of 1000 BASE-TX over 100 meters and are qualified for frequency up to 550 MHz. It provides bandwidth required for multi-media, broadband video, analog video and other future applications.

Standard Compliances

All proposed Category 6 requirements as per ANSI/TIA/EIA, ISO/IEC, and CENELEC EN Standards, ANSI/TIA-568-C.2 Category 6 ISO/IEC 11801 Class E 2nd Edition CENELEC EN 50173-1 IEC 61156-5, CENELEC EN 50288-6-1 for Horizontal Cable
Flame retardancy is verified according to NFPA 262

Construction

Primaries: Conductor: 23 AWG (MIN.0.546mm) Solid Bare Copper Dual Insulation, Fep On All 4 Pairs
Pair Assembly: 2 Primaries Twisted In Varied Lays
Assembly: 4 Pairs Cabled Together, And 1 Rip Cord (Nylon Fiber)
Jacket: No Lead Plenum Rated Thermoplastic, Nominal Cable OD: Nominal: 6.3 mm
Listing: C(UL)US or C(ETL)US Type CMP UL or ETL Verified to Category 6

Physical Characteristics

Cable Weight: 13.87kg/1000ft (45.47 Kg/km)
Bending Radius: 1.9" (48mm) Min. (8×Cable OD)
Minimum Bend Radius: 8×Cable Diameter For 4-pair Unshielded Twisted-pair (UTP)
Horizontal Cable, Under No-load Conditions
Pulling Tension: 25 lbf (110 N) Max
Operating Temp.: -20°C To +60°C (-4°F to +140°F)
Storage Temp.: -20°C To +75°C (-4°F to +167°F)
Installation Temp.: 0°C To +60°C (+32°F to +140°F)

Electrical Properties

Operating Temp: -70°C ~ +150°C
Voltage: 300V/AC Or V/DC
Capacitance: 5.6nf/100m.Nom
Characteristic Impedance: 100±15% Ohms,1 - 250MHz
velocity of Propagation: 69% Nom.
DCR: Conductor: 9.38 Ohms/100m.Nom
D-C Resistance Unbalance: 5%, Max.
Propagation Delay: 250mhz 536ns/100m Max.
Delay Skew: 45ns/100m.MAX

Application

1000BASE-TX Gigabit Ethernet, 100BASE-T (IEEE 802.3), 100 VG - AnyLAN(IEEE802.12), Voice, T1, ISDN, 10BASE(IEEE802.3), 155/622 Mbps ATM, 550 MHz Broadband Video

Ordering Information

QT-C6-UP-1000-XX Cat.6 UTP 23AWG CMP/Plenum Cable, 1000ft (UL)

XX=BK(Black) BL(Blue) GN (Green) GY(Gray) OR(Orange) RD(Red) PU(Purple) WT(White) YW(Yellow) IV(Ivory)

Electrical Performance

Freq (MHz)	Attenuation (dB)		NEXT (dB/100m)		PS NEXT (dB)		ACR (dB)		PSACR (dB)		ACR-F (dB)		PSACR-F (dB)		Return Loss (dB)	
	Nor.	Typ.	Nor.	Typ.	Nor.	Typ.	Nor.	Typ.	Nor.	Typ.	Nor.	Typ.	Nor.	Typ.	Nor.	Typ.
1.0	2.1	1.8	74.3	87.3	72.3	85.3	72.2	85.5	70.2	83.5	67.8	84.8	64.8	79.8	20.0	29.0
4.0	3.8	3.5	65.3	78.3	63.3	76.3	61.4	74.8	59.4	72.8	55.8	72.8	52.8	67.8	23.0	32.0
10.0	6.0	5.6	59.3	72.3	57.3	70.3	53.3	66.7	51.3	64.7	47.8	64.8	44.8	59.8	25.0	38.0
16.0	7.6	7.1	56.2	69.2	54.2	67.2	48.6	62.1	46.6	60.1	43.7	60.7	40.7	55.7	25.0	34.0
20.0	8.5	7.9	54.8	67.8	52.8	65.8	46.2	59.9	44.2	57.9	41.8	58.8	38.8	53.8	25.0	34.0
31.25	10.8	10.0	51.9	64.9	49.9	62.9	41.1	54.9	39.1	52.9	37.9	54.9	34.9	49.9	23.6	32.0
62.5	15.5	14.4	47.4	60.4	45.4	58.4	31.9	46.0	29.9	44.0	31.9	48.9	28.9	43.9	21.5	32.0
100.0	19.9	18.6	44.3	57.3	42.3	55.3	24.4	38.7	22.4	36.7	27.8	44.8	24.8	39.8	20.1	32.0
160.0	25.8	24.1	41.2	54.2	39.2	52.2	15.5	30.1	13.5	28.1	23.7	40.7	20.0	35.7	18.7	31.0
200.0	29.0	26.8	39.8	52.8	37.8	50.8	10.6	26.0	8.6	24.0	21.8	38.8	18.8	33.8	18.0	29.0
250.0	33.0	30.5	38.3	51.3	36.3	49.3	5.3	20.8	3.3	18.8	19.8	37.0	16.8	31.8	17.3	29.0
300.0	36.4	33.7	37.2	50.0	35.2	48.1	0.8	16.3	-	14.4	18.3	36.0	15.3	30.0	16.8	27.0
450.0	46.0	43.3	34.5	48.5	32.5	45.3	-	5.2	-	2.0	14.8	30.0	11.8	25.0	15.6	24.0
500.0	48.4	46.0	33.8	43.1	31.8	42.7	-	-	-	-	13.8	27.0	10.8	22.0	15.2	20.0
550.0	51.8	49.3	33.2	40.5	31.2	41.4	-	-	-	-	13.0	25.0	10.0	17.7	14.92	18.0

