

## LANmark-1000 Enhanced Category 6 Plenum Rated

LANmark-1000 has been improved to offer best-in-class electrical performance. Berk-Tek's engineers completely redesigned LANmark-1000 so that all crosstalk parameters could be improved by four dB. As a result, the Power Sum Attenuation to Crosstalk ratio (PSACR) is nearly 3 times better (at 250 MHz) allowing for much greater signal strength and less vulnerability to noise interference.

### Description

#### Berk-Tek LANmark-1000, Performance Guaranteed

Before any cable can display the Berk-Tek LANmark-1000 legend, it must pass factory tests with a minimum of 5dB of crosstalk margin beyond the CAT 6 standard for NEXT, PSNEXT, ACR and PSACR. 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, 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-1000 has a Converged Application Score (CA Score) of 7.3 and is a good choice for high bandwidth applications and to support a network with more devices using PoE. For more information on CA Score, please click [here](#).

*Perform Beyond Expectations... Choose Berk-Tek*

### Construction

23 AWG bare copper wire insulated with FEP. Two insulated conductors twisted together to form a pair and four such pairs laid up with crossfiller to form the basic unit, jacketed with flame-retardant PVC.

### Flame Rating

Plenum - NFPA 262, CMP, UL Listed

### Features

- Full Power Sum Performance
- Documented balance characteristics (LCL, LCTL)
- ETL verified to ANSI/TIA/EIA-568-C.2
- RoHS Compliant

### Benefits

- Optimal support for Gigabit Ethernet with headroom
- Power sum characterization gives highest performance using existing applications
- Provides additional bandwidth required for future applications
- Addition of balance requirements improves overall cable performance and reduces cable emissions which results in reduced transmission errors
- Characterized to 550 MHz, 300 MHz greater than the standard



### Standards

**International** ISO/IEC 11801

**National** ANSI/TIA-568-c.2 Category 6; UL 444

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### Characteristics

<b>Construction characteristics</b>	
Type of cable	UTP
<b>Dimensional characteristics</b>	
Number of pairs	4
<b>Usage characteristics</b>	
Field of application	Indoor
Category	Cat. 6
Fire safety	CMP - Plenum Rated

### Product List

☎=Make to order, 📦=In stock

Part Number	Description	Colour	Length per reel (ft)	Packaging
📦 10032026	LANmark-1000 Plenum	Grey	1000.0	Box
📦 10032089	LANmark-1000 Plenum	Yellow	1000.0	Reel
📦 10032090	LANmark-1000 Plenum	Yellow	1000.0	Box
📦 10032091	LANmark-1000 Plenum	White	1000.0	Reel
📦 10032092	LANmark-1000 Plenum	White	1000.0	Box
📦 10032093	LANmark-1000 Plenum	Blue	1000.0	Reel
📦 10032094	LANmark-1000 Plenum	Blue	1000.0	Box
☎ 10032095	LANmark-1000 Plenum	Red	1000.0	Reel
📦 10032096	LANmark-1000 Plenum	Green	1000.0	Reel
📦 10032097	LANmark-1000 Plenum	Green	1000.0	Box
☎ 10032108	LANmark-1000 Plenum	Black	1000.0	Reel
📦 10032120	LANmark-1000 Plenum	Pink	1000.0	Reel
☎ 10033809	LANmark-1000 Plenum	Violet	1000.0	Box
☎ 10033811	LANmark-1000 Plenum	Pink	1000.0	Box
☎ 10033897	LANmark-1000 Plenum	Orange	1000.0	Reel
☎ 10033996	LANmark-1000 Plenum	Red	1000.0	Box
☎ 10033997	LANmark-1000 Plenum	Orange	1000.0	Box
☎ 10034197	LANmark-1000 Plenum	Violet	1000.0	Reel
☎ 10035304	LANmark-1000 Plenum	Black	1000.0	Box
☎ 10043530	LANmark-1000 Plenum	Brown	1000.0	Box
📦 10065427	LANmark-1000 Plenum	Yellow	1000.0	Reel in a box
📦 10065423	LANmark-1000 Plenum	Blue	1000.0	Reel in a box
📦 10065424	LANmark-1000 Plenum	White	1000.0	Reel in a box
📦 10065425	LANmark-1000 Plenum	Grey	1000.0	Reel in a box
📦 10065428	LANmark-1000 Plenum	Green	1000.0	Reel in a box
☎ 10066098	LANmark-1000 Plenum	Orange	1000.0	Reel in a box
☎ 10066099	LANmark-1000 Plenum	Black	1000.0	Reel in a box
☎ 10081066	LANmark-1000 Plenum	Red	1000.0	Reel in a box
☎ 10083461	LANmark-1000 Plenum	Violet	1000.0	Reel in a box
☎ 10120387	LANmark-1000 Plenum	Pink	1000.0	Reel in a box
📦 10032025	LANmark-1000 Plenum	Grey	1000.0	Reel

