

PRODUCT PART NUMBER

• LUR46ECXX

PRODUCT DESCRIPTION

- U/UTP, 24AWG solid bare copper, CAT.6, CMR
- With cross filler
- With rip cord

APPLICATION

- Structure cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- IEEE 802.3ab 1000BASE-T, 1000BASE-TX and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

USAGE & ENVIRONMENTAL CONDITION

| | | |
|-------------------|--------------------|---------------|
| Temperature range | Storage & shipping | -20°C to 75°C |
| | Installation | 0°C to 60°C |
| | Operation | -20°C to 60°C |

| | |
|------------------------|-------------------------------|
| Minimum bending radius | ≥ 4 times of overall diameter |
|------------------------|-------------------------------|

| | |
|-------------------------|---------|
| Maximum pulling tension | ≤ 110 N |
|-------------------------|---------|

PHYSICAL & ELECTRICAL CHARACTERISTICS (AT 20°C)

| | |
|---|-------------------|
| Temperature rating | 75°C |
| Spark test | 2.5 KV DC |
| AC leakage current through overall jacket | ≤ 10mA (1.5KV AC) |
| Cable cold bend | -20°C for 4 hr |
| Conductor DC resistance | ≤ 9.38 /100m |
| Resistance unbalance | ≤ 5% |
| Dielectric strength | 15 KV ac for 2 s |
| Insulation resistance | ≥ 5000 M ·km |
| Mutual capacitance | ≤ 5.6 nF/100m |
| Capacitance unbalance pair-to-ground | ≤ 330 pF/100m |

PRODUCT FEATURES

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 600 MHz
- Reelex II carton and easy to pull out.
- Carton with one-layer corrugated design providing sufficient strength and saving packaging space.

TRANSMISSION PERFORMANCE (AT 20°C)

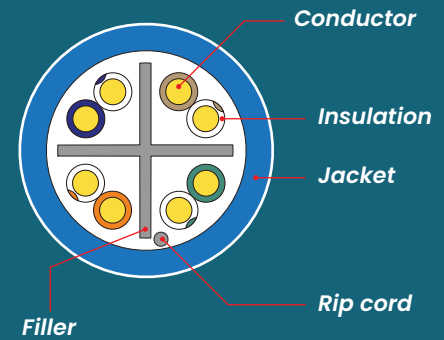
| Frequency (MHz) | IL | NEXT | PS.NEXT | ACR | PS.ACR | ACRF | PS.ACRF | RL | Propagation Delay | Delay Skew |
|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------|--------------|
| | Max. dB/100m | Min. dB/100m | Min. dB/100m | Min. dB/100m | Min. dB/100m | Min. dB/100m | Min. dB/100m | Min. dB/100m | Max. ns/100m | Max. ns/100m |
| 1 | 2.03 | 80.30 | 78.30 | 78.28 | 76.28 | 73.80 | 70.80 | 20.00 | 570.00 | 45.00 |
| 4 | 3.78 | 71.27 | 69.27 | 67.49 | 65.49 | 61.76 | 58.76 | 23.01 | 552.00 | |
| 8 | 5.32 | 66.75 | 64.75 | 61.43 | 59.43 | 55.74 | 52.74 | 24.52 | 546.73 | |
| 10 | 5.95 | 65.30 | 63.30 | 59.35 | 57.35 | 53.80 | 50.80 | 25.00 | 545.38 | |
| 100 | 19.80 | 50.30 | 48.30 | 30.50 | 28.50 | 33.80 | 30.80 | 20.11 | 537.60 | |
| 250 | 32.85 | 44.33 | 42.33 | 11.48 | 9.48 | 25.84 | 22.84 | 17.32 | 536.28 | |
| 600 | 54.49 | 38.63 | 36.63 | N.A. | N.A. | 18.24 | 15.24 | 14.66 | 535.47 | |

Values above 250MHz are for information only.

APPLICABLE STANDARD

- **Electrical Transmission**
 - ANSI/TIA-568-C.2 (2009)
 - ISO/IEC 11801 (Edition 2.2)
 - IEC 61156-5 (Edition 2.0)
- **Electrical Transmission**
 - UL 1666 (CMR)
- **Material and Construction**
 - UL 444
 - CSA 22.2 NO.214
- **EU Directive 2011/65/EC (RoHS2)**
- **EU Directive 2006/95/EC (LVD)**
- **CE compliance date: 2010.01.01**

SECTIONAL DRAWING



MATERIAL AND CONSTRUCTION

| | | | |
|----------------------------|--|--|----------------|
| Conductor | Material | 24AWG solid bare copper | |
| Insulation | Material | Polyolefin (PO) | |
| | Color code & diameter | Blue & white/blue Stripe | 0.96 ± 0.02 mm |
| | Orange & white/orange stripe | 0.93 ± 0.02 mm | |
| | Green & white/green stripe | 0.96 ± 0.02 mm | |
| Brown & white/brown stripe | 0.93 ± 0.02 mm | | |
| Twisted | Description | Left hand direction | |
| Filler | Material | Polyolefin (PO) | |
| Assembly | Description | Left hand direction | |
| Rip cord | Material | Polyester multi-yarn | |
| Jacket | Material | Flame retardant polyvinyl chloride (FRPVC) | |
| | Diameter | 5.8 ± 0.2 mm | |
| | Thickness | 0.50 ± 0.05 mm | |
| | Color | Per customer's request | |
| Marking | DIGILINK GLOBAL 1000X CAT 6E GIGASYSTEM TESTED TO 600MHZ---E142890 UTP 4PR 24AWG 75 C(UL)US CMR---ETL & 3P VERIFIED TO TIA-568-C.2 ISO/IEC 11801 mmyyl RoHS COMPLIANT XXXXF Note: mmyyl is date code. | | |

