

## Category 5e UTP Horizontal Cable, 24AWG×4P, PVC

### STANDARD COMPLIANCES

All Category 5e Requirements as Per ANSI/TIA, ISO/IEC, and CENELEC EN Standards:

ANSI/TIA-568-C.2 Cat.5e

ISO/IEC 2<sup>nd</sup> Edition 11801 Class D

CENELEC EN 50173-1

IEC 61156-5, CENELEC EN 50288-3-1 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 / 24AWG
		Nominal Diameter: 1/0.517 mm
Insulation	Material	HDPE
	Thickness	Nominal: 0.20 mm
	Diameter	Nominal: 0.91 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/mm²
Jacket	Material	Flame Retardant PVC
	Thickness	Nominal: 0.5 mm
	Diameter	Nominal: 5.2 mm
	Color	Gray
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 1.407 Kgf/mm²
	Aging at 100°C for 168Hrs	Min. elongation retention:50%
		Min. tensile strength retention:75%
Marking		CAT.5E UTP INSTALLATION CONFORM TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-3-1 & IEC 60332-1-2 24AWGX4P [XXXXXXXXM]

### APPLICATIONS

1000BASE-T 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	102Ω ± 15%		
	1~125MHz	100Ω ± 15%		
Attenuation & Near End Cross Talk	Frequency (MHz)	Max.Attenuation (dB/100 meters)	NEXT (dB), Min.	PSNEXT (dB), Min.
	1 MHz	2.0*	65.3*	62.3*
	4 MHz	4.1*	56.3*	53.3*
	8 MHz	5.8*	51.8*	48.8*
	10 MHz	6.5*	50.3*	47.3*
	16 MHz	8.2*	47.2*	44.2*
	20 MHz	9.3*	45.8*	42.8*
	25 MHz	10.4*	44.3*	41.3*
	31.25 MHz	11.7*	42.9*	39.9*
	62.5 MHz	17.0*	38.4*	35.4*
	100 MHz	22.0*	35.3*	32.3*
	125 MHz	24.9*	33.8*	30.8*

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:

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

## CONFIGURATION

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

