

Copper LAN Product Inquiry Phone: 717-354-6200 berktek.support@nexans.com

LANmark-XTP UTP Plenum Category 6A

LANmark-XTP UTP Plenum Part Number: 11082057

Berk-Tek's LANmark-XTP features a small diameter of 0.270", that allows for easier and more efficient installation and cable management compared to other Category 6A UTP Cables. The smaller size also improves density and cooling. It features innovative noise canceling XTP technology that delivers exceptional alien crosstalk (AXT) performance. LANmark-XTP is capable of transmitting 10GBASE-T network applications and mission critical systems running at 10 Gigabit speeds with performance is verified beyond ANSI/TIA Category 6A standards by third-party labs.

Description

THE FUTURE OF 10G PERFORMANCE HAS ARRIVED

Take Your Network's Performance to the Next Level with LANmark™-XTP.

It's not every day that you get to design and build a high-performing network for the next generation. But when you do, you need a cable that's built to last. Berk-Tek's LANmark-XTP cable is just that. Designed for those interested in exceptional performance to support applications today and tomorrow, LANmark-XTP features innovative noise canceling XTP technology, for the highest degree of alien crosstalk immunity available in a CAT 6A UTP cable. This performance advantage is delivered along with the smallest CAT 6A UTP diameter of 0.270", for superior cable density and less pathway congestion.

Based on Berk-Tek's advanced testing, LANmark-XTP has a Converged Application Score (CA Score) of 8.6 and is the best choice for high bandwidth requirements with excellent PoE performance and the only choice for HD Video and 802.11ac wireless. For more information on CA Score, please click <a href="https://example.com/here-test-new-te

Construction:

Bare copper wire insulated with FEP. Two primaries are twisted together to form a pair and four such pairs are cabled together with a central filler to form the basic unit. The cable core is surrounded by an aluminum/polyester tape and jacketed with flame-retardant polymer alloy.

Flame Rating:

Plenum-NFPA 70, CMP UL Listed

Features:

- Innovative noise canceling XTP technology delivers superior alien crosstalk (AXT) performance
- Backwards compatible with Gigabit Ethernet to provide seamless migration to 10GBASET while supporting all CAT 6 and CAT 5e system requirements
- Manages the convergence of voice, video and data at 10 Gigbit Ethernet speeds, simplifying networks

Benefits:

- Supports both long and short channels
- Easier installation and cable management with reduced outer diameter of 0.270"
- Error-free performance up to 10 Gigabit Ethernet with full duplex transmission up to 500 MHz
- The smaller diameter allows for improved density and better operational airflow and cooling
- No bonding or grounding needed allows for simple and efficient installation

Perform Beyond Expectations, choose Berk-Tek.



Standards

National ANSI/TIA-568-C.2; CSA C22.2 N° 214-02; UL 444



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Part Number: <u>11082057</u>

Characteristics

| Construction characteristics | |
|------------------------------|--------------------|
| Type of cable | UTP |
| Colour | Blue |
| Dimensional characteristics | |
| Length per reel | 1000.0 ft |
| Number of pairs | 4 |
| Usage characteristics | |
| Packaging | Reel |
| Field of application | Indoor |
| Category | Cat. 6a |
| Fire safety | CMP - Plenum Rated |



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Part Number: <u>11082057</u>

