



Product: [7814ANH](#)

CAT 6 4P 24AWG, U/UTP, LSZH Jkt, Indoor

Product Description

CAT 6 4PR x 24AWG U/UTP, Solid Bare Copper Conductor, PE Insulation, LSZH Jacket, Indoor

Technical Specifications

Product Overview

| | |
|------------------------|--|
| Suitable Applications: | Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, 250MHz Category 6 and PoE application. |
|------------------------|--|

Construction Details

Conductor

| Size | Stranding | Material | No. of Pairs |
|------|-----------|------------------|--------------|
| 24 | Solid | BC - Bare Copper | 4 |

Insulation

| Material | Nom. Insulation Diameter | Color Code |
|-------------------|--------------------------|--|
| PE - Polyethylene | 0.97 mm (0.038 in) | Blue & White with Blue Stripe, Orange & White with Orange Stripe, Green & White with Green Stripe, Brown & White with Brown Stripe |

Outer Jacket

| Material | Nom. Diameter | Ripcord |
|---|------------------|---------|
| LSZH - Low Smoke Zero Halogen (Flame Retardant) | 5.8 mm (0.23 in) | Yes |

Electrical Characteristics

Electricals

| Max. Conductor DCR | Max. Mutual Capacitance | Max. Capacitance Unbalance | Nom. Characteristic Impedance |
|-------------------------------|-------------------------|----------------------------|-------------------------------|
| 93.8 Ohm/km (28.6 Ohm/1000ft) | 56 pF/m (17 pF/ft) | 330 pF/100m | 100 Ohm |

Delay

| Frequency | Max. Delay | Max. Delay Skew | Nom. Velocity of Prop. |
|-----------|-------------|-----------------|------------------------|
| 100 MHz | 538 ns/100m | 45 ns/100m | 70% |

High Frequency

| Frequency [MHz] | Max. Insertion Loss (Attenuation) | Min. NEXT [dB] | Min. PSNEXT [dB] | Min. ACR [dB] | Min. PSACR [dB] | Min. ACRF (ELFEXT) [dB] | Min. PSACRF (PSELFEXT) [dB] | Min. RL (Return Loss) [dB] | Min. TCL [dB] | Min. ELTCTL [dB] |
|-----------------|-----------------------------------|----------------|------------------|---------------|-----------------|-------------------------|-----------------------------|----------------------------|---------------|------------------|
| 1 | 2.0 dB/100m | 74.3 | 72.3 | 72.3 | 70.3 | 67.8 | 64.8 | 20.0 | 40.0 | 35.0 |
| 4 | 3.8 dB/100m | 65.3 | 63.3 | 61.5 | 59.5 | 55.8 | 52.8 | 23.0 | 40.0 | 23.0 |
| 8 | 5.3 dB/100m | 60.8 | 58.8 | 55.5 | 54.5 | 49.7 | 46.7 | 24.5 | 40.0 | 16.9 |
| 10 | 6.0 dB/100m | 59.3 | 57.3 | 53.3 | 50.3 | 47.8 | 44.8 | 25.0 | 40.0 | 15.0 |
| 16 | 7.6 dB/100m | 56.2 | 54.2 | 48.7 | 46.7 | 43.7 | 40.7 | 25.0 | 38.0 | 10.9 |
| 20 | 8.5 dB/100m | 54.8 | 52.8 | 46.3 | 44.3 | 41.8 | 38.8 | 25.0 | 37.0 | 9.0 |
| 25 | 9.5 dB/100m | 53.3 | 51.3 | 43.8 | 41.8 | 39.8 | 36.8 | 24.3 | 36.0 | 7.0 |
| 31.25 | 10.7 dB/100m | 51.9 | 49.9 | 41.4 | 39.4 | 37.9 | 34.9 | 23.6 | 35.1 | |
| 62.5 | 15.4 dB/100m | 47.4 | 45.4 | 32.0 | 30.0 | 31.9 | 28.9 | 21.5 | 32.0 | |
| 100 | 19.8 dB/100m | 44.3 | 42.3 | 24.5 | 22.5 | 27.8 | 24.8 | 20.1 | 30.0 | |
| 155 | 25.2 dB/100m | 41.4 | 39.4 | 16.3 | 14.3 | 24.0 | 21.0 | 18.8 | 27.0 | |

