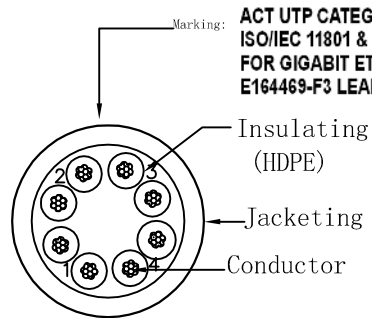
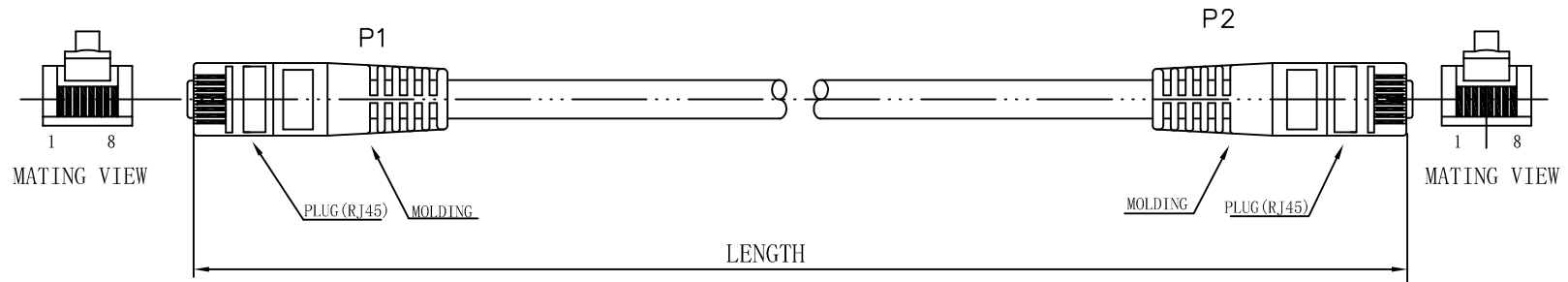


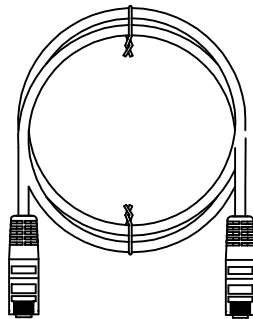
| DATE | REV | DESCRIPTION | BY | CHKD |
|------|-----|-------------|----|------|
|      |     |             |    |      |
|      |     |             |    |      |
|      |     |             |    |      |



ACT UTP CATEGORY 5 E PATCHCABLE 4X2XAWG#24  
ISO/IEC 11801 & EN 50288 & TIA/EIA-568-B.2 3P VERIFIED  
FOR GIGABIT ETHERNET TYPE CM (UL) C(UL) CMH  
E164469-F3 LEADFREE EN71 16000.001

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

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



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

|     |  |
|-----|--|
| 3RD |  |
|-----|--|

|            |        |          |                              |      |            |
|------------|--------|----------|------------------------------|------|------------|
|            |        |          |                              |      |            |
| DRAW. NO   | YUS-06 | ITEM     | Patch cable Category 5 E PVC |      |            |
| DEPARTMENT |        | DRAW     |                              | DRAW | 2011/06/17 |
| SCALE      |        | CHECKER  |                              | DRAW |            |
| UNIT       | mm     | APPROVAL |                              | DRAW |            |

| DATE | REV | DESCRIPTION | BY | CHKD |
|------|-----|-------------|----|------|
|      |     |             |    |      |
|      |     |             |    |      |
|      |     |             |    |      |

|                     |                                                                               |
|---------------------|-------------------------------------------------------------------------------|
| WIRE                | CAT.5E UTP STR 24AWG                                                          |
| PLUG                | RJ45 8P8C                                                                     |
| Plating on contacts | 50U'                                                                          |
| Max bending radius  | 21.6mm                                                                        |
| Band with           | Diamater of mandeel:17.5mm                                                    |
| nvp                 | 69%                                                                           |
| Standards           | TIA/EIA-568-B.2 EN50288                                                       |
| Impedance           | 100Ω±15%                                                                      |
| Skew                | <=45ns 100m at:20° C                                                          |
| Capacity            | MAX 5600pF/100m                                                               |
| Jacket              | PVC Thickness:MIN at any point:0.42mm<br>MAX AVG:0.48mm<br>Diameter:5.4±0.2mm |
| Insulation          | Thickness:MIN at any point:0.15mm<br>MAX AVG:0.25mm<br>Diameter:0.95±0.06mm   |
| Conductor           | Bare Copper 24AWG 7/0.196±0.015mm                                             |
| Color               | XX                                                                            |

| Part   | Colour | RAL no (LEADFREE) |
|--------|--------|-------------------|
| IB64xx | IVORY  | RAL 1015          |
| IB48xx | PINK   | RAL 4003          |
| IB47xx | PURPLE | RAL 4005          |
| IB55xx | RED    | RAL 3031          |
| IB45xx | ORANGE | RAL 2000          |
| IB58xx | YELLOW | RAL 1023          |
| IB46xx | BROWN  | RAL 8023          |
| IB57xx | GREEN  | RAL 6016          |
| IB59xx | BLACK  | RAL 9011          |
| IB56xx | BLUE   | RAL 5012          |
| IB60xx | GREY   | RAL 7045          |
| IB54xx | WHITE  | RAL 9016          |

