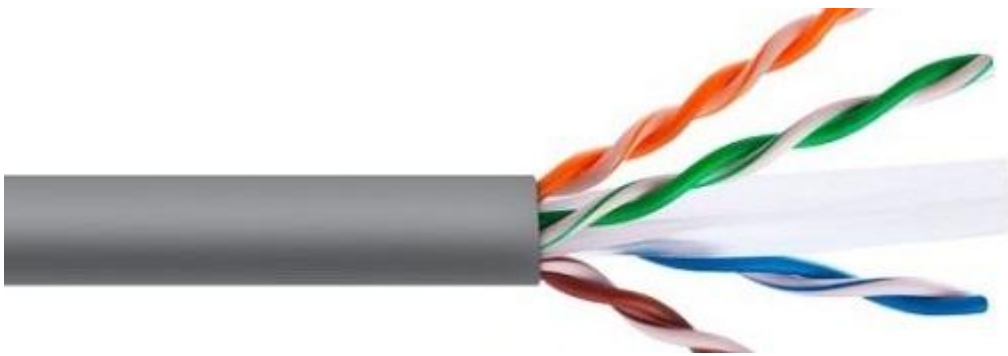


## CAT-6 UTP/FTP NETWORKING CABLES

CAT-6 Cables are used for LAN (local area network), Data centre & Video applications delivering 1000base-t Gigabit Ethernet, 100base-Tx fast Ethernet and for composite video.



| PHYSICAL CONSTRUCTION |  |                     |
|-----------------------|--|---------------------|
| CONDUCTOR             | 4xTwisted Pairs,<br>23AWG/0.56mm, Bare Annealed<br>solid copper wire |                     |
| INSULATION CONDUCTOR  | HDPE   |                     |
| PAIRS CONDUCTOR       | 4  |                     |
|                       | PAIRS  | White-Blue/Blue     |
|                       |  | White-Orange/Orange |
|                       |  | White-Green/Green   |
|                       | White-Brown/Brown  |                     |
| RIPCORD/DIVIDER       | Yes/Yes  |                     |
| OUTER SHEATH          | LDPE/PVC   |                     |
| SHEATH COLOUR         | BLACK/GREY(can be customised)  |                     |
| STANDARD LENGTH       | 305 meters   |                     |
| PACKAGING             | PULL UP BOX/COILS.   |                     |

| PHYSICAL CHARACTERISTICS |                      |                               |                        |                               |                               |
|--------------------------|----------------------|-------------------------------|------------------------|-------------------------------|-------------------------------|
| Conductor Size           | Insulation Dia.(mm.) | Nom. Thickness Of Sheath(mm.) | Nom. Overall Dia.(mm.) | Min. Install Bend Radius(mm.) | Max. Pulling Tension (Newton) |
| 23Awg/0.56mm             | 0.94                 | 0.65                          | 5.9±0.1                | 65                            | 200                           |

**ELECTRICAL CHARACTERISTICS**

| C.R<br>( $\Omega$ /100M) | Max. Mutual<br>Capacitance<br>(pF/m) | Impedance<br>( $\Omega$ ) | Velocity of<br>Propagation<br>(%) | Max. Delay<br>Skew<br>(ns/100m) | Max. Operating<br>Voltage(Volts<br>RMS) |
|--------------------------|--------------------------------------|---------------------------|-----------------------------------|---------------------------------|---|
| 9.39                     | 56                                   | 100 $\pm$ 15              | 67                                | 45                              | 300                                     |

**PERFORMANCE CHART**

| Frequenc<br>y<br>MHz | Return<br>Loss<br>(dB/100m<br>) | Max.<br>Attenuatio<br>n<br>(dB/100m) | Min.<br>NEXT<br>dB | Max. Time<br>Delay<br>(ns/100m) | Min.<br>PSNEXT<br>(dB) | Min.<br>ELFEXT<br>(dB) | Min.<br>PSELFEXT |
|----------------------|---------------------------------|--------------------------------------|--------------------|---------------------------------|------------------------|------------------------|------------------|
| 1                    | 20                              | 2.0                                  | 74.3               | 570                             | 72.3                   | 67.8                   | 64               |
| 4                    | 23                              | 3.9                                  | 65.4               | 552                             | 63                     | 55.8                   | 59               |
| 8                    | 24.5                            | 5.5                                  | 60.8               | 546.7                           | 58.5                   | 49.7                   | 46.7             |
| 10                   | 25                              | 6.3                                  | 59                 | 545                             | 57.5                   | 47.7                   | 44.8             |
| 16                   | 25                              | 7.5                                  | 56                 | 542                             | 54.2                   | 43                     | 40.7             |
| 20                   | 25                              | 8.5                                  | 54.8               | 541                             | 53                     | 41.5                   | 38.8             |
| 25                   | 24.3                            | 9.8                                  | 53.3               | 540                             | 51                     | 39.8                   | 36.8             |
| 31.25                | 23.6                            | 10.7                                 | 51.9               | 540                             | 49                     | 37.9                   | 34.9             |
| 62.5                 | 21.5                            | 15.5                                 | 47.9               | 537.4                           | 45.5                   | 31.9                   | 28.9             |
| 100                  | 20.3                            | 19.8                                 | 44.4               | 536.8                           | 42.4                   | 27.8                   | 25               |
| 200                  | 18                              | 29                                   | 39.8               | 536.6                           | 37.8                   | 21.7                   | 18.6             |
| 250                  | 17.7                            | 32.9                                 | 38.3               | 536.2                           | 36.3                   | 20                     | 16.9             |