| LANmark-XTP UTP Parametric Data: Electrical | | | | | | |
|---|----------------------------|-----------------------------|-----------------------------|----------------------------|----------------------------|---------|
| | | FQ = Frequency (MHz) | / TIA = TIA Spec | PG = Product Guaran | tee | |
| | RL (dB) | NEXT (dB) | PSNEXT (dB) | ACRF (dB) | PSANEXT (dB) | LCL/TCL |
| FQ | TIA / PG | TIA / PG | TIA / PG | TIA / PG | TIA / PG | PG |
| 1 | 20.00 / 20.00 | 74.30 / <mark>75.30</mark> | 72.30 / <mark>72.30</mark> | 67.80 / 71.80 | 67.00 / <mark>67.00</mark> | 50.00 |
| 4 | 23.00 / 23.00 | 65.30 / <mark>66.30</mark> | 63.30 / <mark>63.30</mark> | 55.80 / <mark>59.80</mark> | 67.00 / <mark>67.00</mark> | 44.0 |
| 10 | 25.00 / 25.00 | 59.30 / <mark>60.30</mark> | 57.30 / 57.30 | 47.80 / 51.80 | 67.00 / <mark>67.00</mark> | 40.00 |
| 16 | 25.00 / 25.00 | 56.20 / 57.30 | 54.20 / <mark>54.30</mark> | 43.70 / 47.70 | 67.00 / <mark>67.00</mark> | 38.00 |
| 20 | 25.00 / 25.00 | 54.80 / 55.80 | 52.80 / <mark>52.80</mark> | 41.80 / 45.80 | 67.00 / <mark>67.00</mark> | 37.00 |
| 31.25 | 23.60 / 23.60 | 51.90 / <mark>52.90</mark> | 49.90 / 49.90 | 37.90 / 41.90 | 67.00 / <mark>67.00</mark> | 35.10 |
| 62.5 | 21.50 / 21.50 | 47.40 / <mark>48.40</mark> | 45.40 / <mark>45.40</mark> | 31.90 / 35.90 | 65.60 / <mark>67.00</mark> | 32.00 |
| 100 | 20.10 / 20.10 | 44.30 / 45.30 | 42.30 / 42.30 | 27.80 / 31.80 | 62.50 / 66.50 | 30.00 |
| 250 | 17.30 / 17.30 | 38.30 / <mark>39.30</mark> | 36.30 / <mark>36.30</mark> | 19.80 / 23.80 | 56.50 / 60.50 | 26.00 |
| 350 | 16.30 / 16.30 | 36.10 / 37.20 | 34.10 / <mark>34.20</mark> | 16.90 / 20.90 | — / 58.30 | 24.60 |
| 400 | 15.90 / 15.90 | 35.30 / <mark>36.30</mark> | 33.30 / <mark>33.30</mark> | 15.80 / 19.80 | 53.50 / 57.50 | 23.40 |
| 500 | 15.20 / 15.20 | 33.80 / <mark>34.80</mark> | 31.80 / 31.80 | 13.80 / 17.80 | 52.00 / 56.00 | 23.00 |
| 600 | — / 14.70* | — / 33.60 * | — / 30.60* | — / 16.20* | — / 54.80* | 22.20* |
| 750 | — / 14.00* | — / 32.20* | — / 29.20* | — / 14.30* | — / 53.40* | 21.20* |
| | IL (dB/100 m) | ACR (dB/100 m) | PSACR (dB/100 m) | PSACRF (dB/100 m) | PSAACRF (dB) | EL TCTL |
| FQ | TIA / PG | TIA / PG | TIA / PG | TIA / PG | TIA / PG | PG |
| 1 | 2.10 / 2.10 | 72.20 / 73.20 | 70.20 / <mark>70.20</mark> | 64.80 / <mark>64.80</mark> | 67.00 / <mark>67.00</mark> | 35.00 |
| 4 | 3.80 / <mark>3.80</mark> | 61.50 / <mark>62.50</mark> | 59.50 / <mark>59.50</mark> | 52.80 / <mark>52.70</mark> | 66.20 / <mark>67.00</mark> | 23.00 |
| 10 | 5.90 / 5.90 | 53.40 / 54.40 | 51.40 / 51.40 | 44.80 / <mark>44.80</mark> | 58.20 / <mark>62.20</mark> | 15.00 |
| 16 | 7.50 / 7.50 | 48.80 / 49.80 | 46.80 / <mark>46.80</mark> | 40.70 / 40.70 | 54.10 / 58.10 | 10.90 |
| 20 | 8.40 / 8.40 | 46.40 / 47.40 | 44.40 / 44.40 | 38.80 / 38.80 | 52.20 / <mark>56.20</mark> | 9.00 |
| 31.25 | 10.50 / 10.50 | 41.40 / 42.40 | 39.40 / <mark>39.40</mark> | 34.90 / <mark>34.90</mark> | 48.30 / <mark>52.30</mark> | _ |
| 62.50 | 15.00 / 15.00 | 32.40 / <mark>33.40</mark> | 30.40 / 30.40 | 28.90 / <mark>28.80</mark> | 42.30 / 46.30 | _ |
| 100 | 19.10 / 19.10 | 25.20 / <mark>26.20</mark> | 23.20 / <mark>23.20</mark> | 24.80 / 24.80 | 38.20 / 42.20 | _ |
| 250 | 31.10 / 31.10 | 7.30 / 8.20 | 5.30 / 5.30 | 16.80 / <mark>16.80</mark> | 30.20 / 34.20 | _ |
| 350 | 37.20 / <mark>37.20</mark> | -1.10 / <mark>0.00</mark> | -3.10 / - | 13.90 / 13.90 | — / 31.30 | |
| 400 | 40.10 / 40.10 | -4.80 / - <mark>3.80</mark> | -6.80 / - | 12.80 / <mark>12.70</mark> | 26.20 / 30.20 | |
| 500 | 45.30 / <mark>45.30</mark> | -11.40 / -10.50 | -13.4 / - | 10.80 / 10.80 | 24.20 / <mark>28.20</mark> | _ |
| 600 | — / 50.10* | — / -16.40 * | - / - | — / 9.20* | — / 26.60* | |

^{*}Values provided for reference only.