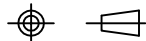
RoHS Compliant



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

.x ± 1  
.XX ± 0.2  
.XX ± 0.05

3RD



| DRAW. NO   | YUS-06 | ITEM     | Patch cable Category 5 E PVC |      |            |
|------------|--------|----------|------------------------------|------|------------|
| DEPARTMENT |        | DRAW     |                              | DRAW | 2011/06/17 |
| SCALE      |        | CHECKER  |                              | DRAW |            |
| UNIT       | mm     | APPROVAL |                              | DRAW |            |

## Product Specification

### STANDARD COMPLIANCES:

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

ANSI/TIA/EIA 568-B.2 Cat.5e

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

CENELEC EN 50173-1

IEC 61156-6, 2nd Edition CENELEC EN 50288-3-2 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 / 24 AWG                                                                                                                                                       |
| Insulation | Material                  | HDPE                                                                                                                                                                       |
|            | Thickness                 | Normal Avg.: 0.186 mm                                                                                                                                                      |
|            | Diameter                  | Normal : 0.96 mm                                                                                                                                                           |
|            | Colors                    | Blue/White-Blue    Orange/White-Orange                                                                                                                                     |
|            |                           | Green/White-Green    Brown/White-Brown                                                                                                                                     |
|            | Elongation                | Min. 300%                                                                                                                                                                  |
|            | Tensile Strength          | Min. 1.683 Kg/mm <sup>2</sup>                                                                                                                                              |
| Sheath     | Material                  | PVC                                                                                                                                                                        |
|            | Thickness                 | Average: 0.50 mm                                                                                                                                                           |
|            | Diameter                  | 5.6±0.3 mm                                                                                                                                                                 |
|            | Elongation                | Min. 100%                                                                                                                                                                  |
|            | Tensile Strength          | Min. 1.407 Kg/mm <sup>2</sup>                                                                                                                                              |
|            | Aging at 100°C for 168Hrs | Min. elongation retention:50%<br>Min. tensile strength retention:75%                                                                                                       |
| Marking    |                           | ACT CAT.5E UTP PATCH CABLE ETL<br>VERIFIED to TIA/EIA-568-B.2 - ISO/IEC 11801<br>ED.2 & EN 50288-3-2 & IEC 60332-1 3P<br>VERIFIED - 24AWGx4P TYPE CM (UL)<br>c(UL) E164469 |
|            |                           | or as customer request.                                                                                                                                                    |
| Flame Test |                           | Burning five times, every time is less than 60<br>second and paper flag can't be burned.                                                                                   |

## APPROVAL:

- UL/cUL Listed & 3P Certified ANSI/TIA/EIA-568-B.2 Category 5e testing performance requirements.

## APPLICATIONS:

- 1000BASE-T Gigabit Ethernet
- 10BASE-T, 100BASE-T Fast Ethernet (IEEE 802.3)
- 100 VG - AnyLAN(IEEE802.12), 155/622 Mbps ATM
- 550MHz Broadband Video
- Voice, T1, ISDN

## ELECTRICAL PERFORMANCES:

|                                   |                 |                                   |                |                    |
|-----------------------------------|-----------------|-----------------------------------|----------------|--------------------|
| Spark Test                        |                 | 2000 ± 250 V ac                   |                |                    |
| Dielectric Strength               |                 | 2500 V dc / 3 seconds             |                |                    |
| Insulation Resistance Test        |                 | Min. 150 MΩ/Km                    |                |                    |
| Conductor Resistance              |                 | Max.9.38Ω/100m at 20℃             |                |                    |
| Resistance Unbalance              |                 | Max. 5%                           |                |                    |
| Capacitance Unbalance             |                 | Max. 330 pF/100m                  |                |                    |
| Mutual Capacitance                |                 | Max. 5600 pF/100m                 |                |                    |
| Impedance                         | 722kHz          | 102Ω ± 15%                        |                |                    |
|                                   | 1~125MHz        | 100Ω ± 15%                        |                |                    |
| Attenuation & Near End Cross Talk | Frequency (MHz) | Attenuation (dB/100M at 20℃), Max | NEXT (dB), Min | Power Sum (dB),Min |
|                                   | 722kHz          | --                                | 67.0*          | 64.0*              |
|                                   | 1MHz            | --                                | 65.0*          | 62.0*              |
|                                   | 4 MHz           | 4.9*                              | 56.0*          | 53.0*              |
|                                   | 8 MHz           | 7.0*                              | 51.0*          | 48.0*              |
|                                   | 10 MHz          | 7.8*                              | 50.0*          | 47.0*              |
|                                   | 16 MHz          | 9.8*                              | 47.0*          | 44.0*              |
|                                   | 20 MHz          | 11.1*                             | 45.0*          | 42.0*              |
|                                   | 25 MHz          | 12.5*                             | 44.0*          | 41.0*              |
|                                   | 31.25 MHz       | 14.0*                             | 42.0*          | 39.0*              |
|                                   | 62.5 MHz        | 20.4*                             | 38.0*          | 35.0*              |
|                                   | 100 MHz         | 26.4*                             | 35.0*          | 32.0*              |
|                                   | 125 MHz         | 30.0*                             | 34.0*          | 31.0*              |

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:

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

CONFIGURATION:

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

