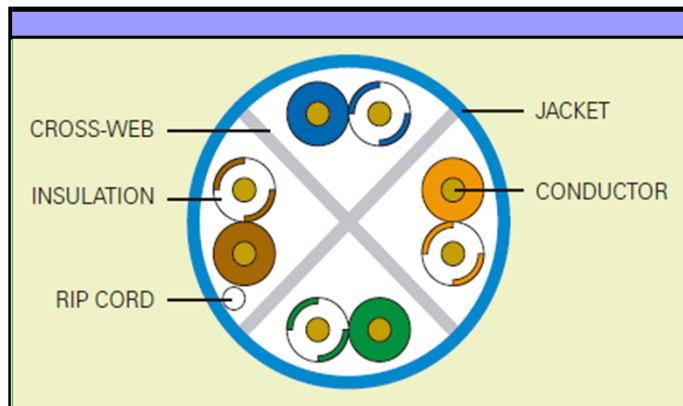


Category 6 Enhanced UTP 4 Pair Cable



Description

23 AWG CAT6E CMR, High-Performance Data Cable

Applicable Standards

- UTP CABLE CAT6, #23 AWG X 4 PAIR W/HDPE INSULATION AND FLAME-RETARDANT PVC JACKET
- UL Listed Type CMR
- C(UL) listed CMG FT4
- ETL Listed Type CMR
- C(ETL) listed CMG FT4
- TIA/EIA-568-C.2, UL 1666 CMR RATED
- IEC 61156 AND ANSI/TIA-568-C.2
- ROHS Compliant
- ATM 155 Mbps
- Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
- 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

Physical Characteristics

| | |
|-------------------------------------|----------------------------|
| Number of Conductor Pairs | 4 |
| Size | 23 AWG |
| Stranding | Solid |
| Conductor Material | Solid Annealed Bare Copper |
| Shield Material | Unshielded |
| Rip Cord | Yes |
| Insulation Material | Polyethylene |
| Insulation Overall Diameter | 0.040 in. ± 0.0002 in. |
| Insulation Average Thickness | 0.0088 in. |
| Jacket | Flame Retardant PVC |
| Outer Jacket Average Wall Thickness | 0.023 in. |
| Outer Jacket Nominal O.D. | 0.244 in. ± 0.008 in. |
| Nominal Weight | 30 lbs. |

Mechanical Characteristics

| | | |
|--------------------|-------------------|---------------|
| Temperature Rating | Installation | 0 to + 60°C |
| | Operating | 0°C to + 75°C |
| Tensile Strength | Before | = 13.8 Mpa |
| Elongation | Aging | > = 100% |
| Aging Condition | 100°C x 168 hours | |
| | After | 85% of unaged |
| | Aging | 50% of unaged |

Color Code

| | | |
|--------|----------------|--------|
| Pair 1 | White / Blue | Blue |
| Pair 2 | White / Orange | Orange |
| Pair 3 | White / Green | Green |
| Pair 4 | White / Brown | Brown |

Cable Marking

EXXXXXX-XX 23AWG 4 PR UTP CMR C(UL)US VERIFIED
75C (UL) CATEGORY 6 TIA.EIA-568.C.2 C(ETL)US FT4 TESTED
TO 550 MHZ ETL VERIFIED TO ****FT

