

# CTi LANmaster-6

## UTP Cat.6 4 Pair Data Cable

### Application

CTi LANmaster-6 UTP Cable is most perfect solution design to future proof network . With the world most advance manufacturing and testing equipments in CTi , and as a highly professional LAN Cable producer.

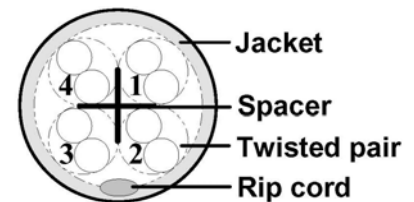
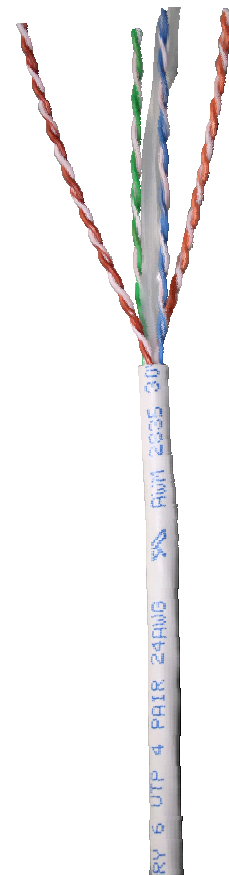
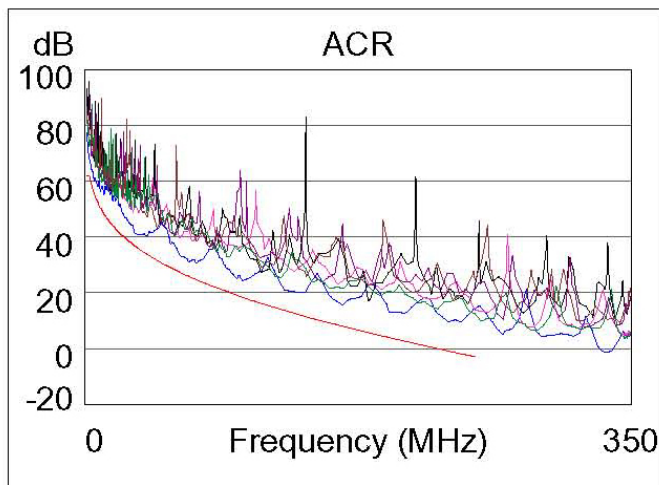
We highly recommended CTi Cat.6 Cable for all forthcoming installation.

- 10/100 baseT Ethernet
- 1000 baseTX Fast Ethernet
- 155 Mbit ATM
- 622 Mbit ATM
- 1.2 Gbit ATM
- Future classE application

CTi LANmaster-6 UTP is Verified to ISO/IEC 11801 Category 6.  
TIA/EIA-568-B.2-1 ; IEC 61156-5 ; EN50173

### Performance

CTi LANmaster-6 UTP Cable offers substantial headroom over other UTP cable . Typical worst ACR figure are shown as:



- Twisted Pair Color Code :
1. Orange, White/Orange
  2. Blue, White/Blue
  3. Brown, White/Brown
  4. Green, White/Green



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### Component

- a. Size of conductor : AWG 24 ( Solid Anneal copper wire).
- b. Dielectric material : Polyethylene.
- c. Diameter of Dielectric core :  $1.00 \pm 0.05$  mm.
- d. Number of twist pairs : Four pairs.  
Each one of four pairs with different pitch.

### Electrical Property

- a. Mutual Capacitance : max. 5.6nf/100m at 1 kHz
- b. Capacitance unbalance pair to ground : max. 160pf/100m at 1 kHz
- c. DC resistance of conductor : max.  $9.38\Omega/100m$  at  $20^\circ\text{C}$
- d. DC resistance unbalance of conductor : max. 2% at  $20^\circ\text{C}$
- e. Insulation resistance : min.  $5000M\Omega/Km$  at  $20^\circ\text{C}$
- f. Velocity of propagation : nom. 66%
- g. Rated temperature :  $60/75^\circ\text{C}$
- h. Rated voltage : 30V
- i. Dielectric test : min. 1 kV / 1 minute, without any breakdown

j.

| Frequency | Impedance | Atten. | NEXT | PSNEXT | ACR  | PSACR | ELFEXT |
|-----------|-----------|--------|------|--------|------|-------|--------|
| (MHz)     | $\Omega$  | dB     | dB   | dB     | dB   | dB    | dB     |
| 1         | 100 ± 15  | 2.0    | 74.3 | 72.3   | 72.3 | 70.3  | 67.8   |
| 4         |           | 3.8    | 65.3 | 63.3   | 61.5 | 59.5  | 55.8   |
| 8         |           | 5.3    | 60.8 | 58.8   | 55.5 | 53.5  | 49.7   |
| 10        |           | 6.0    | 59.3 | 57.3   | 53.3 | 51.3  | 47.8   |
| 16        |           | 7.6    | 56.3 | 54.3   | 48.7 | 46.7  | 43.7   |
| 20        |           | 8.5    | 54.8 | 52.8   | 46.3 | 44.3  | 41.8   |
| 25        |           | 9.5    | 53.4 | 51.4   | 43.9 | 41.9  | 39.8   |
| 31.25     |           | 10.7   | 51.9 | 49.9   | 41.2 | 39.2  | 37.9   |
| 62.5      |           | 15.4   | 47.4 | 45.4   | 32.0 | 31.0  | 31.9   |
| 100       |           | 19.8   | 44.3 | 42.3   | 24.5 | 22.5  | 27.8   |
| 200       |           | 29.0   | 39.8 | 37.8   | 10.8 | 8.8   | 21.8   |
| 250       |           | 32.8   | 38.4 | 36.4   | 5.6  | 3.6   | 19.8   |



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### Physical Property

#### Insulation

| Material     | Physical Property | Min. Elongation(%) | Min. Tensile strength(psi) |
|--------------|-------------------|--------------------|----------------------------|
| Polyethylene | Unaged            | 300                | 2400                       |
|              | Aged(%)           | 75                 | 75                         |

#### Jacket

| Material | Physical Property | Min. Elongation(%) | Min. Tensile strength(psi) |
|----------|-------------------|--------------------|----------------------------|
| PVC      | Unaged            | 100                | 1500                       |
|          | Aged(%)           | 65                 | 70                         |
| CM       | Unaged            | 100                | 2500                       |
|          | Aged(%)           | 50                 | 85                         |
| CMR      | Unaged            | 100                | 2500                       |
|          | Aged(%)           | 50                 | 85                         |
| LSZH     | Unaged            | 100                | 1200                       |
|          | Aged(%)           | 75                 | 75                         |
| UV-PE    | Unaged            | 350                | 1400                       |
|          | Aged(%)           | 75                 | 75                         |

### Part Number

| Part No.     | Sheath | Color      | Packing  |
|--------------|--------|------------|----------|
| UT-6004      | PVC    | Light Grey | 305m box |
| UT-6004-LSZH | LSZH   | Blue       | 305m box |

Edition 07/11/2010  
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