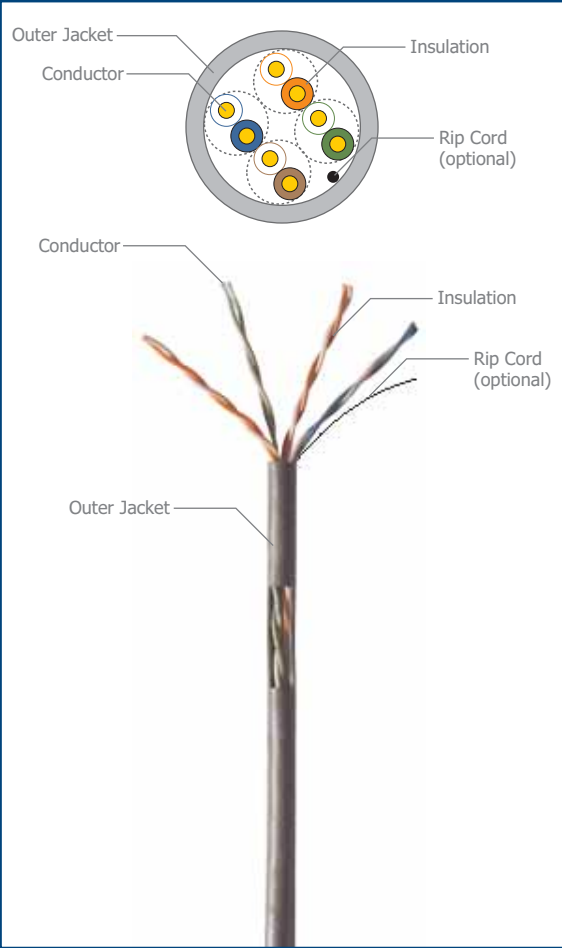


4PR 24AWG U/UTP (CAT5E ECONOMY) / Part No.: LN-A0424AU5E

| Description | Application |
|---|--|
| <ul style="list-style-type: none"> Rated temperature: 75°C Reference Standard: UL Subject 444, EIA/TIA 568B.2 & ISO/IEC 11801 Solid bare copper conductor Colour-coded PE insulation Rip cord (optional) PVC or LSZH jacket Packaging: Reelex Pull-out Box Packing | <ul style="list-style-type: none"> 100 Base-T4 100Base-TX 100VG-AnyLAN 1000Base-T 1000Base-TX 155Mbps ATM 622Mbps ATM |

