

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

STANDARD COMPLIANCES

All Proposed Category 6 requirements as per ANSI/TIA, ISO/IEC, and CENELEC EN Standards.
ANSI/TIA-568-C.2 Cat.6

ISO/IEC 2nd Edition 11801 CLASS E

CENELEC EN 50173-1, CENELEC EN 50288-6-1, IEC 61156-5 for horizontal cable

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

CONSTRUCTION & CHARACTERISTICS

Conductor	Material / Size	Bare Copper / 23AWG
		Nominal Diameter: 1/0.56 mm
Insulation	Material	HDPE
	Thickness	Nominal: 0.22 mm
	Diameter	Nominal: 1.00 mm
	Colors	Blue/White-Blue Orange/White-Orange Green/White-Green Brown/White-Brown
	Unaged Elongation	Min. 300%
	Unaged Tensile Strength	Min. 1.683 Kgf/mm ²
Jacket	Material	Flame Retardant PVC
	Thickness	Nominal: 0.50 mm
	Diameter	Nominal: 6.3 mm
	Color	Gray
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 1.407 Kgf/mm ²
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%
Marking	CAT.6 UTP INSTALLATION CONFORM TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-6-1 & IEC 60332-1-2 23AWGX4P [XXXXXXXXM]	
(PS): " + " Mould separate		

APPLICATIONS

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

ELECTRICAL PERFORMANCES

Dielectric Strength of Insulation		2500 V dc / 2 seconds		
Insulation Resistance Test		Min. 5000 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	772kHz	125Ω ± 20%		
	1~250MHz	100Ω ± 15%		
Attenuation & Near End Cross Talk	Frequency (MHz)	Max. Attenuation (dB/100 meters)	NEXT (dB), Min.	PSNEXT (dB), Min.
	1 MHz	2.0*	74.3*	72.3*
	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	15.4*	47.4*	45.4*
	100 MHz	19.8*	44.3*	42.3*
	150 MHz	24.9*	41.4*	39.4*
	200MHz	29.0*	39.8*	37.8*
	250MHz	32.8*	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:

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

CONFIGURATION

orange 2	green 3
white/orange	white/green
blue 1	brown 4
white/blue	white/brown