Electrical Performance

| Frequency (MHz) | Attenuation (dB/100m) | Return loss (dB) | NEXT (dB) | PS-NEXT (dB) |
|-----------------|-----------------------|------------------|-----------|--------------|
| | Max. | Min. | Min. | Min. |
| 1 | 2.0 | 20.0 | 77.3 | 75.3 |
| 4 | 3.8 | 23.6 | 68.3 | 66.3 |
| 8 | 5.3 | 25.4 | 63.8 | 61.8 |
| 10 | 5.9 | 26.0 | 62.3 | 30.3 |
| 16 | 7.4 | 26.0 | 59.3 | 57.3 |
| 20 | 8.3 | 26.0 | 57.8 | 55.8 |
| 25 | 9.3 | 25.5 | 56.3 | 54.3 |
| 31.25 | 10.4 | 25.0 | 54.9 | 52.9 |
| 62.5 | 14.9 | 23.5 | 50.4 | 48.4 |
| 100 | 19.0 | 22.5 | 47.3 | 45.3 |
| 155 | 23.9 | 21.6 | 45.8 | 43.5 |
| 200 | 27.4 | 21.0 | 42.8 | 40.8 |
| 250 | 30.8 | 20.5 | 41.3 | 39.3 |
| 300 | 34.0 | 20.1 | 40.2 | 38.2 |
| 350 | 37.0 | 19.8 | 39.2 | 37.2 |
| 400 | 39.7 | 19.5 | 38.3 | 36.3 |
| 450 | 42.1 | 19.2 | 37.5 | 35.5 |
| 500 | 44.9 | 19.0 | 36.8 | 34.8 |
| 550 | 47.3 | 18.8 | 36.2 | 34.2 |

| Frequency (MHz) | ELFEXT Min. (dB) | PS-ELFEXT Min. (dB) | ACR Min. (dB) | PS-ACR Min. (dB) |
|-----------------|------------------|---------------------|---------------|------------------|
| 1 | 70.8 | 67.8 | 75.0 | 73.0 |
| 4 | 58.7 | 55.7 | 64.0 | 62.0 |
| 8 | 52.7 | 49.7 | 57.7 | 55.7 |
| 10 | 50.8 | 47.8 | 55.6 | 53.6 |
| 16 | 46.7 | 43.7 | 50.7 | 48.7 |
| 20 | 44.7 | 41.7 | 48.2 | 16.2 |
| 25 | 42.8 | 39.8 | 45.6 | 13.6 |
| 31.25 | 40.9 | 37.9 | 42.8 | 40.8 |
| 62.5 | 34.8 | 31.8 | 32.9 | 30.9 |
| 100 | 30.8 | 27.8 | 24.9 | 22.9 |
| 155 | 27.0 | 23.6 | 21.0 | 21.5 |
| 200 | 24.7 | 21.7 | 18.4 | 16.4 |
| 250 | 22.8 | 19.8 | 13.5 | 11.5 |
| 300 | 21.2 | 18.2 | 9.6 | 5.0 |
| 350 | 19.9 | 16.9 | 5.2 | 3.2 |
| 400 | 18.7 | 15.7 | 1.5 | - |
| 450 | 17.7 | 14.7 | - | - |
| 500 | 16.8 | 13.8 | - | - |
| 550 | 15.9 | 12.9 | - | - |

* Values above 250MHz are information only

Electrical Characteristics

| | |
|--|---------------------|
| Maximum Conductor DC Resistance @ 20°C | 9.38 Ω / 100 Meters |
| Maximum DC Resistance Unbalanced @ 20°C | 5% |
| Maximum Pair-to-Pair Ground Capacitance Unbalanced | 30 pF / 100 Meters |
| Characteristic Impedance | 100 ± 15 Ω |
| Mutual Capacitance | 5.6 nF / 100 Meters |
| Maximum Delay Skew | 40 nS / 100 Meters |

Part Numbers

| Part # | Color | Put-up |
|--------------|--------|--------------------|
| 6E04UR BK -3 | Black | 1,000' Reel in Box |
| 6E04UR BL -3 | Blue | 1,000' Reel in Box |
| 6E04UR GN -3 | Green | 1,000' Reel in Box |
| 6E04UR GY -3 | Grey | 1,000' Reel in Box |
| 6E04UR RD -3 | Red | 1,000' Reel in Box |
| 6E04UR WH -3 | White | 1,000' Reel in Box |
| 6E04UR YL -3 | Yellow | 1,000' Reel in Box |