

## Product Specification

### IN COMPLIANCE WITH:

All Proposed Category 6 requirements as per ANSI/TIA/EIA, ISO/IEC, and CENELEC EN Standards.

ANSI/TIA/EIA 568-B.2-1 CAT.6

ISO/IEC 11801 CLASS E, 2nd Edition

IEC 61156-6

CENELEC EN 50173-1

CENELEC EN 50288-5-1, CENELEC EN 50288-5-2

Flame Retardancy is verified according to IEC 60332-1-2.

We implemented RoHS compliance for the requirement of European Union issued Directive 2002/95/EC

### CHARACTERISTICS:

|            |                  |                               |                     |
|------------|------------------|-------------------------------|---------------------|
| Conductor  | Material         | Bare Copper                   |                     |
|            | Size             | 23 AWG                        |                     |
|            | Construction     | 1/0.560 ± 0.02 mm             |                     |
| Insulation | Material         | HDPE                          |                     |
|            | Thickness        | Min. at any point: 0.12mm     | Average: 0.22mm     |
|            | Diameter         | 1.00 ± 0.1 mm                 |                     |
|            | Colors           | Blue/White-Blue               | Orange/White-Orange |
|            |                  | Green/White-Green             | Brown/White-Brown   |
|            | Elongation       | Min. 300 %                    |                     |
|            | Tensile Strength | Min. 1.682 Kg/mm <sup>2</sup> |                     |

# Category 6 UTP 23AWG×4P Horizontal Cable, PVC

Part NO.

**Show Me**  
**CABLES**  
cables & connectors since 1995

|        |                           |                                                                                                                                  |
|--------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Sheath | Material                  | PVC                                                                                                                              |
|        | Thickness                 | Average: 0.50 mm                                                                                                                 |
|        |                           | Min. at any point: 0.40 mm                                                                                                       |
|        | Diameter                  | 6.3 ± 0.3 mm                                                                                                                     |
|        | Color                     | Assorted upon request                                                                                                            |
|        | Elongation                | Min. 100%                                                                                                                        |
|        | Tensile strength          | Min. 1.407 Kg/mm <sup>2</sup>                                                                                                    |
|        | Aging at 100°C for 168Hrs | Min. elongation retention:50%<br>Min. tensile strength retention:75%                                                             |
|        | Marking                   | CAT.6 UTP ISO/IEC 11801 & EN 50288 &<br>TIA/EIA-568-B.2-1 ETL/3P VERIFIED - 23AWGX4P SOLID<br>TYPE CM (UL) C(UL) E164469 XXXXXXM |
|        |                           | or as customer request.                                                                                                          |
|        | Flame Test                | Burning five times, every time is less than 60 second and paper flag can't be burned.                                            |

## APPROVALS:

- UL/cUL Listed
- ETL/3P Certified ANSI/TIA/EIA-568-B.2-1 Category 6 Testing Safety/Performance requirements.

## APPLICATIONS:

- 1000BASE-Tx Gigabit Ethernet
- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12), 155/622 Mbps ATM
- 550 MHz Broadband Video
- Voice, T1, ISDN

# Category 6 UTP 23AWG×4P Horizontal Cable, PVC

Part NO.

**Show Me**  
CABLES  
cables & connectors since 1995

## ELECTRIC CHARACTERS:

|                            |                         |
|----------------------------|-------------------------|
| Spark Test                 | 2000 ± 250 V ac         |
| Dielectric Strength        | 2500 V dc / 3 seconds   |
| Insulation Resistance Test | Min. 150 MΩ/Km          |
| Conductor Resistance       | Max.9.38 Ω/100m at 20°C |
| Resistance Unbalance       | Max. 2%                 |
| Capacitance Unbalance      | Max. 160 pF/100m        |
| Mutual Capacitance         | Max. 5600 pF/100m       |

| Impedance                            | 64kHz              | 125Ω ± 20%                                      |                   |                         |
|--------------------------------------|--------------------|-------------------------------------------------|-------------------|-------------------------|
|                                      | 1~250MHz           | 100Ω ± 15%                                      |                   |                         |
| Attenuation &<br>Near End Cross Talk | Frequency<br>(MHz) | Attenuation<br>(dB/100 meters at<br>20°C), Max. | Next<br>(dB), Min | Power Sum<br>(dB), Min. |
|                                      | 1MHz               | — —                                             | 74.3*             | 64.0*                   |
|                                      | 4 MHz              | 3.8*                                            | 65.3*             | 63.3*                   |
|                                      | 10 MHz             | 6.0*                                            | 59.3*             | 57.3*                   |
|                                      | 16 MHz             | 7.6*                                            | 56.2*             | 54.2*                   |
|                                      | 20 MHz             | 8.5*                                            | 54.8*             | 52.8*                   |
|                                      | 31.25 MHz          | 10.7*                                           | 51.9*             | 49.9*                   |
|                                      | 62.5 MHz           | 15.5*                                           | 47.4*             | 45.4*                   |
|                                      | 100 MHz            | 19.9*                                           | 44.3*             | 42.3*                   |
|                                      | 150 MHz            | 25.3*                                           | 41.4*             | 39.4*                   |
|                                      | 200MHz             | 29.2*                                           | 39.8*             | 37.8*                   |
|                                      | 250MHz             | 33.0*                                           | 38.3*             | 36.3*                   |

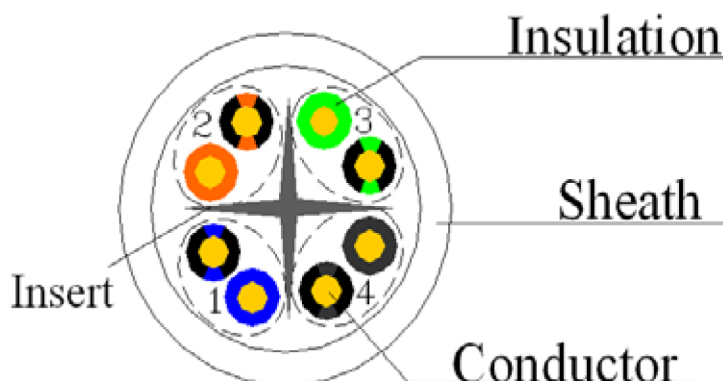
The asterisked (\*) value are for information only. The minimum Next coupling loss for any pair combination at room temperature is to be greater than the value determined using the formula:

$$\text{NEXT}(f \text{ MHz}) \geq \text{NEXT}(0.772) - 15 \log_{10}(f \text{ MHz}/0.772)$$

Part NO.

## DRAWING:

|                              |                            |
|------------------------------|----------------------------|
| 2<br>ORANGE<br>/WHITE-ORANGE | 3<br>GREEN<br>/WHITE-GREEN |
| 1<br>BLUE<br>/WHITE-BLUE     | 4<br>BROWN<br>/WHITE-BROWN |



## ORDERING INFORMATION:

Part NO. YLC-6UH04-AX1-XXX2XX3

Description Category 6 UTP 23AWG×4P Horizontal Cable, PVC

YLC: LAN Cable

6: Cat.6

U: UTP

H: Horizontal

04: 4 Pair

A: Jacket: PVC CM

X1: Packing: R: Reel or N: w/o Reel

XXX2: Meter 305: 305m 500: 500m 610: 610m

XX3: Color: WH:White RD:Red YL:Yellow BL:Blue BK:Black GY:Gray

Others: Available on Requests.