

ABA Industry, Inc.

Specification for Approval



Contact Sales at 888-568-1230
or
Email us at Sales@LANshack.com

Product Part Number

- TPM2404N70XX

Product Description

- U/UTP, 24AWG stranded bare copper, CAT.6, CM

Product Features

- High performance of transmission.
- High quality of safety property.
- Sweep frequency up to 400 MHz.
- Reelex II carton and easy to pull out.
- Carton with one layer corrugated design providing sufficient strength and saving packaging space.

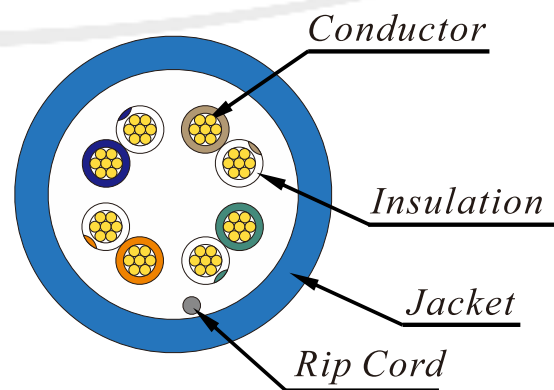
Application

- Structure cabling for patch 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+)

Applicable Standard

- Electrical Transmission
 - ANSI/TIA-568-C.2 (2009)
 - ISO/IEC 11801 (Edition 2.2)
 - IEC 61156-6 (Edition 2.0)
- Flame Test
 - UL 1685 (CM)
- 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



| | | | | | |
|----------------|------------|---------|-----|--------------|--|
| Establish Date | 2014.03.01 | Edition | 1.0 | Revised Date | |
|----------------|------------|---------|-----|--------------|--|

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Material and Construction

| | | | |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|----------------|
| Conductor | Material | 24AWG stranded bare copper | |
| Insulation | Material | Polyolefin (PO) | |
| | Color code & diameter | Blue & white/blue Stripe | 1.01 ± 0.02 mm |
| | | Orange & white/orange stripe | 0.97 ± 0.02 mm |
| | | Green & white/green stripe | 1.00 ± 0.02 mm |
| Brown & white/brown stripe | | 0.97 ± 0.02 mm | |
| Twisted | Description | Left hand direction | |
| Assembly | Description | Left hand direction | |
| Jacket | Material | Flame retardant polyvinyl chloride (FRPVC) | |
| | Diameter | 5.4 ± 0.2 mm | |
| | Thickness | 0.50 ± 0.05 mm | |
| | Color | Per customer's request | |
| Marking | ELITE 1000X PATCH CABLE CAT 6 GIGASYSTEM---E142890 UTP 4PR 24AWG 75°C C(UL)US CM---ETL VERIFIED TO TIA-568-C.2 mmyy ¹ RoHS COMPLIANT XXXXFT Note 1: mmyy is date code. | | |

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 | |

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Physical & Electrical Characteristics (at 20°C)

| | |
|-------------------------------------------|-------------------|
| Temperature & voltage rating | 75°C / 300V |
| 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 | ≤ 14 Ω/100m |
| Resistance unbalance | ≤ 5% |
| Dielectric strength | 1.5 KV ac for 2 s |
| Insulation resistance | ≥ 5000 MΩ · m |
| Mutual capacitance | ≤ 5.6 nF/100m |
| Capacitance unbalance pair-to-ground | ≤ 160 pF/100m |

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 | 2.43 | 77.30 | 75.30 | 74.87 | 72.87 | 70.80 | 67.80 | 20.00 | 570.00 | 45.00 |
| 4 | 4.54 | 68.27 | 66.27 | 63.73 | 61.73 | 58.76 | 55.76 | 23.01 | 552.00 | |
| 8 | 6.38 | 63.75 | 61.75 | 57.37 | 55.37 | 52.74 | 49.74 | 24.52 | 546.73 | |
| 10 | 7.14 | 62.30 | 60.30 | 55.16 | 53.16 | 50.80 | 47.80 | 25.00 | 545.38 | |
| 16 | 9.06 | 59.24 | 57.24 | 50.17 | 48.17 | 46.72 | 43.72 | 25.00 | 543.00 | |
| 20 | 10.16 | 57.78 | 55.78 | 47.62 | 45.62 | 44.78 | 41.78 | 25.00 | 542.05 | |
| 25 | 11.41 | 56.33 | 54.33 | 44.92 | 42.92 | 42.84 | 39.84 | 24.17 | 541.20 | |
| 31.25 | 12.81 | 54.88 | 52.88 | 42.07 | 40.07 | 40.90 | 37.90 | 23.33 | 540.44 | |
| 62.5 | 18.46 | 50.36 | 48.36 | 31.90 | 29.90 | 34.88 | 31.88 | 20.74 | 538.55 | |
| 100 | 23.76 | 47.30 | 45.30 | 23.54 | 21.54 | 30.80 | 27.80 | 18.99 | 537.60 | |
| 150 | 29.65 | 44.66 | 42.66 | 15.01 | 13.01 | 27.28 | 24.28 | 17.47 | 536.94 | |
| 200 | 34.78 | 42.78 | 40.78 | 8.00 | 6.00 | 24.78 | 21.78 | 16.40 | 536.55 | |
| 250 | 39.42 | 41.33 | 39.33 | N.A. | N.A. | 22.84 | 19.84 | 15.57 | 536.28 | |
| 300 | 43.71 | 40.14 | 38.14 | N.A. | N.A. | 21.26 | 18.26 | 14.89 | 536.08 | |
| 350 | 47.74 | 39.14 | 37.14 | N.A. | N.A. | 19.92 | 16.92 | 14.31 | 535.92 | |
| 400 | 51.56 | 38.27 | 36.27 | N.A. | N.A. | 18.76 | 15.76 | 13.81 | 535.80 | |

