

Category 6 Ultra (600MHz) U/UTP Cables



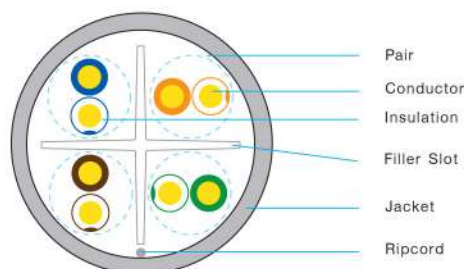
STANDARD

- ANSI/TIA-568-C.2 Category 6
- ISO/IEC 11801:2002 Class E
- EN 50173-1 Category 6
- ICEA S-102-700 Category 6
- EN 50288-6-1, NEMA WC 66
- IEC 61156-5, ASTM D4566-98, IEC 60332-1
- UL/CSA Listed CMX, CM, CMR, CMP and LSZH
- ETL and 3P Verified to TIA-568-C.2 CAT 6
- UL E197771, INTERTEK, RoHS Compliant



APPLICATION

- 10GBASE-T (IEEE 802.3an 10Gigabit Ethernet *55m)
- 1000 BASE-T (IEEE 802.3ab Gigabit Ethernet)
- 100 BASE-TX (IEEE 802.3u Fast Ethernet)
- 10 BASE-T (IEEE 802.3 Ethernet)
- 155/622Mbps and 1.2Gbps ATM
- 4/16 Mbps Token Ring
- POE, POE+ (IEEE 802.3af, IEEE 802.3at)
- TP-PMD, TPDDI, ISDN, VoIP
- Analog & Digital Voice, Digital & Analog Video



ELECTRICAL CHARACTERISTICS

Impedance	: 100±5Ω, 1 MHz to 600 MHz
Mutual Capacitance	: 5.6 nFMax / 100m
Capacitance, Unbalance	: 160 pF Max / 100m
DC Resistance	: 6.65 ohm Max/100m
DC Resistance, Unbalance	: 5% Max.
Insulated Resistance	: 5000 MΩ/Km
Dielectric Strength	: 1kV/min
Propagation Delay	: 536 ns/100m Max @600MHz
Delay Skew	: 30 ns Max

CONSTRUCTION / MATERIAL

Conductor	: 23AWG Solid Bare Copper
Insulation	CM, CMR, LSZH : HDPE CMP : FEP
Filler Slot	: FRPE
Ripcord	: Under Jacket
Jacket	CM, CMR : FRPVC CMP : FRPVC (Low Smoke) LSZH : LSZH

FREQUENCY (MHZ)	INSERTION LOSS (dB/100m)	NEXT MIN.(dB)	ACR MIN.(dB)	PS.NEXT MIN.(dB)	PS.ACR MIN.(dB)	ELFEXT MIN.(dB/100m)	PS.ELFEXT MIN.(dB/100m)	RL MIN.(dB)
1	2.0	78.0	76.0	76.0	73.5	69.0	66.0	20.0
31.25	10.7	56.0	45.3	54.0	42.8	38.5	35.6	23.6
62.5	15.4	50.5	35.1	52.2	33.0	33.0	29.5	21.5
100	19.8	47.5	27.7	49.8	25.6	28.5	25.8	20.1
155	25.1	45.0	19.7	47.2	17.2	25.0	23.0	18.8
200	29.0	44.4	15.4	45.0	12.3	22.5	21.7	18.0
250	32.0	42.9	10.9	43.2	6.5	21.2	18.0	17.3
300	36.4	41.5	4.9	40.7	1.9	18.5	15.6	16.8
400	43.0	38.5	-	37.5	-	16.5	13.7	15.9
550	51.8	36.7	-	34.5	-	13.5	10.7	14.9
600	54.5	36.5	-	34.5	-	13.0	10.0	14.7

MECHANICAL PROPERTIES

Minimum Bending Radius

Install 8 X Cable Diameter

After Install 4 X Cable Diameter

Tensile Strength

110 N (25lbf)

Ultimate Breaking Strength

>400 N (90lbf)

Installation / Operating temperature

-20°C to 60°C

Storage Temperature

-20°C to 80°C

Part No.	UL/NEC Flame Rating	Conductor	Jacket	Diameter (mm.)	Color	Packaging
US-9116	CMR	23AWG Solid Bare Copper	FRPVC	6.4	White	305m/Pull Box
US-9116LSZH	LSZH	23AWG Solid Bare Copper	LSZH	6.4	White	305m/Pull Box
US-9116P	CMP	23AWG Solid Bare Copper	FRPVC(LS)	5.8	White	305m/Pull Box
US-9116CM	CM	23AWG Solid Bare Copper	FRPVC	6.4	White	305m/Pull Box
US-9126	CM	24AWG Stranded Bare Copper	FRPVC	5.4	Blue	305m/Pull Box