

# High Quality Cat5e UTP Cable

## Description:

**TECHLINE** Cat-5e UTP Copper Solid cable transmits data over local area Networks (LANs).

These cables exceed performance requirements specified by TIA/EIA-568C.2. B.2

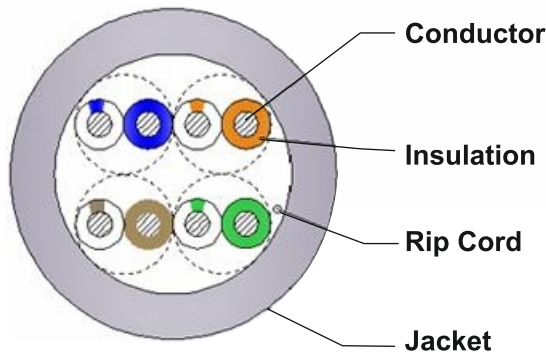
As streaming video and multimedia over LAN are gaining popularity, users demand faster data transmission and reduced waiting time.

## Application:

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 Fast Ethernet. These cables are made using 24 gauge (AWG) copper wires with about three twists per inch enabling them to transmit data at 1000 Mbps (~1 Gigabit per second) with a frequency of 100 MHz. They are suitable for 10BASE-T, 100BASE-TX. They support a higher signal-to-noise ratio, providing better reliability for current applications and higher data rates for future applications. 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 and ISO/IEC 11801, UL 444 Flame retardant to IEC60332-1, Smoke density acc.to IEC61034, HalogenFree acc. To IEC60754-2.



## Construction Characteristics:

conductor	Material	Solid Bare Copper
	Size	24AWG X 4P
	Construction	1/0.505 ± 0.010
Insulation	Material	HDPE
	Min. Thickness	0.180 mm
	AVG. Thickness	0.20mm
	Diameter	0.93 ± 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	5.4 ± 0.20
	Rip Cord	Nylon
	Color	Per request

## Electrical & Physical Characteristics:

Operating Temperature Range	-20 °C + 75° C
Conductor Resistance	Max 93.8 ohm/km at 20° C
Dielectric Strength	Min DC 2.5 KV (2 sec)
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)	Return Loss (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PS ACR (dB)
1	2.0	20.0	65.3	62.3	63.8	60.8	63.3	60.3
4	4.1	23.0	56.3	53.3	51.8	48.8	52.2	49.2
8	5.8	24.5	51.8	48.8	45.7	42.7	46.0	43.0
10	6.5	25.0	50.3	47.3	43.8	40.8	43.8	40.8
16	8.2	25.0	47.3	44.2	39.7	36.7	39.0	36.0
20	9.3	25.0	45.8	42.8	37.8	34.8	36.5	33.5
25	10.4	24.2	44.3	41.3	35.8	32.8	33.9	30.9
31.25	11.7	23.3	42.9	39.9	33.9	30.9	31.2	28.2
62.5	17.0	20.7	38.4	35.4	27.9	24.9	21.4	18.4
100	22.0	19.0	35.3	32.3	23.8	20.8	13.3	10.3

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## PATCH CORD:

### SPECIFICATION INTRODUCTION

- 4 Pairs Unshielded Stranded Twisted Pair (UTP) Cable
- Conductor Metal: Bare Copper
- Conductor: 24 AWG
- Insulation Material: HD-PE
- Jacket Material: PVC / LSZH
- Heat-resistant: 60°C minimum (Temperature limited)



### APPLICATION

These cables exceed performance requirements specified by the

TIA/EIA-568B.2 / TIA/EIA-568C.2

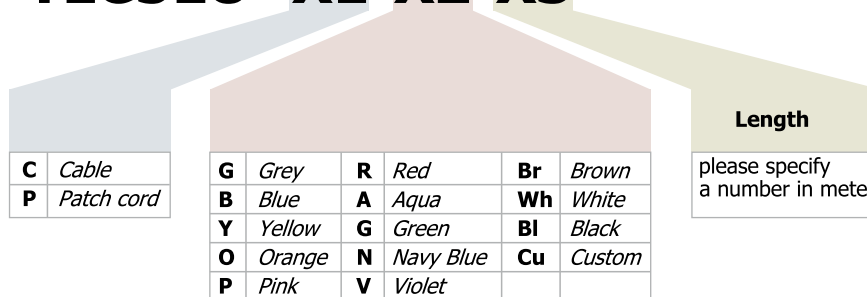
- 10BASE-T, 100BASE-TX Fast Ethernet, 1000BASE-T (IEEE802.3)
- 100VG-AnyLAN (IEEE802.12)
- 550 MHz Broadband Video
- Voice, T1, ISDN
- 155/ 622 Mbps ATM
- Power over Ethernet (POE)

### 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.)

### ORDERING INFORMATION:

## TLC5EU- X1-X2-X3



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