| Product Figure | Physical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|--|---------------------|-------|------------------------|--------|------------|-------|---------------------------------|---------------|--|--|-------------------|-------------------|----------------------------|------------|----------------------------------|------|--|--|---------------------|----|---------------|---|----|------------------------------------|----|-------------------|----|---------------------|------------------------------|-------------|-----------------------------|----------------------|--------------------------------------|---------------------|-----------------------------------|------------------------------|----------|-------------------------------|--------------|---|------|-----------------------------------|----------|-------------------|-------------------------------|-----------------------------------|---------------------------------------|---------------|---|---|--|-----|----------------------------------|--------------|---|--------------------|---|---|---|------|----------------------------------|------|
|  | <table border="1"> <tr> <td rowspan="4">Structure</td> <td>Construction</td> <td>U/UTP</td> </tr> <tr> <td>Number of Pairs</td> <td>4 Pair</td> </tr> <tr> <td>AWG</td> <td>24AWG</td> </tr> <tr> <td>Conductor Dimension (mm)</td> <td>0.505 (24AWG)</td> </tr> <tr> <td rowspan="3"></td> <td>Solid or Stranded; Bare or Tinned</td> <td>Solid bare copper</td> </tr> <tr> <td rowspan="4">Insulation</td> <td>Insulation Material</td> <td>HDPE, FRPE</td> </tr> <tr> <td>Insulation Dimension (mm)</td> <td>0.88</td> </tr> <tr> <td>Number Colour (Ring or Strip Marking)</td> <td>1.White/Blue(Ring) & Blue 2.White/Orange(Ring) & Orange 3.White/Green(Ring) & Green 4.White/Brown(Ring) & Brown</td> </tr> <tr> <td>Cross Filler</td> <td>No</td> </tr> <tr> <td rowspan="3">Shield</td> <td>Individual Shield & Material</td> <td>No</td> </tr> <tr> <td>Outer Shield & Material</td> <td>No</td> </tr> <tr> <td>Drain Wire</td> <td>No</td> </tr> <tr> <td rowspan="3">Outer Jacket</td> <td>Outer Jacket Material</td> <td>PVC or LSZH</td> </tr> <tr> <td>Outer Jacket Ripcord</td> <td>Per customer request</td> </tr> <tr> <td>Overall Nominal Diameter (mm)</td> <td>24AWG UTP nom:4.8mm</td> </tr> <tr> <td rowspan="6">Mechanical Characteristics</td> <td>Operating Temp. Range</td> <td>-20~75°C</td> </tr> <tr> <td>Bulk Cable Weight (KG)</td> <td>29KG (24AWG)</td> </tr> <tr> <td>Max. Recommended Pulling Tension</td> <td>110N</td> </tr> <tr> <td>Min. Bend Radius (Install)</td> <td>4 X O.D.</td> </tr> <tr> <td>Flame Test</td> <td>CMX, CM, CMG, CMR, IEC60332-1</td> </tr> <tr> <td rowspan="6">Electrical Characteristics</td> <td>Nom. Mutual Capacitance @ 1kHz</td> <td>≤ 5.6nF /100M</td> </tr> <tr> <td>Max. Capacitance Unbalance (pF/100m)</td> <td>≤ 330pF/100M(Per TIA/EIA-568B.2) ≤ 160pF/100M(Per IEC 61156)</td> </tr> <tr> <td>Nominal Velocity of Propagation</td> <td>65%</td> </tr> <tr> <td>Max. Delay Skew (ns/100m)</td> <td>≤ 45ns /100M</td> </tr> <tr> <td>Max. Conductor DC Resistance @ 20 Deg. C</td> <td>9.38Ω /100M(24AWG)</td> </tr> <tr> <td>Max. DC Resistance Unbalance @ 20 Deg. C</td> <td>≤ 5%(Per TIA/EIA-568B.2) ≤ 2%(Per IEC 61156-5)</td> </tr> <tr> <td>Max. Insulation Resistance (MΩ/km)</td> <td>5000</td> </tr> <tr> <td>Max. Operating Voltage-UL</td> <td>300V</td> </tr> </table> | Structure | Construction | U/UTP | Number of Pairs | 4 Pair | AWG | 24AWG | Conductor Dimension (mm) | 0.505 (24AWG) | | Solid or Stranded; Bare or Tinned | Solid bare copper | Insulation | Insulation Material | HDPE, FRPE | Insulation Dimension (mm) | 0.88 | Number Colour (Ring or Strip Marking) | 1.White/Blue(Ring) & Blue 2.White/Orange(Ring) & Orange 3.White/Green(Ring) & Green 4.White/Brown(Ring) & Brown | Cross Filler | No | Shield | Individual Shield & Material | No | Outer Shield & Material | No | Drain Wire | No | Outer Jacket | Outer Jacket Material | PVC or LSZH | Outer Jacket Ripcord | Per customer request | Overall Nominal Diameter (mm) | 24AWG UTP nom:4.8mm | Mechanical Characteristics | Operating Temp. Range | -20~75°C | Bulk Cable Weight (KG) | 29KG (24AWG) | Max. Recommended Pulling Tension | 110N | Min. Bend Radius (Install) | 4 X O.D. | Flame Test | CMX, CM, CMG, CMR, IEC60332-1 | Electrical Characteristics | Nom. Mutual Capacitance @ 1kHz | ≤ 5.6nF /100M | Max. Capacitance Unbalance (pF/100m) | ≤ 330pF/100M(Per TIA/EIA-568B.2) ≤ 160pF/100M(Per IEC 61156) | Nominal Velocity of Propagation | 65% | Max. Delay Skew (ns/100m) | ≤ 45ns /100M | Max. Conductor DC Resistance @ 20 Deg. C | 9.38Ω /100M(24AWG) | Max. DC Resistance Unbalance @ 20 Deg. C | ≤ 5%(Per TIA/EIA-568B.2) ≤ 2%(Per IEC 61156-5) | Max. Insulation Resistance (MΩ/km) | 5000 | Max. Operating Voltage-UL | 300V |
| | Structure | | Construction | U/UTP | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number of Pairs | | | 4 Pair | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AWG | | | 24AWG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Conductor Dimension (mm) | | 0.505 (24AWG) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Solid or Stranded; Bare or Tinned | Solid bare copper | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Insulation | Insulation Material | HDPE, FRPE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | Insulation Dimension (mm) | 0.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Number Colour (Ring or Strip Marking) | | 1.White/Blue(Ring) & Blue 2.White/Orange(Ring) & Orange 3.White/Green(Ring) & Green 4.White/Brown(Ring) & Brown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Cross Filler | | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shield | Individual Shield & Material | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Outer Shield & Material | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Drain Wire | No | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Outer Jacket | Outer Jacket Material | PVC or LSZH | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Outer Jacket Ripcord | Per customer request | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Overall Nominal Diameter (mm) | 24AWG UTP nom:4.8mm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mechanical Characteristics | Operating Temp. Range | -20~75°C | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Bulk Cable Weight (KG) | 29KG (24AWG) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Max. Recommended Pulling Tension | 110N | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Min. Bend Radius (Install) | 4 X O.D. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Flame Test | CMX, CM, CMG, CMR, IEC60332-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Electrical Characteristics | Nom. Mutual Capacitance @ 1kHz | ≤ 5.6nF /100M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Capacitance Unbalance (pF/100m) | | ≤ 330pF/100M(Per TIA/EIA-568B.2) ≤ 160pF/100M(Per IEC 61156) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal Velocity of Propagation | | 65% | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Delay Skew (ns/100m) | | ≤ 45ns /100M | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Conductor DC Resistance @ 20 Deg. C | | 9.38Ω /100M(24AWG) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. DC Resistance Unbalance @ 20 Deg. C | | ≤ 5%(Per TIA/EIA-568B.2) ≤ 2%(Per IEC 61156-5) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Insulation Resistance (MΩ/km) | 5000 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. Operating Voltage-UL | 300V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

