

Data/LAN Cables

Cat 6 U/UTP PE



Application

- ISDN
- 4/6 Mbps Token Ring (IEEE 802.5)
- 100 Mbps CDDI
- 250 Mbps ATM Power over Ethernet (PoE)
- 10 BASE-T Ethernet (IEEE 802.3j)
- 100 BASE-VG AnyLAN (IEEE 802.12)
- 1000 BASE-T 1 Gigabit Ethernet (IEEE 802.3 ab)

Cable Construction

- 1 - Conductor : Electrolytic solid copper conductor
- 2 - Insulation : Solid polyethylene insulation
- 3 - Stranding : Insulations are stranded into pairs
- 4 - Separator : Pairs are stranded together with star shaped separator
- 5 - Outer Jacket : UV resistant polyethylene outer jacket.

Technical Characteristics

Conductor Resistance Ω/km (20 °C)	Insulation Resistance $\text{M}\Omega/\text{km}$ (20 °C)	Mutual Capacitance nF/km	Resistance Unbalance %	Propagation Velocity %	Characteristic Impedance Ω (1-250 MHz)	Operating Voltage V DC	Test Voltage V (DC. 1 minute)
Max. 94	5000	Max. 56	%2	%67-69	100 $\pm$ %15	250	1200

Mechanical Characteristics

Bending Radius	Temperature Range Operating
8.0xD mm	-20°C ~ +60°C

Standards

Manufacturing
ANSI/TIA-568-C.2, IEC-61156-5, IEC-11801

Electrical Properties

Frequency MHz	Insertion Loss $\text{dB}/100\text{m}$ (Max.)	Near-end Crosstalk (NEXT) dB (Min.)	Power-sum Near-end Crosstalk (PSNEXT) dB (Min.)	Equal-level Far-end Crosstalk (ELFEXT) $\text{dB}/100\text{m}$ (Min.)	Power-sum Equal Level Far-end Crosstalk (PSELFEXT) $\text{dB}/100\text{m}$ (Min.)	Return Loss (RL) dB (Min.)
1	2	74.3	72.3	67.8	64.8	20
4	3.8	65.3	63.3	55.8	52.8	23
8	5.3	60.8	58.8	49.7	46.7	24.5
10	6	59.3	57.3	47.8	44.8	25
16	7.6	56.2	54.2	43.7	40.7	25
20	8.5	54.8	52.8	41.8	38.8	24.3
25	9.5	53.3	51.3	39.8	36.8	23.6
31.25	10.7	51.9	49.9	37.9	34.9	21.5
62.5	15.4	47.4	45.4	31.9	28.9	20.1
100	19.8	44.3	42.3	27.8	24.8	18
200	29	39.8	37.8	21.8	18.8	17.3
250	32.8	38.3	36.3	19.8	16.8	16.8

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Part Number	Pair Count	Conductor Diameter (AWG)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.416.2.1.1.0057.0.0004	4	23	6.0	18.2	37.1	305/500/1000