

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 2nd 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 ² |
| 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 ² |
| | 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

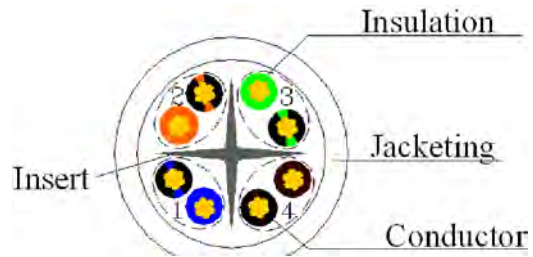
| | | | | |
|-----------------------------------|-----------|--------------------------|------------|------------|
| Dielectric Strength of Insulation | | 2500 V dc / 2 seconds | | |
| Insulation Resistance Test | | Min. 5000 MΩ·Km | | |
| Conductor Resistance | | Max. 9.38 Ω/100m at 20°C | | |
| Resistance 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:

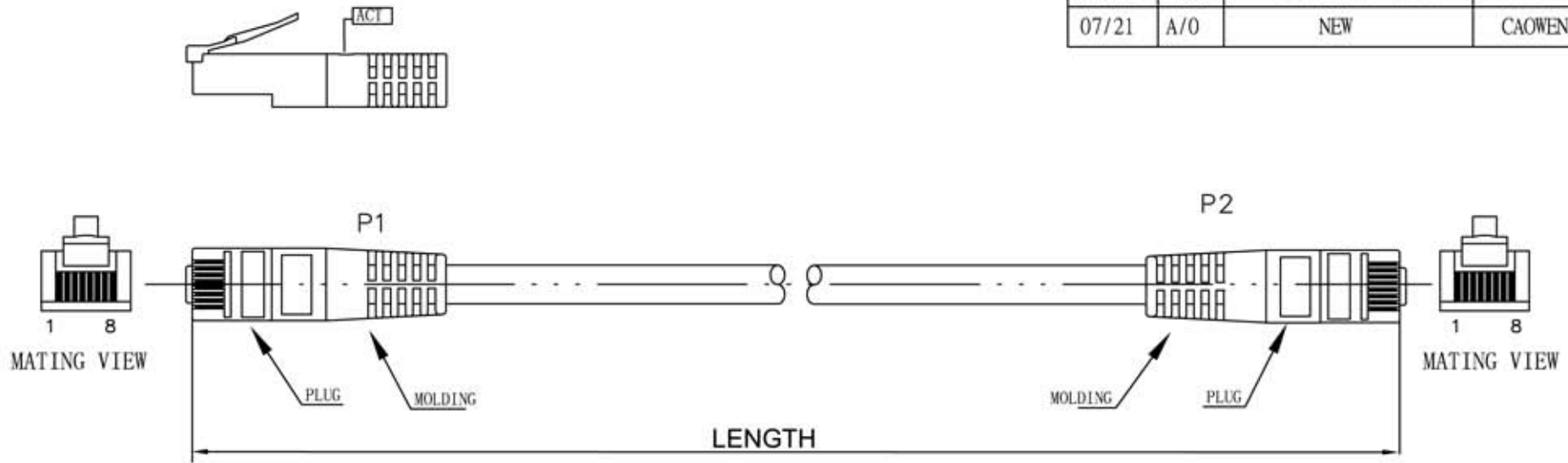
$$NEXT(f \text{ MHz}) \geq NEXT(0.772) - 15 \text{ LOG}_{10}(f \text{ MHz} / 0.772) \text{ dB}$$

CONFIGURATION

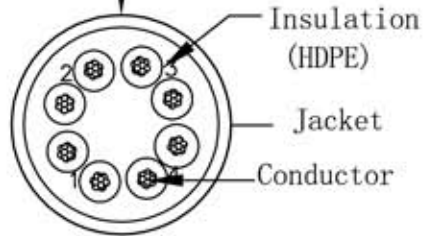
| | |
|--------------|-------------|
| orange 2 | green 3 |
| white/orange | white/green |
| blue 1 | brown 4 |
| white/blue | white/brown |



| 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 |

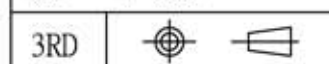
| | |
|------------|---|
| Conductor | Bare Copper 24AWG |
| Insulation | Thickness:MIN at any point:0.15mm MAX AVG:0.25mm Diameter: 1.03±0.06mm |
| Jacket | PVC Thickness:MIN at any point:0.55mm MAX AVG:0.65mm Diameter:5.9±0.15mm |

| CAT.6 UTP 24AWG *4P PVC | length | Y | RAL NO |
|---|--------|--------|----------|
| IB15XX,IB16XX,IB17XX,IB18XX,IB80XX,IB81XX,IB84XX,IB85XX,IB86XX,IB87XX,IB89XX,IB94XX | 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 |

RoHS COMPLIANT