

Category 5e UTP Horizontal Cable, 24AWGx4P, 350MHz, CMP

STANDARD COMPLIANCES

All Proposed Category 5e requirements as per ANSI/TIA, ISO/IEC, and CENELEC EN Standards:

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

ISO/IEC 2nd Edition 11801 Class E

CENELEC EN 50173-1

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

Flame Retardancy is verified according to NFPA-262.

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

CONSTRUCTION & CHARACTERISTICS

CONDUCTOR	MATERIAL / SIZE	BARE COOPER / 24 AWG
Insulation	Material	FEP
	Thickness	Nominal: 0.176 mm
	Diameter	Nominal 0.86 mm
	Colors	Blue/White-Blue, Orange/White-Orange Green/White-Green, Brown/White-Brown
	Unaged Elongation	Min. 200%
	Unaged Tensile Strength	Min. 1.754 Kgf/mm ²
Jacket	Material	Flame Retardant PVC
	Thickness	Nominal: 0.5 mm
	Diameter	Nominal: 5.0 mm
	Color	Assorted upon request
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 1.407 Kgf/mm ²
Flame Test	Aging at 100° C for 168 hrs.	Min. elongation retention: 50% Min. tensile strength retention: 75%
	Marking	PLENUM CAT.5e UTP INSTALLATION ETL VERIFIED TO ANSI/TIA-568-C.2 24AWGX4P CMP(UL) Bxxxx0000FT----1000FT or as customer request
Flame Test	According to UL NFPA-262, CSA FT-6 standard flame test	

APPROVALS

UL/cUL Listed



APPLICATIONS

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-TX Fast Ethernet (IEEE 802.3)
- 100 BASE-VG-AnyLAN, 155/622 Mbps ATM
- 350MHz Broadband Video
- 4- /16- Mbps Token Ring

ELECTRICAL PERFORMANCES

Dielectric Strength of Insulation	2500 VDC / 2 seconds
Insulation Resistance Test	Min. 5000 M Ω -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	772 kHz 102 Ω \pm 15% 1-350 mHz 100 Ω \pm 15%

Attenuation & Near End Cross Talk	Frequency	Attenuation	NEXT	PSNEXT	RL
	(MHz)	(dB/100 m)	(dB), Min.	(dB), Min.	(dB), Min.
	1 MHz	2.0*	65.3*	62.3*	20.0*
	4 MHz	4.1*	56.3*	53.3*	23.0*
	8 MHz	5.8*	51.8*	48.8*	24.5*
	10 MHz	6.5*	50.3*	47.3*	25.0*
	16 MHz	8.2*	47.2*	44.2*	25.0*
	20 MHz	9.3*	45.8*	42.8*	25.0*
	25 MHz	10.4*	44.3*	41.3*	24.3*
	31.25 MHz	11.7*	42.9*	39.9*	23.6*
	62.5 MHz	17.0*	38.4*	35.4*	21.5*
	100 MHz	22.0*	35.3*	32.3*	20.1*
	200 MHz	32.4*	30.8*	27.8*	18.0*
	250 MHz	36.0*	29.3*	26.3*	17.3*
	300 MHz	41.0*	28.1*	25.1*	16.8*
	350 MHz	44.9*	27.1*	24.1*	16.3*

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

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

CONFIGURATION