| | | | | | | | | | | |
|-----|--------------|------|------|------|-----|------|------|------|------|--|
| 200 | 29.0 dB/100m | 39.8 | 37.8 | 10.8 | 8.8 | 21.8 | 18.8 | 18.0 | 27.0 | |
| 250 | 32.8 dB/100m | 38.3 | 36.3 | | | 19.8 | 16.8 | 17.3 | | |

Mechanical Characteristics

Temperature

| |
|------------------|
| Operating |
| -20°C to +75°C |

Bend Radius

| |
|--------------------------|
| Installation Min. |
| 23.2 mm (0.913 in) |

| | |
|--------------------|------------------------------|
| Max. Pull Tension: | 110 N (25 lbf) |
| Bulk Cable Weight: | 40.5 kg/km (27.2 lbs/1000ft) |

Standards and Compliance

| | |
|----------------------------------|--|
| Environmental Suitability: | Indoor, Indoor, Non-Halogenated |
| Flammability / Reaction to Fire: | IEC 60332-1-2 |
| IEEE Compliance: | IEEE 802.3bt Type1, Type2, Type3, Type4 |
| Data Category: | Category 6 |
| TIA/EIA Compliance: | ANSI/TIA 568.2-D |
| ISO/IEC Compliance: | ISO/IEC 11801-1, IEC 61156-5 |
| European Halogen Free Standards: | IEC 60754-1 - Halogen Amount = 5 mg/g, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 µS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3 |
| European Directive Compliance: | EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2) |
| APAC Compliance: | China RoHS II (GB/T 26572-2011) |

Product Notes

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| Notes: | Jacket sequentially marked |
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History

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|----------------------|---|
| Update and Revision: | Revision Number: 0.48 Revision Date: 12-12-2023 |
|----------------------|---|

Part Numbers

Variants

| Item # | Color | Putup Type | Length |
|------------------|--------|-------------|----------|
| 7814ANH 010A305M | Black | Reel in Box | 305 m |
| 7814ANH 010A1000 | Black | Reel in Box | 1,000 ft |
| 7814ANH 006A305M | Blue | Reel in Box | 305 m |
| 7814ANH 006U305M | Blue | Unreel | 305 m |
| 7814ANH 006A1000 | Blue | Reel in Box | 1,000 ft |
| 7814ANH 006U1000 | Blue | Unreel | 1,000 ft |
| 7814ANH 0062000M | Blue | Reel | 2,000 m |
| 7814ANH 005A305M | Green | Reel in Box | 305 m |
| 7814ANH 005A1000 | Green | Reel in Box | 1,000 ft |
| 7814ANH 008A305M | Grey | Reel in Box | 305 m |
| 7814ANH 008U305M | Grey | Unreel | 305 m |
| 7814ANH 008A1000 | Grey | Reel in Box | 1,000 ft |
| 7814ANH 008U1000 | Grey | Unreel | 1,000 ft |
| 7814ANH 003A305M | Orange | Reel in Box | 305 m |
| 7814ANH 003A1000 | Orange | Reel in Box | 1,000 ft |
| 7814ANH 002A305M | Red | Reel in Box | 305 m |
| 7814ANH 002A1000 | Red | Reel in Box | 1,000 ft |
| 7814ANH 007A305M | Violet | Reel in Box | 305 m |
| 7814ANH 007A1000 | Violet | Reel in Box | 1,000 ft |
| 7814ANH 004A305M | Yellow | Reel in Box | 305 m |
| 7814ANH 004A1000 | Yellow | Reel in Box | 1,000 ft |

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