

CAT 6 U/UTP ARMoured CABLE

Channeltech Systems provide an array of Cat6 U/UTP Cables with different conductor sizes, tailored to meet every Ethernet requirement. Our Cat 6 Cables boast compatibility with data rates of up to 1 Gbps, making them the prime selection for LAN/WAN Solutions. Each cable comprises 8 copper conductors, with 2 conductors intricately twisted to forge a pair. The amalgamation of 4 pairs, sheathed with FR grade material, ensures unparalleled performance and durability



- Cable Type : U/UTP
- Category : Cat6
- No. of Pairs : 4



Physical Construction:

| | |
|-----------------------|--|
| • Conductor Type | Solid Bare Electrolytic Grade Copper |
| • Conductor Size | 23 AWG |
| • Insulation | Polyolefin |
| • Insulation Diameter | 0.995 mm \pm 0.20 mm |
| • Pairing | Twisted into two core |
| • Inner Sheath | PVC |
| • Armoured Type | Aluminum Wire |
| • Armoured Size | 22/0.7 \pm 0.1 mm |
| • Outer Sheath | PE /PVC/LSZH |
| • Outer Sheath Colour | Black |
| • Cable Diameter | 9.2 mm \pm 0.5 mm |
| • Printing | Each meter printed as per given customer details |

Electrical Properties:

| | |
|---|--------------|
| • Conductor Resistance (Ω /km) | 93.8 (Max) |
| • Mutual Capacitance (nF/100 M) | 5.6 (Max) |
| • Resistance Unbalance (%) | 5 (Max) |
| • Worst Delay Skew (ns/100 M) | \leq 45 |
| • NVP (%) | 69 |
| • Characteristic Impedance (Ω) | 100 \pm 15 |

Mechanical Properties:

| | |
|-------------------------|-----------------------|
| • Bending Radius | ≤ 10 x Cable Diameter |
| • Operating Temperature | -20 to +75 °C |

Pair Identification Colour Code:

| | | | |
|----------|-------|--------|--------|
| Pair#1-2 | White | Orange | Orange |
| Pair#3-6 | White | Green | Green |
| Pair#4-5 | White | Blue | Blue |
| Pair#7-8 | White | Brown | Brown |

High Frequency Electrical Properties:

| Frequency | IL | NEXT | PSNEXT | ACRF | PSACRF | RL |
|-----------|------|------|--------|------|--------|------|
| (MHZ) | dB | dB | dB | dB | dB | dB |
| | Max | Min. | Min. | Min. | Min. | Min |
| 1 | 2.1 | 65.0 | 62.0 | 63.3 | 60.3 | 19.0 |
| 4 | 4.0 | 63.0 | 60.5 | 51.2 | 48.2 | 19.0 |
| 8 | 5.7 | 58.2 | 55.6 | 45.2 | 42.2 | 19.0 |
| 10 | 6.3 | 56.6 | 54.0 | 43.3 | 40.3 | 19.0 |
| 16 | 8.0 | 53.2 | 50.6 | 39.2 | 36.2 | 18.0 |
| 20 | 9.0 | 51.6 | 49.0 | 37.2 | 34.2 | 17.5 |
| 25 | 10.1 | 50.0 | 47.3 | 35.3 | 32.3 | 17.0 |
| 31.25 | 11.4 | 48.4 | 45.7 | 33.4 | 30.4 | 16.5 |
| 62.5 | 16.5 | 43.4 | 40.6 | 27.3 | 24.3 | 14.0 |
| 100 | 21.3 | 39.9 | 37.1 | 23.3 | 20.3 | 12.0 |
| 200 | 31.5 | 34.8 | 31.9 | 17.2 | 14.2 | 9.0 |
| 250 | 35.9 | 33.1 | 30.2 | 15.3 | 12.3 | 8.0 |

Ref Standard:

- ANSI/TIA-568.2-D
- ISO/IEC 11801 2ND Edition

Packing Standard:

- Packing Style : Wooden Reel
- Packing Length : 305 meter

Approved by
Technical Head