

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

LANmark-XTP UTP Plenum Category 6A

LANmark-XTP UTP Plenum Part Number: <u>11082057</u>

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. LANmark-XTP is ideal for:

- 10GBASE-T network applications and mission critical systems running at 10 Gigabit speeds
- Data center applications including computer clusters and end of row architectures
- Optimal total cost of ownership for financial, health care, government, transportation and education environments
- · Wireless access points
- Networks requiring exceptional performance for Category 6A technology

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:

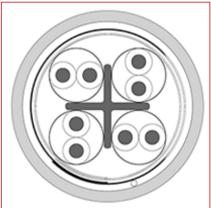
Plenum-NFPA 70, CMP UL Listed

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:





Standards

National ANSI/TIA-568-C.2; 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
- 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.



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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 Guarantee
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		FQ = Frequency (MHZ)	/ TIA = TIA Spec /	PG = Product Guaran	itee	
	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 / 72.30	67.80 / <mark>71.80</mark>	67.00 / 67.00	50.00
4	23.00 / 23.00	65.30 / <mark>66.30</mark>	63.30 / 63.30	55.80 / <mark>59.80</mark>	67.00 / 67.00	44.0
10	25.00 / 25.00	59.30 / <mark>60.30</mark>	57.30 / 57.30	47.80 / 51.80	67.00 / 67.00	40.00
16	25.00 / 25.00	56.20 / 57.30	54.20 / 54.30	43.70 / 47.70	67.00 / 67.00	38.00
20	25.00 / 25.00	54.80 / <mark>55.80</mark>	52.80 / 52.80	41.80 / 45.80	67.00 / 67.00	37.00
31.25	23.60 / 23.60	51.90 / 52.90	49.90 / 49.90	37.90 / 41.90	67.00 / 67.00	35.10
62.5	21.50 / 21.50	47.40 / <mark>48.40</mark>	45.40 / 45.40	31.90 / <mark>35.90</mark>	65.60 / 67.00	32.00
100	20.10 / 20.10	44.30 / 45.30	42.30 / 42.30	27.80 / <mark>31.80</mark>	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 / <mark>16.30</mark>	36.10 / 37.20	34.10 / 34.20	16.90 / 20.90	— / 58.30	24.60
400	15.90 / 15 .90	35.30 / <mark>36.30</mark>	33.30 / 33.30	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	IL (dB/100 m) TIA / PG	ACR (dB/100 m) TIA / PG	PSACR (dB/100 m) TIA / PG	PSACRF (dB/100 m) TIA / PG		
	· · · · · · · · · · · · · · · · · · ·	, , ,	, ,	· · · · · · · · · · · · · · · · · · ·	PSAACRF (dB)	EL TCTL
FQ	TIA / PG	TIA / PG	TIA / PG	TIA / PG	PSAACRF (dB) TIA / PG	EL TCTL PG
FQ 1	TIA / PG 2.10 / 2.10	TIA / PG 72.20 / 73.20	TIA / PG 70.20 / 70.20	TIA / PG 64.80 / 64.80	PSAACRF (dB) TIA / PG 67.00 / 67.00	PG 35.00
FQ 1 4	TIA / PG 2.10 / 2.10 3.80 / 3.80	TIA / PG 72.20 / 73.20 61.50 / 62.50	TIA / PG 70.20 / 70.20 59.50 / 59.50	TIA / PG 64.80 / 64.80 52.80 / 52.70	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00	PG 35.00 23.00
FQ 1 4 10	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20	PG 35.00 23.00 15.00
FQ 1 4 10 16	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20 31.25	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40 10.50 / 10.50	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40 41.40 / 42.40	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40 39.40 / 39.40	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80 34.90 / 34.90	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20 48.30 / 52.30	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20 31.25 62.50	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40 10.50 / 10.50 15.00 / 15.00	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40 41.40 / 42.40 32.40 / 33.40	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40 39.40 / 39.40 30.40 / 30.40	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80 34.90 / 34.90 