

## Product Specification

### 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 2<sup>nd</sup> Edition 11801 Class E

CENELEC EN 50173-1

CENELEC EN 50288-6-2, IEC 61156-6 for patch 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
Insulation	Material	HDPE
	Thickness	Nominal: 0.20mm
	Diameter	Nominal: 1.0 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 <sup>2</sup>
Jacket	Material	Flame Retardant PVC
	Thickness	Nominal: 0.50 mm
	Diameter	Nominal: 6.4 mm
	Color	Assorted upon request
	Unaged Elongation	Min. 100%
	Unaged Tensile Strength	Min. 1.407 Kgf/mm <sup>2</sup>
	Aging at 100°C for 168Hrs	Min. elongation retention:50% Min. tensile strength retention:75%
Marking	CAT.6 UTP PATCH ETL/3P VERIFIED TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-6-2 & IEC 60332-1-2 24AWGX4P CM(UL) c(UL) E164469-XX	
	or as customer request.	
(PS): " + " Mould separate		

### APPROVALS

UL/cUL Listed

ETL/3P Certified ANSI/TIA-568-C.2 Category 6 Testing Safety/Performance



Intertek

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

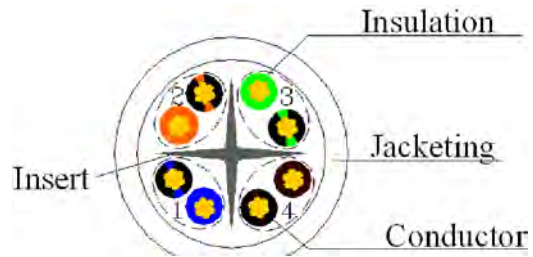
Dielectric Strength of Insulation		2500 V dc / 2 seconds		
Insulation Resistance Test		Min. 5000 MΩ·Km		
Conductor Resistance		Max. 9.38 Ω/100m at 20°C		
Resistance Unbalance		Max. 2%		
Capacitance Unbalance		Max. 160 pF/100m		
Mutual Capacitance		Max. 5600 pF/100m		
Impedance	772kHz	125Ω ± 20%		
	1~250MHz	100Ω ± 15%		
Attenuation & Near End Cross Talk	Frequency	Max.Attenuation	NEXT	PSNEXT
	(MHz)	(dB/100 meters)	(dB), Min.	(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:

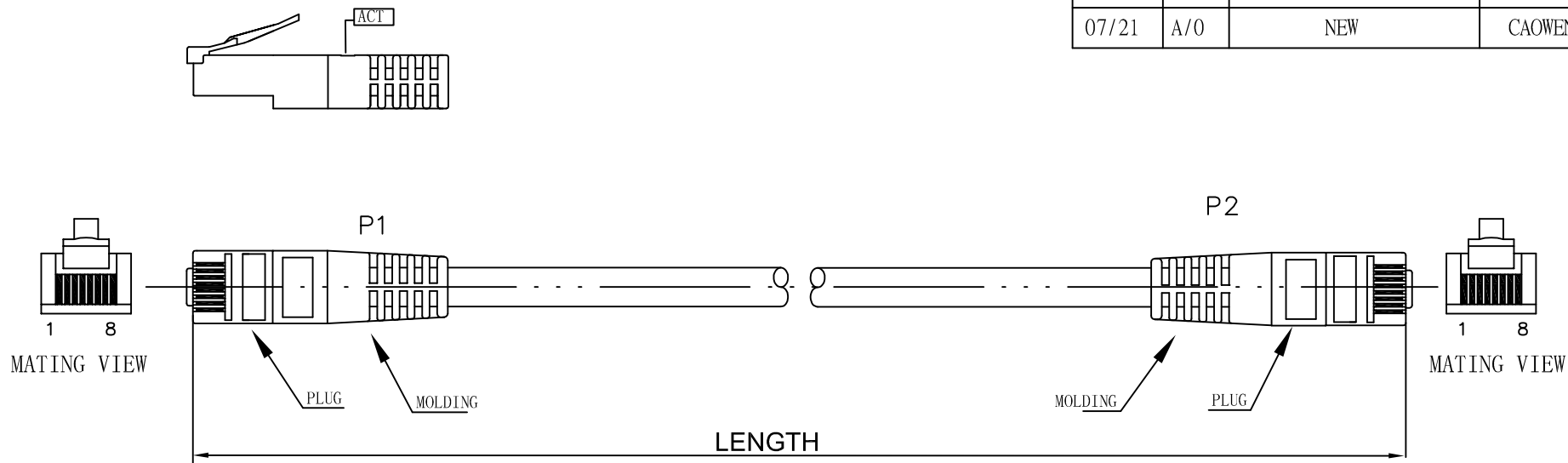
$$NEXT(f \text{ MHz}) \geq NEXT(0.772) - 15 \text{ LOG}_{10}(f \text{ MHz} / 0.772) \text{ dB}$$

## CONFIGURATION

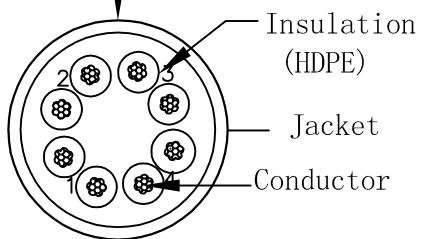
orange 2	green 3
white/orange	white/green
blue 1	brown 4
white/blue	white/brown



DATE	REV	DESCRIPTION	BY	CHKD
07/21	A/0	NEW	CAOWEN	YZG



Marking: ACT CATEGORY 6 UTP PATCH CABLE ETL/3P VERIFIED TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-6-2 & IEC 60332-1-2 ▲ 24AWGX4P (UL) c(UL)CMH E164469-XX LEADFREE EN71 15000.001



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

PA/R	PINOUT		
	P1(T568B)	WIRE	P2(T568B)
2	1	WHT/ORG	1
	2	ORG	2
3	3	WHT/GRN	3
	6	GRN	6
1	4	BLU	4
	5	WHT/BLU	5
4	7	WHT/BRN	7
	8	BRN	8

Conductor	Bare Copper 24AWG
Insulation	Thickness:MIN at any point:0.15mm MAX AVG:0.25mm Diameter: 1.03±0.06mm
Jacket	PVC Thickness:MIN at any point:0.55mm MAX AVG:0.65mm Diameter:5.9±0.15mm

CAT.6 UTP 24AWG *4P PVC	length	Y	RAL NO
IB15XX,IB16XX,IB17XX, IB18XX,IB80XX,IB81XX IB84XX,IB85XX,IB86XX IB87XX,IB89XX	0.5M	WH903	RAL 1015
	1M	BK012	RAL 9011
	1.5M	GY272	RAL 7045
	2M	RD210	RAL 3031
	3M	BU608	RAL 5012
	4M	GN509	RAL 6016
	5M	YE406	RAL 1023
	7M	OR307	RAL 2000
	10M	BRN021	RAL 8023
	15M	PU720	RAL 4005
	20M	RD220	RAL 4003

WIRE	CAT. 6 UTP 24AWG*4P
PLUG	YUS-06 8P8C 50U"
Length	XXM
COLOR	XX

Unless specified on the drawing, tolerances are per the follows:  
 . ± 1  
 .X ± 0.2  
 .XX ± 0.05



DRAW. NO	00803	ITEM	CAT. 6 UTP 24AWG*4P PVC		
DEPARTMENT		DRAW	CAOWEN	DATE	10/07/21
SCALE		CHECKER	YZG	DATE	10/07/21
UNIT	mm	APPROVAL		DATE	

3RD	
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RoHS COMPLIANT