— / 56.70*

750

LANmark-XTP Plenum UTP Physical Data

| Technical Data - Physical | | | | |
|-------------------------------------|--------------------|---------|--|--|
| Conductor | 23 AWG Bare Copper | | | |
| Conductor diameter - in. (mm) | 0.022 | (0.56) | | |
| Insulated conductor diain.(mm) | 0.042 | (1.07) | | |
| Cable diameter - in. (mm) | 0.270 | (6.86) | | |
| Nom. cable wtlb./kft. (kg/kft) | 40 | (18.14) | | |
| Max. installation tension - lb. (N) | 25 | (110) | | |
| Min. bend radius - in. (mm) | 1.00 | (25.40) | | |

/ -24.50*

| Color Code | | | | |
|--------------------------------|------------|--------|--|--|
| Pair-1 | White | Blue | | |
| Pair-2 | White | Orange | | |
| Pair-3 | White | Green | | |
| Pair-4 | White | Brown | | |
| Temperature Rating (degrees C) | | | | |
| Installation | 0 to +50 | | | |
| Operation | -20 to +90 | | | |

/ 24.70*

LANmark-XTP Plenum UTP Technical Data - Parametric Measurements

| Mutual Capacitance | 5.1 nF/100 m max. | Pair to Ground Unbalance | 330 pF/100 m max. |
|--------------------|---------------------|--------------------------|-------------------|
| DC Resistance | 9.38 Ohms/100 m max | Velocity of Propagation | 67% nom |

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Skew45 ns/100 m max.DC Resistance unbalance4% max.

Supported CAT 6a Applications

| STANDARD | APPLICATION | SPEED |
|---------------|------------------|----------|
| IEEE 802.3an | 10GBASE-T | 10 Gb/s |
| IEEE 802.3 | 1000BASE-T | 1 Gb/s |
| TIA/EIA 854 | 1000BASE-TX | 1 Gb/s |
| ATM | 155 Mb/s | 155 Mb/s |
| CDDI | | 100 Mb/s |
| IEEE 802.3 | 10BASE-T | 10 Mb/s |
| IEEE 802.3 af | PoE | 1 Gb/s |
| IEEE 802.3 at | PoE+, Type 1 & 2 | 1 Gb/s |

LANmark-XTP UTP Plenum Jacket Legend

BERK-TEK LANMARK-XTP UTP 23 AWG CMP 90C C(UL)US --- ETL VERIFIED TIA-568-C.2 CAT 6A [ANY APPLICABLE PATENTS] [DATECODE] [SEQ#] FT

LANmark-XTP Converged Application Score

A cable's Converged Application Score (CA Score) is in an indicator of how well IP traffic is protected and how much heat rise there is when the cable undergoes PoE testing. The score is represented by a numeric value between 1 and 10, with 1 being the lowest and 10 being the highest. In reality, a score of 1 is unattainable because it would represent no connection, as is a score of 10 because it would mean zero heat rise with high power PoE. CA Scores range between 2 and 9.

LANmark-XTP

| | Score | > 3.6 | 3.6 - 5.5 | 5.6 - 6.5 | 6.6 - 7.5 | 7.6 - 8.5 | 8.6 + |
|-------------|-------------|--------------|-------------|-----------|-----------|-----------|-------|
| CA Score | Performance | Unacceptable | Poor | Limited | Good | Better | Best |
| | Heat Rise | Severe | Significant | Moderate | Moderate | Moderate | Low |

What does the CA Score tell you? A performance rating of "Poor" (less than 3.6) means that there were consistent noticeable flaws (dropped frames, media loss, etc) in the applications tested. As you move towards higher performance scores, you would notice fewer and fewer flaws, until you reach a score of 9, which is almost flawless. PoE testing is also an important factor; cables that experienced less temperature rise achieve higher CA Scores.

Selling information

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