

LANmark-XTP UTP Plenum Category 6A

LANmark-XTP UTP Plenum

Contact

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

Part Number: 11101254

Berk-Tek's LANmark-XTP features a small diameter of 0.275", 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 0.275", 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 [here](#).

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 as CMP-LP (0.7A)

Features:

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

Benefits:



CA Score Process Verified



STANDARDS

National ANSI/TIA 568.2-D; CSA
C22.2 N° 214-02; UL 444

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- Supports both long and short channels
- Easier installation and cable management with reduced outer diameter of 0.275"
- 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.

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 in a box
Field of application	Indoor
Category	Cat. 6A
Fire safety	CMP - Plenum Rated
Recommended operating temperature range	-20 .. 105 °C

LANMARK-XTP PLENUM - TECHNICAL INFORMATION

Electrical Characteristics

FQ = Frequency (MHz) / TIA = TIA Spec / PG = Product Guarantee

	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	75.30	72.30	73.30	67.80	71.80	67.00	67.00	50.00
4	23.00	23.00	65.30	66.30	63.30	64.30	55.80	59.80	67.00	67.00	44.0
10	25.00	25.00	59.30	60.30	57.30	58.30	47.80	51.80	67.00	67.00	40.00
16	25.00	25.00	56.20	57.30	54.20	55.30	43.70	47.70	67.00	67.00	38.00
20	25.00	25.00	54.80	55.80	52.80	53.80	41.80	45.80	67.00	67.00	37.00
31.25	23.60	23.60	51.90	52.90	49.90	50.90	37.90	41.90	67.00	67.00	35.10
62.5	21.50	21.50	47.40	48.40	45.40	46.40	31.90	35.90	65.60	67.00	32.00
100	20.10	20.10	44.30	45.30	42.30	43.30	27.80	31.80	62.50	66.50	30.00
250	17.30	17.30	38.30	39.30	36.30	37.30	19.80	23.80	56.50	60.50	26.00
350	16.30	16.30	36.10	37.20	34.10	35.20	16.90	20.90	—	58.30	24.60
400	15.90	15.90	35.30	36.30	33.30	34.30	15.80	19.80	53.50	57.50	23.40
500	15.20	15.20	33.80	34.80	31.80	32.80	13.80	17.80	52.00	56.00	23.00
600	—	14.70*	—	33.60*	—	31.60*	—	16.20*	—	54.80*	22.20*
750	—	14.00*	—	32.20*	—	30.20*	—	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	71.20	64.80	68.80	67.00	71.00	35.00
4	3.80	3.80	61.50	62.50	59.50	60.50	52.80	56.70	66.20	70.20	23.00
10	5.90	5.90	53.40	54.40	51.40	52.40	44.80	48.80	58.20	62.20	15.00
16	7.50	7.50	48.80	49.80	46.80	47.80	40.70	44.70	54.10	58.10	10.90
20	8.40	8.40	46.40	47.40	44.40	45.40	38.80	42.80	52.20	56.20	9.00
31.25	10.50	10.50	41.40	42.40	39.40	40.40	34.90	38.90	48.30	52.30	—
62.50	15.00	15.00	32.40	33.40	30.40	31.40	28.90	32.80	42.30	46.30	—
100	19.10	19.10	25.20	26.20	23.20	24.20	24.80	28.80	38.20	42.20	—
250	31.10	31.10	7.30	8.20	5.30	6.30	16.80	20.80	30.20	34.20	—
350	37.20	37.20	-1.10	0.00	-3.10	—	13.90	17.90	—	31.30	—
400	40.10	40.10	-4.80	-3.80	-6.80	—	12.80	16.70	26.20	30.20	—
500	45.30	45.30	-11.40	-10.50	-13.4	—	10.80	14.80	24.20	28.20	—
600	—	50.10*	—	-16.40*	—	—	—	13.20*	—	26.60*	—
750	—	56.70*	—	-24.50*	—	—	—	11.30*	—	24.70*	—

*Values provided for reference only

Parametric Measurements

Description

Mutual Capacitance (nominal)	5.1 nF Ohms/100m
DC Resistance	9.38 Ohms/100m max.
Skew	45 ns/100m max.
Pair-to-Ground Unbalance	330 pF/100m max.
Velocity of Propagation	70% nom.
DC Resistance Unbalance	4% max.

Color Code

Pair-1	White/Blue	Blue
Pair-2	White/Orange	Orange
Pair-3	White/Green	Green
Pair-4	White/Brown	Brown

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Supported Category 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	100BASE-T	10 Mb/s
IEEE 802.3 af	PoE	1 Gb/s
IEEE 802.3 at	PoE+, Type 1 & 2	1 Gb/s
IEEE 802.3 bt	PoE++, Type 3 & 4, draft	10 Gb/s

Technical Data - Physical

Conductor	23 AWG Bare Copper	
Conductor Diameter - in. (mm)	0.022	(0.56)
Insulated Conductor Diameter - in. (mm)	0.042	(1.07)
Cable Diameter - in. (mm)	0.275	(6.98)
Nom. Cable Weight - lb./kft (kg/kft)	40	(18.14)
Max. Installation Tension - lb. (N)	25	(110)
Min. Bend Radius - in. (mm)	1.00	(25.40)

LANMARK-XTP UTP PLENUM JACKET LEGEND

BERK-TEK LANMARK-XTP UTP 23 AWG CMP 105C C(UL)US CMP-LP (0.7A) --- ETL VERIFIED
TIA-568.2-D CAT 6A [PATENT] [DATE] [COUNTER] [UID]" FT

LANMARK-XTP CONVERGED APPLICATION SCORE

A cable's Converged Application Score (CA Score) is 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

CA Score	Score	> 3.6	3.6 - 5.5	5.6 - 6.5	6.6 - 7.5	7.6 - 8.5	8.6 +
	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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