

## Contact

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## LANmark-10G2 Plenum UTP

LANmark-10G2 Plenum CAT 6a UTP

Part Number: 11085339

LANmark™-10G2 is a true multi-media cable, designed to handle the convergence of voice, video and data at 10 gigabit Ethernet speeds, simplifying even the most dynamic network. The 10G2 is a breakthrough in cable technology, with a patented design guaranteed to minimize alien crosstalk while maintaining a small outside diameter.

### Description

#### Berk-Tek LANmark-10G2, Performance Guaranteed

Before any cable can display the **Berk-Tek LANmark-10G2** legend, it must pass factory tests with **a minimum of 2dB of margin for NEXT & PSNEXT and 4dB of margin for ACRF & PSACRF beyond the CAT 6A standard.** If the margin is missing, so is the legend. That is our guarantee to you.

Your business demands continuous performance from your IT network, so our specifications aren't simply numbers on the page. They define the way that we do business. This means that you are **guaranteed** industry-leading performance and quality for all Berk-Tek products.

Some other manufacturers talk about "typical" values, but at Berk-Tek, we hold ourselves to a higher standard. We won't talk about typicals, we talk about what is true, guaranteed, and independently verified.

Based on Berk-Tek's advanced testing, LANmark-10G2 has a Converged Application Score (CA Score) of 7.4. For more information on CA Score, please click [here](#).

#### Perform Beyond Expectations, choose Berk-Tek.

#### Construction

Bare copper wire insulated with FEP. Two insulated conductors twisted together to form a pair and four such pairs cabled to form the basic unit made round with 3 monofilaments and with a striated flame-retardant PVC jacket.

#### Flame Rating

- Plenum-NFPA 262, CMP
- ETL Listed

#### Features

- New flexible, round, compact design
- Alien Crosstalk compliant
- Fully compliant to Augmented Category 6 requirements
- Documented balance characteristics (LCL/TCL, EL TCTL)
- Reduced attenuation (Insertion Loss)
- Highest performing UTP cable available
- RoHS Compliant

#### Benefits

- Easier installation and cable management with round design
- Round design provides a true OD measurement
- Provides the bandwidth required for multimedia, broadband video, analog video and other future applications
- Balance characteristics improves overall cable performance and reduce transmission errors
- Characterized to 750 MHz, 250 MHz greater than the standard
- Improved insertion loss for stronger signal to noise ratio



### Standards

National ANSI/TIA-568-C.2;  
NFPA 262; UL 444

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### 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

## LANmark-10G2 Plenum UTP

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### LANmark-10G2 Parametric Data: Electrical

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	76.30	72.30	74.30	67.80	71.80	67.00	67.00	50.00
4	23.00	23.00	65.30	67.30	63.30	65.30	55.80	59.70	67.00	67.00	44.0
10	25.00	25.00	59.30	61.30	57.30	59.30	47.80	51.80	67.00	67.00	40.00
16	25.00	25.00	56.20	58.30	54.20	56.30	43.70	47.70	67.00	67.00	38.00
20	25.00	25.00	54.80	56.80	52.80	54.80	41.80	45.80	67.00	67.00	37.00
31.25	23.60	23.60	51.90	53.90	49.90	51.90	37.90	41.90	67.00	67.00	35.10
62.5	21.50	21.50	47.40	49.40	45.40	47.40	31.90	35.80	65.60	65.60	32.00
100	20.10	20.10	44.30	46.30	42.30	44.30	27.80	31.80	62.50	62.50	30.00
250	17.30	17.30	38.30	40.30	36.30	38.30	19.80	23.80	56.50	56.50	26.00
350	16.30	16.30	36.10	38.20	34.10	36.20	16.90	20.90	—	54.30	24.60
400	15.90	15.90	35.30	37.30	33.30	35.30	15.80	19.70	53.50	53.40	24.00
500	15.20	15.20	33.80	35.80	31.80	33.80	13.80	17.80	52.00	52.00	23.00
600	—	14.70*	—	34.60*	—	32.60*	—	16.20*	—	50.80*	22.20*
750	—	14.00*	—	33.20*	—	31.20*	—	14.30*	—	49.30*	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	74.20	70.20	72.20	64.80	68.80	67.00	67.00	35.00
4	3.80	3.80	61.50	63.50	59.50	61.50	52.80	56.70	66.20	66.20	23.00
10	5.90	5.90	53.40	55.40	51.40	53.40	44.80	48.80	58.20	58.20	15.00
16	7.50	7.50	48.80	50.80	46.80	48.80	40.70	44.70	54.10	54.10	10.90
20	8.40	8.40	46.40	48.40	44.40	46.40	38.80	42.80	52.20	52.50	9.00
31.25	10.50	10.50	41.40	43.40	39.40	41.40	34.90	38.90	48.30	48.30	—
62.50	15.00	15.00	32.40	34.40	30.40	32.40	28.90	32.80	42.30	42.30	—
100	19.10	19.10	25.20	27.20	23.20	25.20	24.80	28.80	38.20	38.20	—
250	31.10	31.10	7.30	9.30	5.30	7.30	16.80	20.80	30.20	30.20	—
350	37.20	37.20	-1.10	1.00	-3.10	—	13.90	17.90	26.20	27.30	—
400	40.10	40.10	-4.80	-2.80	-6.80	—	12.80	16.70	26.20	26.20	—
500	45.30	45.30	-11.40	-9.40	-13.4	—	10.80	14.80	24.20	24.20	—
600	—	50.10*	—	-15.40*	—	—	—	13.20*	—	22.60*	—
750	—	56.70*	—	-23.50*	—	—	—	11.30*	—	20.70*	—

\*Values provided for reference only

### LANmark-10G2 Plenum UTP Physical Data

Technical Data - Physical			Color Code		
Conductor	23 AWG Bare Copper		Pair-1	White	Blue
Conductor diameter - in. (mm)	0.023	(0.58)	Pair-2	White	Orange
Insulated conductor dia.-in.(mm)	0.044	(1.12)	Pair-3	White	Green
Cable diameter - in. (mm)	0.300	(7.62)	Pair-4	White	Brown
Nom. cable wt.-lb./kft. (kg/kft)	38	(17.7)	Temperature Rating (degrees C)		
Max. installation tension - lb. (N)	25	(110)	Installation	0 to +50	
Min. bend radius - in. (mm)	1.2	(30.48)	Operation	-20 to +75	

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#### LANmark-10G2 Plenum 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-10G2 UTP Plenum Jacket Legend

BERK-TEK LANMARK-10G2 23 AWG CMP 75C C(UL) US ETL VERIFIED TIA-568-C.2 CAT 6A [ANY APPLICABLE PATENTS] [DATECODE] [SEQ#] FT

#### LANmark-10G2 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-10G2

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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