

Data/LAN Cables

Cat 5e U/UTP PVC



Application

- 10 BASE-T (IEEE 802.3) Ethernet
- 100 BASE-T (IEEE 802.3u) Fast Ethernet
- 100 VG-AnyLAN (IEEE 802.12)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100 Mbps CDDI
- 52/155 Mbps ATM
- 1000 BASE-T (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 and all pairs are stranded together.
- 4 - Outer Jacket : UV resistant PVC outer jacket, RAL 7035 (Grey)

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 (1-100 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 | -55°C ~ +60°C |

Standards

| Manufacturing | Flame Retardancy Test |
|--|---|
| ANSI/TIA-568-C.2, IEC-61156-5, IEC-11801 | IEC 60332-1-2, VDE 0482-332-1-2, EN 60332-1-2 |

Electrical Properties

| Frequency MHz | Insertion Loss dB/100m (Max.) | Near-end Crosstalk (NEXT) dB (Min.) | Power-sum Near-end Crosstalk (PSNEXT) dB (Min.) | Equal-level Far-end Crosstalk (ELFEXT) dB/100m (Min.) | Power-sum Equal Level Far-end Crosstalk (PSELFEXT) dB/100m (Min.) | Return Loss (RL) dB (Min.) |
|------------------|-------------------------------------|---|---|---|---|----------------------------------|
| 1 | 2 | 65.3 | 62.3 | 63.8 | 63.8 | 23 |
| 4 | 4.1 | 56.3 | 53.3 | 51.8 | 51.8 | 23 |
| 8 | 5.8 | 51.8 | 48.8 | 45.7 | 45.7 | 23 |
| 10 | 6.5 | 50.3 | 47.3 | 43.8 | 43.8 | 23 |
| 16 | 8.2 | 47.2 | 44.2 | 39.7 | 39.7 | 23 |
| 20 | 9.3 | 45.8 | 42.8 | 37.8 | 37.8 | 23 |
| 25 | 10.4 | 44.3 | 41.3 | 35.8 | 35.8 | 22 |
| 31.25 | 11.7 | 42.9 | 39.9 | 33.9 | 33.9 | 21 |
| 62.5 | 17 | 38.4 | 35.4 | 27.9 | 27.9 | 18 |
| 100 | 22 | 35.3 | 32.3 | 23.8 | 23.8 | 16 |

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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) |
|-------------------------|------------|--------------------------|-----------------------------|-----------------------|------------------------|---------------------|
| 3.415.2.1.2.0046.0.0004 | 4 | 25 | 5.2 | 12.7 | 32 | 500/1000 |