

## 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: 0.221 mm
	Diameter	Nominal: 1.03 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	LSOH
	Thickness	Nominal: 0.50 mm
	Diameter	Nominal: 6.4 mm
	Color	Assorted upon request
	Unaged Elongation	Min. 125%
	Unaged Tensile Strength	Min. 0.917 Kgf/mm <sup>2</sup>
	Aging at 100°C for 168Hrs	Min. elongation retention:75% Min. tensile strength retention:70%
Marking		CAT.6 UTP LSOH 24AWGX4P PATCH 3P VERIFIED TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-6-2 & IEC 60332-1-2
		or as customer request.
(PS): " + " Mould separate		

### APPROVALS

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



## 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

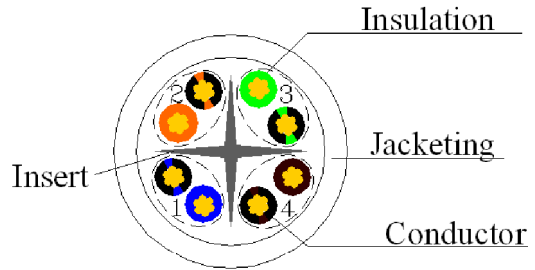
## ELECTRICAL PERFORMANCES

Dielectric Strength of Insulation		2500 V dc / 2 seconds		
Insulation Resistance Test		Min. 5000 MΩ·Km		
Conductor Resistance		Max. 9.38Ω/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:  
 $NEXT(f\text{ MHz}) \geq NEXT(0.772) - 15\text{LOG}10(f\text{ MHz}/0.772)\text{dB}$

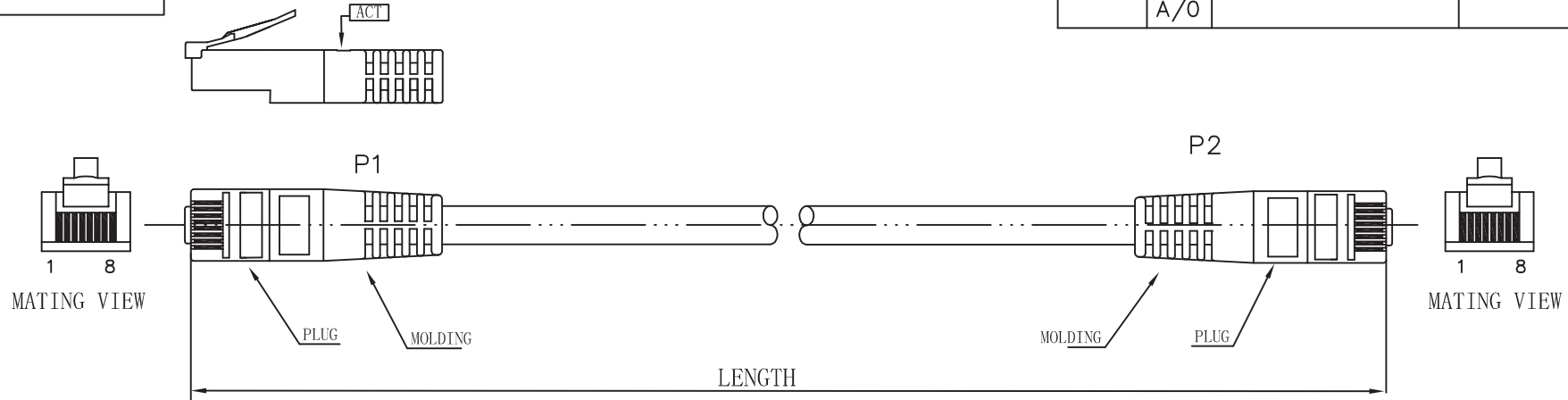
**CONFIGURATION**

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

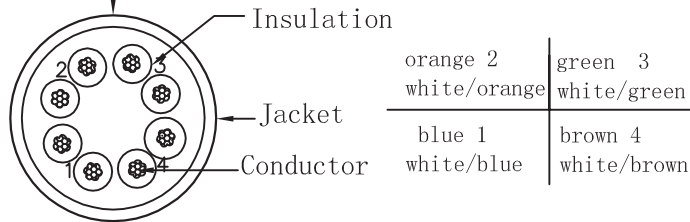


RoHS COMPLIANT

DATE	REV	DESCRIPTION	BY	CHKD
	A/0			



MARKING (FP0399) : **ACT CAT.6 UTP LSZH 24AWGX4P PATCH ETL/3P VERIFIED TO ANSI/TIA-568-C.2 & ISO/IEC 11801 ED.2 & EN 50288-6-2 & IEC 60332-1-2 LEADFREE EN71 15000.001**



NO.	ITEM	COLOR	Y	RAL NO.
1	IB90XX	GREY	GY825	RAL 9002
2	IB95XX	RED	RD210	RAL 3020
3	IB96XX	BLUE	BU608	RAL 5019
4	IB97XX	GREEN	GN509	RAL 6016
5	IB98XX	YELLOW	YE406	RAL 1003
6	IB99XX	BLACK	BK012	RAL 9011

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

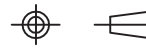
Conductor	Bare Copper 24AWG 70.196±0.015mm
Insulation	Thickness:MIN at any point:0.15mm MAX AVG:0.25mm Diameter: 1.04±0.06mm
Jacket	LSOH Thickness:MIN at any point:0.55mm MAX AVG:0.60mm Diameter:5.9±0.15mm

Wire	CAT.6 UTP STR 24AWG*4P
Plug	YUS-06 8P8C 50U"
Length	x xM

Unless specified on the drawing, tolerances are per the follows:

.X ± 1  
.XX ± 0.2  
.XX ± 0.05

3RD



DRAW. NO	CW-0284	ITEM			
CUSTOMER NAME	NETIFO	DRAW	DHY	DATE	2011/10/21
SCALE		CHECKER	wuxiao	DATE	2011/10/21
UNIT	MM	SHEET	1	OF	1