

## CAT 6 U/UTP LAN CABLES

### Category 6 U/UTP 250MHz LAN Cables

Canovate CAT 6 U/UTP LAN Data Cable is an enhanced performance cable used for transmission of high speed data, digital and analogue voice and video RGB signals on LANs. It supports Gigabit Ethernet (1000 baseT) standard and operates at bandwidths up to 250 MHz.



### Product Application

- 10 Base T (IEEE 802.3)
- 100 Base T (IEEE 802.3U)
- 100 Vg-Any LAN (IEEE 802.12)
- Token ring (IEEE 805.5)
- TP-PMD (ANSI X3T9.5)
- 350 Mbps CDDI
- ATM 155
- 1000 BASE-T Gigabit Ethernet

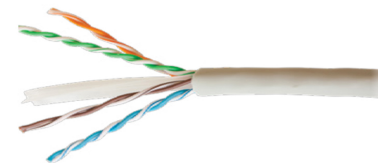
### Product Benefits

The cable supports gigabit Ethernet protocol for installation in horizontal and backbone applications.



### Mechanical and Environmental Properties

|                             |   |
|-----------------------------|---|
| <b>Maximum tensile load</b> | 14 kg per simplex cable (installation)                            |
| <b>Minimum bend radius</b>  | 8x outer diameter (installation)<br>4x outer diameter (operation) |
| <b>Temperature</b>          | 0°C to +50°C (installation)<br>-10°C to +60°C (operation)         |



### Electrical Properties (At 20°C)

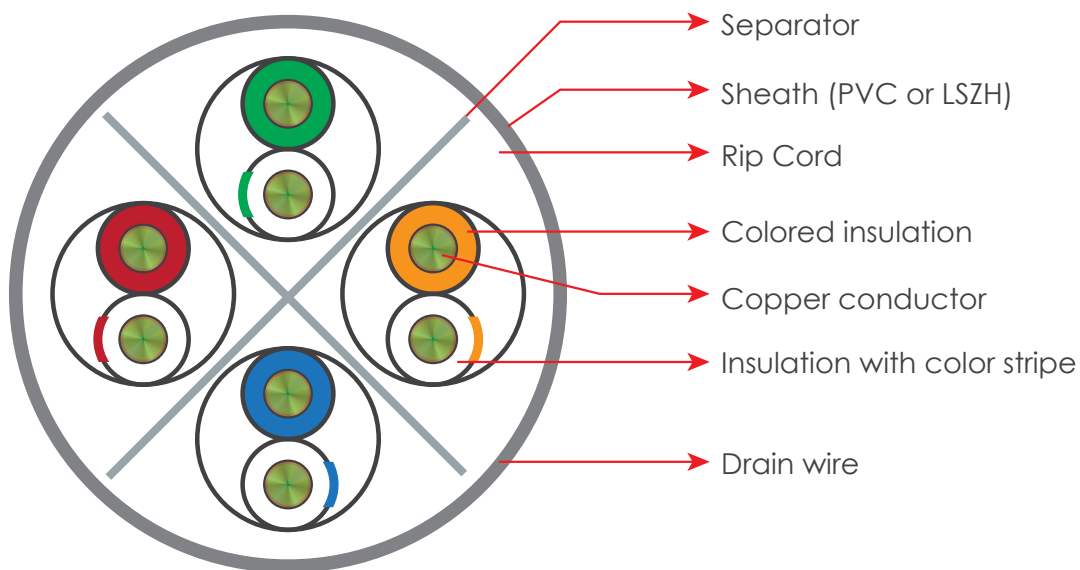
| Electrical Characteristics@ 20°C | Specifications                      | Typical Performance  |
|----------------------------------|-------------------------------------|--|
| Conductor loop resistance        | Max. 19.0 / 100m                    | 14.5/ 100m   |
| Conductor resistance unbalance   | Max. 2%                             | 1.5%   |
| Dielectric strength              | 1.0kV de or 0.7kV ac for 1 min      | 100% in process test   |
| Insulation resistance            | 500M .km @ U 100-500 V test voltage | >5 GQkm  |
| Capacitance unbalance to earth   | Max. 330 pF/100m                    | 200 pF/100m  |
| Velocity of propagation          | <538 nsec/100m@ 250MHz              | 496 nsec/100m @ 250MHz<br>(NVP for hand held testers = 0.69) |
| Skew                             | Max. 45 nsec/100m@ 250MHz           | 25 nsec/100m@ 250MHz   |
| Characteristic impedance         | 100.0 +/- 15.0@ 250MHz              | 100.0 +/- 10.0@ 250MHz                                       |
| Mutual capacitance               | 5.6nF/ 100m                         | 5.6nF/ 100m  |

### Order Information

| Type  |
|---|
| Cat.6 U/UTP Cable LSZH FR (Grey), 305m Reel |



## Cable Construction



## Packaging

305 m - Reel in a box

## Manufacturing Process

Canovate controls every stage of the manufacturing process so that quality is built in to every meter of cable, rather than selected out at the end through testing. To ensure the accuracy and precision of the manufacturing process, Canovate routinely calibrates and recertifies process equipment and measurement benches against internationally traceable standards from NPL/ NIST and follows test methods compliant with EIA/TIA and I EC standards.

## International Standards

- ISO/IEC 11801:2002
- ISO/IEC 61156-5
- EN 50173-1:2002
- EN 50288-2-1
- ANSI/TIA/EIA 568B.2:2002