* Custom configuration is available upon request.



4PR 24AWG U/UTP (CAT5E ECONOMY) / Part No.: LN-A0424AU5E
TIA/EIA-568B.2 Electrical Characteristics

| Frequency (MHz) | Impedance (Ohms) | ATT (dB/100m) | RL (dB Min) | NEXT (dB Min) | PSNEXT (dB Min) | ELFEXT (dB Min) | PSELFEXT (dB Min) | PD Max (ns/100m) | SKEW (ns/100m) | Hybrid PSNext (dB Min) |
|-----------------|------------------|---------------|-------------|---------------|-----------------|-----------------|-------------------|------------------|----------------|------------------------|
| 0.772 | 100 ± 15 | 1.8 | 19.4 | 67.0 | 64.0 | 66.0 | 63.0 | 575 | 45 | 65.0 |
| 1 | 100 ± 15 | 2.0 | 20.0 | 65.3 | 62.3 | 63.8 | 60.8 | 570 | 45 | 65.0 |
| 4 | 100 ± 15 | 4.1 | 23.0 | 56.3 | 55.3 | 51.7 | 48.7 | 552 | 45 | 59.3 |
| 8 | 100 ± 15 | 5.8 | 24.5 | 51.8 | 48.8 | 45.7 | 42.7 | 547 | 45 | 54.8 |
| 10 | 100 ± 15 | 6.5 | 25.0 | 50.3 | 47.3 | 43.8 | 40.8 | 545 | 45 | 53.3 |
| 16 | 100 ± 15 | 8.2 | 25.0 | 47.3 | 44.3 | 39.7 | 36.7 | 543 | 45 | 50.2 |
| 20 | 100 ± 15 | 9.3 | 25.0 | 45.8 | 42.8 | 37.7 | 34.7 | 542 | 45 | 48.8 |
| 25 | 100 ± 15 | 10.4 | 24.3 | 44.3 | 41.3 | 35.8 | 32.8 | 541 | 45 | 47.3 |
| 31.25 | 100 ± 15 | 11.7 | 23.6 | 42.9 | 39.9 | 33.9 | 30.9 | 540 | 45 | 45.9 |
| 62.5 | 100 ± 15 | 17.0 | 21.5 | 38.4 | 35.4 | 27.8 | 24.8 | 539 | 45 | 41.4 |
| 100 | 100 ± 15 | 22.0 | 20.1 | 35.3 | 32.3 | 23.8 | 20.8 | 538 | 45 | 38.3 |

IEC-61156-5 Electrical Characteristics

| Frequency (MHz) | Impedance (Ohms) | ATT (dB/100m) | RL (dB Min) | NEXT (dB Min) | PSNEXT (dB Min) | ELFEXT (dB Min) | PSELFEXT (dB Min) | PD Max (ns/100m) | SKEW (ns/100m) |
|-----------------|------------------|---------------|-------------|---------------|-----------------|-----------------|-------------------|------------------|----------------|
| 1 | 100 ± 15 | - | - | - | - | 64.0 | 61.0 | 570 | 45 |
| 4 | 100 ± 15 | 4.0 | 23.0 | 56.0 | 53.0 | 52.0 | 49.0 | 552 | 45 |
| 10 | 100 ± 15 | 6.3 | 24.5 | 50.0 | 47.0 | 45.9 | 42.9 | 545 | 45 |
| 16 | 100 ± 15 | 8.0 | 25.0 | 47.0 | 44.0 | 39.9 | 36.9 | 543 | 45 |
| 20 | 100 ± 15 | 9.0 | 25.0 | 46.0 | 43.0 | 38.0 | 35.0 | 542 | 45 |
| 31.25 | 100 ± 15 | 11.4 | 23.6 | 43.0 | 40.0 | 34.1 | 31.1 | 540 | 45 |
| 62.5 | 100 ± 15 | 16.5 | 21.5 | 38.0 | 35.0 | 28.1 | 25.1 | 539 | 45 |
| 100 | 100 ± 15 | 21.3 | 20.1 | 35.0 | 32.0 | 24.0 | 21.0 | 538 | 45 |

