



# ANSEC

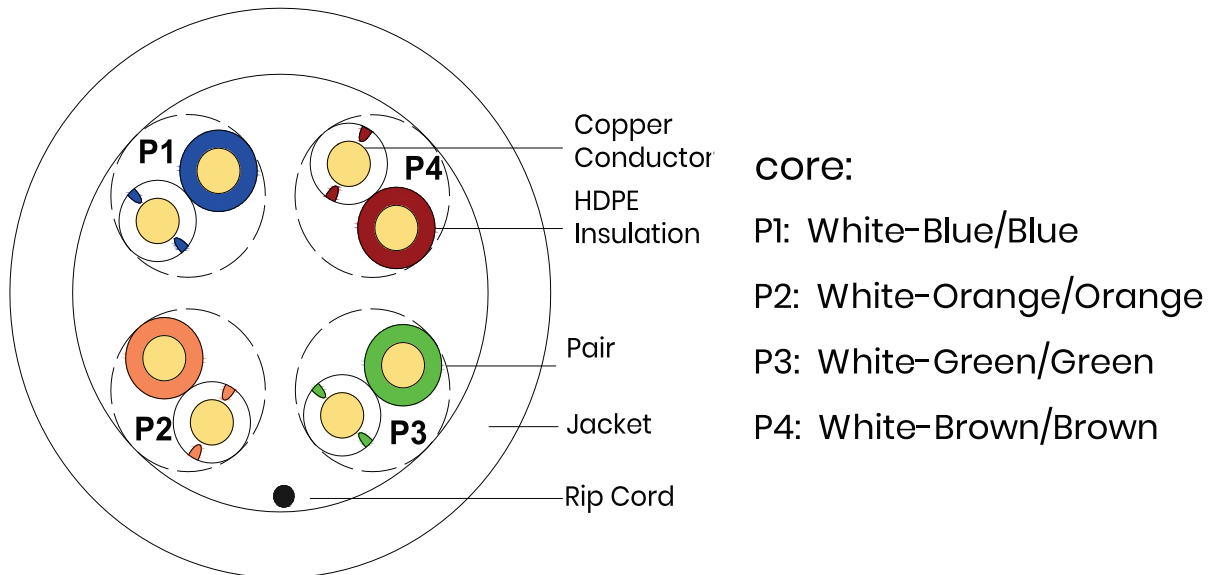
## CAT5e UTP 24AWG CU LSZH 305m COMMUNICATION CABLE



### PRODUCT DATA SHEET

| Type       |                    | CAT5e UTP 24AWG CU LSZH 305m |                   |
|------------|--------------------|------------------------------|-------------------|
| Structure  |                    | Structure A                  |                   |
| Conductors | Structure AWG      | AWG                          | 24# (1/24)        |
|            | Material           | ----                         | Solid Bare Copper |
|            | Diameter           | mm                           | Ø 0.48+/-0.008    |
| Insulation | Material           | ----                         | HDPE              |
|            | Diameter           | mm                           | Ø 0.88+/-0.05     |
|            | Average Thickness  | mm                           | 0.20+/-0.05       |
| Shielding1 | Type               | ----                         | ----              |
| Assembly   | Direction          | ----                         | S                 |
|            | No. of Insulations | Pair                         | 4                 |
| Shielding2 | Material           | ----                         | ----              |
| Drain wire | Shield             | ----                         | ----              |
| Jacket     | Material           | ----                         | LSOH              |
|            | Diameter           | mm                           | Ø 4.8+/-0.3       |
|            | Average Thickness  | mm                           | 0.5+/-0.1         |
|            | Flame Rate         | ----                         | ----              |

## Construction:



### Mechanical Characteristics

1. Cable under the minimum tension:  $\geq 400\text{N}$
2. Conductor elongation:  $\geq 15\%$
3. Jacket before Aging: Tensile Strength  $\geq 10\text{Mpa}$ , Elongation  $\geq 125\%$
4. Jacket After Aging: Tensile Strength  $\geq 8\text{Mpa}$ , Elongation  $\geq 100\%$

### Electrical Characteristics

1. Impedance: 1-100MHz  $100 \pm 15$  (Ohms)
2. Rated Temperature:  $75^\circ\text{C}$
3. DC Resistance Unbalance(%): Max 2.5
4. DC Resistance  $20^\circ\text{C}$ :  $\leq 120$  (Ohms/Km)
5. Pair-to-Ground Capacitance Unbalance: 330 (pF/100M)
6. Insulation Resistance:  $> 5000\text{M}\Omega \cdot \text{Km}$
7. Dielectric strength: DC 2500V 2S

### Nominal Transmission Characteristics

| Frequency<br>(MHz) | Min. RL<br>(dB) | Min. IL<br>(dB/100M) | Max. DOP<br>(ns/100M) | Max. SKEW<br>(ns/100M) | Min. NEXT<br>(dB) | Min. PSNEXT<br>(dB) | Min. ACR-F<br>(dB/100M) | Min. PSACR-F<br>(dB/100M) |
|--------------------|-----------------|----------------------|-----------------------|------------------------|-------------------|---------------------|-------------------------|---------------------------|
| 1                  | 20              | 2                    | 570                   | 45                     | 65.3              | 62.3                | 63.8                    | 60.8                      |
| 4                  | 23              | 4.1                  | 552                   | 45                     | 56.3              | 53.3                | 51.8                    | 48.8                      |
| 10                 | 25              | 6.5                  | 545.4                 | 45                     | 50.3              | 47.3                | 43.8                    | 40.8                      |
| 16                 | 25              | 8.2                  | 543                   | 45                     | 47.2              | 44.2                | 39.7                    | 36.7                      |
| 20                 | 25              | 9.3                  | 542.1                 | 45                     | 45.8              | 42.8                | 37.8                    | 34.8                      |
| 31.25              | 23.6            | 11.7                 | 540.4                 | 45                     | 42.9              | 39.9                | 33.9                    | 30.9                      |
| 62.5               | 21.5            | 17                   | 538.6                 | 45                     | 38.4              | 35.4                | 27.9                    | 24.9                      |
| 100                | 20.1            | 22                   | 537.6                 | 45                     | 35.3              | 32.3                | 23.8                    | 20.8                      |

Note: The above transmission performance for the 100M,  $20 \pm 2^\circ\text{C}$  under the conditions tested

