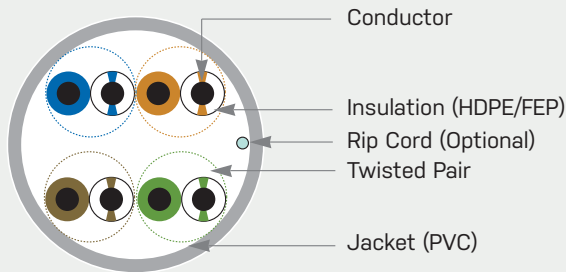
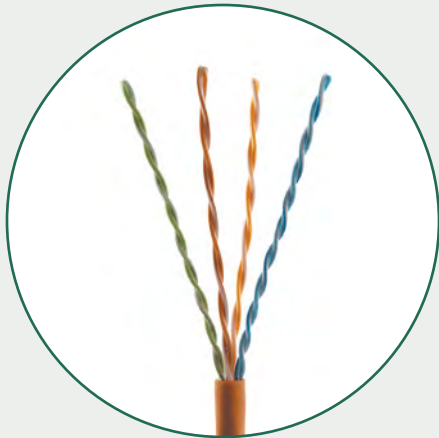


Category 6 500MHz UTP

U6500-004-xxxx



Description

- 90°C UL Listed & 0.5A-LP Rating for CMP
- Filler-less design simplifies installation
- Capable of handling full broadband and baseband video signals
- Every master reel is tested for electrical performance compliance
- Dual length marking in feet and meters from 1000 ft (305 m) to 0 ft (0 m)
- Lightweight, easy-pull Reelex II packaging eases installation
- Slim cable outer diameter of 0.213 in. (Riser Rated), 0.205 in. (Plenum Rated)

Application

- Horizontal Distribution & Backbone Cabling
- 155Mbps ATM, 100Mbps TP-PMD
- 10/100/1000BASE-T (IEEE 802.3)
- 10GBASE-T up to max. 55 m
- ISDN, ADSL
- ATM LAN 1.2G
- PoE, PoE+ (IEEE 802.3af, IEEE 802.3at)

Certifications



Part Numbers

| JACKET COLOR* | DESCRIPTION | |
|---------------|--|---|
| | Category 6 UTP Cable, Non X-filler 4-Pair, Riser Rated | Category 6 UTP Cable, Non X-filler 4-Pair, Plenum Rated |
| Blue | U6500-004-RBL2 | U6500-004-PBL2 |
| White | U6500-004-RWH2 | U6500-004-PWH2 |
| Grey | U6500-004-RGY2 | U6500-004-PGY2 |
| Black | U6500-004-RBK2 | U6500-004-PBK2 |
| Yellow | U6500-004-RYL2 | U6500-004-PYL2 |
| Green | U6500-004-RGN2 | U6500-004-PGN2 |
| Red | U6500-004-RRD2 | U6500-004-PRD2 |
| Orange | U6500-004-ROR2 | U6500-004-POR2 |
| Violet | U6500-004-RVL2 | U6500-004-PVL2 |

*Other jacket colors available upon request with leadtime and minimum order quantities

Performance Characteristics

Meet or exceed TIA-568-C.2 Category 6 requirements

| FREQUENCY ² (MHZ) | RETURN LOSS (RL) MINIMUM DB/100 M | | | INSERTION LOSS (ATTENUATION) MAXIMUM DB/100 M | | |
|---------------------------------|--------------------------------------|--------------------|--------------------|--|--------------------|--------------------|
| | TIA-568-C.2 Standard | U6500-R Typical | U6500-P Typical | TIA-568-C.2 Standard | U6500-R Typical | U6500-P Typical |
| 1 | 20.0 | 26.65 | 27.52 | 2.0 | 1.75 | 1.67 |
| 4 | 23.0 | 34.63 | 30.54 | 3.8 | 3.45 | 3.28 |
| 10 | 25.0 | 36.19 | 30.78 | 6.0 | 5.47 | 5.37 |
| 16 | 25.0 | 38.58 | 32.42 | 7.6 | 6.97 | 6.85 |
| 20 | 25.0 | 44.48 | 36.16 | 8.5 | 7.79 | 7.70 |
| 31.25 | 23.6 | 39.60 | 35.64 | 10.7 | 9.81 | 9.74 |
| 62.5 | 21.5 | 39.56 | 34.45 | 15.4 | 14.13 | 14.09 |
| 100 | 20.1 | 37.99 | 33.04 | 19.8 | 18.08 | 18.09 |
| 200 | 18.0 | 34.95 | 32.49 | 29.0 | 26.03 | 26.44 |
| 250 | 17.3 | 34.38 | 27.51 | 32.8 | 29.33 | 29.69 |
| 300 | | 38.10 | 29.85 | | 33.13 | 33.20 |
| 400 | | 33.81 | 34.86 | | 38.34 | 38.85 |
| 500 | | 35.61 | 32.97 | | 43.56 | 43.95 |

