

# High Quality Cat6 UTP 23 AWG Cable



## Description:

TechLine CAT6 UTP Copper Solid cable transmits data over local area Networks (LANs). These cables exceed performance requirements.

## Application:

As streaming video and multimedia over LAN are gaining popularity, users demand faster data transmission and reduced waiting time. The superior insulation around the 23 AWG copper wires attribute to the increased performance. These cables are used in the tertiary, but also in the secondary level of a network. They are characterized by large performance reserves and outstanding performance. They can be used to implement services such as Gigabit Ethernet. They can transmit data at 1000 Mbps (~1 Gigabit per second) with a frequency of 250 MHz and suitable for 10B ASET, 100BASE-TX Fast Ethernet and 1000BASE-T/1000BASE-TX (Gigabit Ethernet). Enhanced performance cable for transmission of high speed data, digital and analogue voice and video (RGB) signals on LANs. Supports Gigabit Ethernet (1000 base-T) standard. Operates at bandwidth of 250 MHz, The mechanical characteristics are perfectly suited for the application in tight cable channels and platforms due to their optimized construction.



## Standard:

TIA/EIA 568-B.2-1 and ISO/IEC 11801, UL 444, Flame retardant to IEC60332-1, Smoke density acc.to IEC61034, Halogen Free acc. To IEC607542.

## Construction Characteristics:

Conductor	Material	Solid Bare Copper
	Size	23AWG X 4P
	Construction	1/0.57 +/- 0.005
Insulation	Material	HDPE
	Min. Thickness	0.180 mm
	AVG. Thickness	0.220mm
	Diameter	1.00+/-0.05
	Colors	Blue- White/Blue Orange-White/Orange Green- White/Green Brown – White/Brown
Jacket	Material	PVC / LSZH
	Min. Thickness	0.55mm
	AVG. Thickness	0.60mm
	Diameter	6.3 +/- 0.20
	Rip Cord	Nylon
Filler	Color	Per request
	Filler	PVC / MDPE

## Electrical & Physical Characteristics:

Operating Temperature Range	-20 °C + 75 °C
Conductor Resistance	Max 72.2ohm/km at 20° C
Dielectric Strength	Min AC 1.7KV
Spark Test	3.0KV (max)
DC Resistance Unbalance	Max 5 %
Pair-to-Ground Capacitance Unbalance	Max 3300pF/km
Characteristic Impedance	100 +/- 15 Ohm
Nominal Velocity of Propagation (%)	69
Propagation Delay	Max 536ns/100m
Delay Skew	Max 45ns/100m

## Characteristics per 100m @ 20 °C – 3 °C (68 °F – 5.5°F).

Frequency (MHz)	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PSACR (dB)
1	2.0	20.0	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23.0	65.3	63.3	55.8	52.8	61.5	59.5
8	5.3	24.5	60.8	58.8	49.7	46.7	55.5	53.5
10	6.0	25.0	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25.0	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25.0	54.8	52.8	41.8	38.8	46.3	44.3
25	9.5	24.3	53.3	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.6	51.9	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.5	47.4	45.4	31.9	28.9	32.0	30.0
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29.8	18.0	39.8	37.8	21.8	18.8	10.8	8.8
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5

NETWORKING TWISTED PAIR CABLE

# High Quality Cat6 UTP 23 AWG Cable

## PATCH CORD:

### SPECIFICATIONS INTRODUCTION

- 4 Pairs Unshielded Stranded Twisted Pair (UTP) Cable
- Conductor Metal: Bare Copper
- Conductor: 23 AWG
- Insulation Material: HD-PE
- Jacket Material: PVC / LSZH
- Heat-resistant: 60°C minimum (Temperature limited)



### APPLICATION

These cables exceed performance requirements specified by

UL 444, TIA/EIA 568-B.2-1 and ISO/IEC 11801

- 10BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3)
- 100VG -AnyLAN (IEEE802.12)
- 550 MHz Broadband Video
- Voice, T1, ISDN
- 155/ 622 Mbps ATM
- Power over Ethernet (POE)

### MODULAR CONNECTOR/PLUG

- RJ-45 8P for Transparence color
- Gold plated: 30U"
- Contact blade: Phosphor Bronze
- Temperature range: -10 ~ 80° C
- Dielectric withstanding voltage: 500V AC
- Insulation resistance: 35M Ohm (max.)
- Durability: 750 matching cycles
- Cable-to-plug tensile strength: 20lbs (89N) (min.)

### ORDER INFORMATION:

## TLC6U- X1-X2-X3

<b>C</b> <i>Cable</i>								<b>Length</b> please specify a number in meter
<b>P</b> <i>Patch cord</i>		<b>G</b> <i>Grey</i>	<b>R</b> <i>Red</i>	<b>Br</b> <i>Brown</i>				
		<b>B</b> <i>Blue</i>	<b>A</b> <i>Aqua</i>	<b>Wh</b> <i>White</i>				
		<b>Y</b> <i>Yellow</i>	<b>G</b> <i>Green</i>	<b>Bl</b> <i>Black</i>				
		<b>O</b> <i>Orange</i>	<b>N</b> <i>Navy Blue</i>	<b>Cu</b> <i>Custom</i>				
		<b>P</b> <i>Pink</i>	<b>V</b> <i>Violet</i>					

**Note:** Cable reel comes in a standard length of 305m or 500m