28.90 / 28.80	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20 48.30 / 52.30 42.30 / 46.30	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20 31.25 62.50 100	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40 10.50 / 10.50 15.00 / 15.00 19.10 / 19.10	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40 41.40 / 42.40 32.40 / 33.40 25.20 / 26.20	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40 39.40 / 39.40 30.40 / 30.40 23.20 / 23.20	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80 34.90 / 34.90 28.90 / 28.80 24.80 / 24.80	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20 48.30 / 52.30 42.30 / 46.30 38.20 / 42.20	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20 31.25 62.50 100 250	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40 10.50 / 10.50 15.00 / 15.00 19.10 / 19.10 31.10 / 31.10	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40 41.40 / 42.40 32.40 / 33.40 25.20 / 26.20 7.30 / 8.20	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40 39.40 / 39.40 30.40 / 30.40 23.20 / 23.20 5.30 / 5.30	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80 34.90 / 34.90 28.90 / 28.80 24.80 / 24.80 16.80 / 16.80	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20 48.30 / 52.30 42.30 / 46.30 38.20 / 42.20 30.20 / 34.20	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20 31.25 62.50 100 250 350	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40 10.50 / 10.50 15.00 / 15.00 19.10 / 19.10 31.10 / 31.10 37.20 / 37.20	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40 41.40 / 42.40 32.40 / 33.40 25.20 / 26.20 7.30 / 8.20 -1.10 / 0.00	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40 39.40 / 39.40 30.40 / 30.40 23.20 / 23.20 5.30 / 5.30 -3.10 / —	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80 34.90 / 34.90 28.90 / 28.80 24.80 / 24.80 16.80 / 16.80 13.90 / 13.90	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20 48.30 / 52.30 42.30 / 46.30 38.20 / 42.20 30.20 / 34.20 — / 31.30	PG 35.00 23.00 15.00 10.90
FQ 1 4 10 16 20 31.25 62.50 100 250 350 400	TIA / PG 2.10 / 2.10 3.80 / 3.80 5.90 / 5.90 7.50 / 7.50 8.40 / 8.40 10.50 / 10.50 15.00 / 15.00 19.10 / 19.10 31.10 / 31.10 37.20 / 37.20 40.10 / 40.10	TIA / PG 72.20 / 73.20 61.50 / 62.50 53.40 / 54.40 48.80 / 49.80 46.40 / 47.40 41.40 / 42.40 32.40 / 33.40 25.20 / 26.20 7.30 / 8.20 -1.10 / 0.00 -4.80 / -3.80	TIA / PG 70.20 / 70.20 59.50 / 59.50 51.40 / 51.40 46.80 / 46.80 44.40 / 44.40 39.40 / 39.40 30.40 / 30.40 23.20 / 23.20 5.30 / 5.30 -3.10 / — -6.80 / —	TIA / PG 64.80 / 64.80 52.80 / 52.70 44.80 / 44.80 40.70 / 40.70 38.80 / 38.80 34.90 / 34.90 28.90 / 28.80 24.80 / 24.80 16.80 / 16.80 13.90 / 13.90 12.80 / 12.70	PSAACRF (dB) TIA / PG 67.00 / 67.00 66.20 / 67.00 58.20 / 62.20 54.10 / 58.10 52.20 / 56.20 48.30 / 52.30 42.30 / 46.30 38.20 / 42.20 30.20 / 34.20 — / 31.30 26.20 / 30.20	PG 35.00 23.00 15.00 10.90

^{*}Values provided for reference only.

LANmark-XTP Plenum UTP Physical Data

Technical Data - Physical		
Conductor 23 AWG Bare Copper		
Conductor diameter - in. (mm)	0.023	(0.58)
Insulated conductor diain.(mm)	0.046	(1.04)
Cable diameter - in. (mm)	0.275	(6.985)
Nom. cable wtlb./kft. (kg/kft)	38	(17.24)
Max. installation tension - lb. (N)	25	(110)
Min. bend radius - in. (mm)	1.12	(28.45)

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 +75	



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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.
Skew	45 ns/100 m max.	DC Resistance unbalance	4% 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 75C C(UL)US --- ETL VERIFIED TIA-568-C.2 CAT 6A [ANY APPLICABLE PATENTS] [DATECODE] [SEQ#] FT

Selling information

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