| FREQUENCY ² (MHZ) | NEAR END CROSS TALK (NEXT) MINIMUM DB/100 M | | | EQUAL LEVEL FAR END CROSS TALK (ELFEXT) MINIMUM DB/100 M | | |
|---------------------------------|--|--------------------|--------------------|---|--------------------|--------------------|
| | TIA-568-C.2 Standard | U6500-R Typical | U6500-P Typical | TIA-568-C.2 Standard | U6500-R Typical | U6500-P Typical |
| 1 | 74.3 | 94.84 | 88.35 | 67.8 | 92.41 | 88.03 |
| 4 | 65.3 | 84.54 | 74.40 | 55.8 | 83.86 | 75.90 |
| 10 | 59.3 | 77.86 | 71.53 | 47.8 | 78.20 | 70.39 |
| 16 | 56.2 | 75.98 | 69.46 | 43.7 | 76.86 | 68.13 |
| 20 | 54.8 | 73.23 | 69.13 | 41.8 | 74.63 | 65.46 |
| 31.25 | 51.9 | 70.48 | 62.72 | 37.9 | 72.35 | 61.81 |
| 62.5 | 47.4 | 65.07 | 60.55 | 31.9 | 71.30 | 58.69 |
| 100 | 44.3 | 63.12 | 55.10 | 27.8 | 64.88 | 57.71 |
| 200 | 39.8 | 58.39 | 54.33 | 21.8 | 60.37 | 49.03 |
| 250 | 38.3 | 50.62 | 53.58 | 19.8 | 56.90 | 44.99 |
| 300 | | 52.51 | 49.97 | | 48.40 | 38.38 |
| 400 | | 54.01 | 55.13 | | 35.33 | 41.00 |
| 500 | | 46.70 | 64.98 | | 42.04 | 32.59 |

²Value above 250Mhz are for informational purposes only

Technical Details

| ITEM | UNIT | RISER | PLENUM |
|---------------------------------|---------------------|---|-------------------------|
| Conductor DC Resistance | Max. Ohms/100 m | 9.38 | 9.38 |
| Resistance Unbalance | Max. % | 5 | 5 |
| Mutual Capacitance | Max. nF/100 m | 5.6 | 5.6 |
| Capacitance Unbalance | Max. pF/100 m | 330 | 330 |
| Delay Skew | Max. ns | 45 | 45 |
| Nominal Velocity of Propagation | % | 67 | 70 |
| Operating Temperature | °F (°C) | -4 to +140 (-20 to +60) | -4 to +140 (-20 to +60) |
| Storage Temperature | °F (°C) | -4 to +176 (-20 to +80) | -4 to +176 (-20 to +80) |
| Bending Radius | | 4 x Cable diameter | 4 x Cable diameter |
| Packaging: | Type | 1 kft (305 m) | Reelex II |
| | Weight | lb/kft (kg/km) | 17 (25) |
| | Packages Per Pallet | | 36 |
| Materials: | Conductors | 23 AWG, Solid copper | 23 AWG, Solid copper |
| | Insulation | in (mm) | 0.035 (0.90), HDPE |
| | Jacket | in (mm) | 0.193 (4.9), PVC |
| Approvals: | Safety | UL 444, UL 1666 | UL 444, NFPA 262 |
| | Performance | TIA-568-C.2 "Balanced Twisted-Pair Telecommunications Cabling and Components Standards" | |