Values above 250MHz are for information only.

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Shipping Information

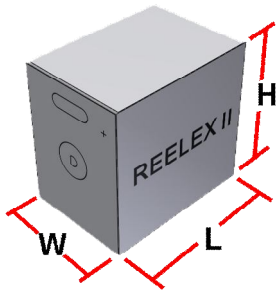
| | | |
|------------------|-----------------------|--------------------|
| Item | Dimension | Nominal net weight |
| Cable | 305 m | 9.73 kg (20.78 lb) |
| Reelex II Carton | L374 x W260 x H360 mm | 900 g |
| Pallet | 1150 x1150 x120 mm | 14.1 kg |

| | | |
|----------------|--------------------|--------------------|
| Container type | Capacity of pallet | Capacity of carton |
| 20 feet | 20 | 600 |
| 40 feet | 40 | 1200 |

Shipping could use standard delivery form or per customer`s request.

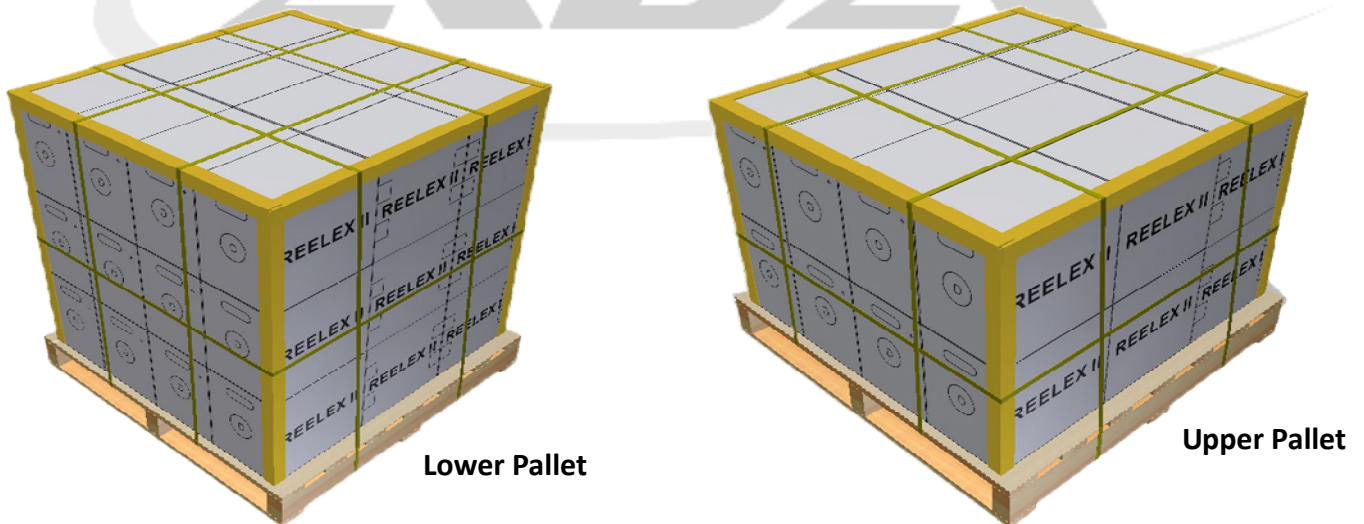
Schematic Drawing of Carton

One layer corrugated Reelex II carton.



Schematic Drawing of Package

Each package of pallet delivered with plastic wrap, packing strap and paper corner protector.



Revised Information

| Edition | Revised Description | Revised Date |
|---------|---------------------|--------------|
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