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**Contact**

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

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Part Number	Description	Colour	Length per reel (ft)	Packaging
☎ 10074896	LANmark-1000 Plenum 1500 ft. smartPAK	Red	1500.0	Box
☎ 11074694	LANmark-1000 Plenum 1500 ft. smartPAK	Blue	1500.0	Box
☎ 11074738	LANmark-1000 Plenum 1500 ft. smartPAK	White	1500.0	Box
☎ 11074739	LANmark-1000 Plenum 1500 ft. smartPAK	Grey	1500.0	Box
☎ 11074894	LANmark-1000 Plenum 1500 ft. smartPAK	Yellow	1500.0	Box
☎ 11074895	LANmark-1000 Plenum 1500 ft. smartPAK	Green	1500.0	Box
☎ 11074899	LANmark-1000 Plenum 1500 ft. smartPAK	Black	1500.0	Box
☎ 11074900	LANmark-1000 Plenum 1500 ft. smartPAK	Violet	1500.0	Box
☎ 11074901	LANmark-1000 Plenum 1500 ft. smartPAK	Orange	1500.0	Box

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## LANmark-1000 Enhanced Category 6 Plenum Rated

### LANmark-1000 Parametric Data: Electrical

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

	RL (dB)		NEXT (dB)		PSNEXT (dB)		ACRF (dB)		LCL/TCL
FQ	TIA	PG	TIA	PG	TIA	PG	TIA	PG	PG
1	20.00	20.00	74.30	79.30	72.30	77.30	67.80	72.80	50.00
4	23.00	23.60	65.30	70.30	63.30	68.30	55.80	60.70	44.00
10	25.00	26.00	59.30	64.30	57.30	62.30	47.80	52.80	40.00
16	25.00	26.00	56.20	61.30	54.20	59.30	43.70	48.70	38.00
20	25.00	26.00	54.80	59.80	41.80	57.80	41.80	46.80	37.00
31.25	23.60	25.00	51.90	56.90	49.90	54.90	37.90	42.90	35.10
62.5	21.50	23.50	47.40	52.40	45.40	50.40	31.90	36.80	32.00
100	20.10	22.50	44.30	49.30	42.30	47.30	27.80	32.80	30.00
150	18.90	21.60	41.70	46.70	39.70	44.70	24.30	29.30	28.20
200	18.00	21.00	39.80	44.80	37.80	42.80	21.80	26.70	27.00
250	17.30	20.50	38.30	43.30	36.30	41.30	19.80	24.80	26.00
300	—	20.10	—	42.10	—	40.10	—	23.30	25.20
350	—	19.80	—	41.20	—	39.20	—	21.90	24.60
400	—	19.50*	—	40.30*	—	38.30*	—	20.70*	24.00*
450	—	19.20*	—	39.50*	—	37.50*	—	19.70*	23.50*
500	—	19.00*	—	38.80*	—	36.80*	—	18.80*	23.00*

  

	IL (dB/100 m)		ACR (dB/100 m)		PSACR (dB/100 m)		PSACRF (dB/100 m)		EL TCTL
FQ	TIA	PG	TIA	PG	TIA	PG	TIA	PG	PG
1	2.00	2.00	72.20	77.30	70.30	75.30	64.80	69.80	35.00
4	3.80	3.80	61.50	66.60	59.50	64.50	52.80	57.70	23.00
10	6.00	5.90	53.40	58.40	51.30	56.40	44.80	49.80	15.00
16	7.60	7.50	48.80	53.80	46.70	51.70	40.70	45.70	10.90
20	8.50	8.40	46.40	51.40	44.30	49.40	38.80	43.80	9.00
31.25	10.70	10.60	41.40	46.40	39.20	44.30	37.90	39.90	—
62.50	15.40	15.30	32.40	37.10	30.00	35.10	28.90	33.80	—
100	19.80	19.70	25.20	29.70	22.50	27.60	24.80	29.80	—
150	24.70	24.50	16.90	22.20	14.90	20.20	21.30	26.30	—
200	29.00	28.80	10.80	16.00	8.80	14.00	18.80	23.70	—
250	32.80	32.60	7.30	10.80	3.50	8.70	16.80	21.80	—
300	—	36.20	—	6.00	—	4.00	—	20.30	—
350	—	39.50	—	1.70	—	—	13.90	18.90	—
400	—	42.70*	—	-2.40*	—	—	12.80	17.70*	—
450	—	45.70*	—	-6.20*	—	—	—	16.70*	—
500	—	48.60*	—	-9.80*	—	—	10.80	15.80*	—

\*Values provided for reference only

### LANmark-1000 Plenum UTP Physical Data

Technical Data - Physical			Color Code		
Conductor	23 AWG Bare Copper		Pair-1	White/Blue	Blue
Conductor diameter - in. (mm)	0.022	(0.56)	Pair-2	White/Orange	Orange
Insulated conductor dia.-in.(mm)	0.040	(1.02)	Pair-3	White/Green	Green
Cable diameter - in. (mm)	0.23	(5.84)	Pair-4	White/Brown	Brown
Nom. cable wt.-lb./kft. (kg/kft)	30	(13.61)	<b>Temperature Rating (degrees C)</b>		
Max. installation tension - lb. (N)	25	(110)	Installation	0 to +50	
Min. bend radius - in. (mm)	1.00	(25.40)	Operation	-20 to +75	

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### LANmark-1000 Plenum Technical Data - Parametric Measurements

<b>Mutual Capacitance</b>	5.1 nF/100 m max.	<b>Pair to Ground Unbalance</b>	330 pF/100 m max.
<b>DC Resistance</b>	9.38 Ohms/100 m max.	<b>Velocity of Propagation</b>	68% nom.
<b>Skew</b>	45 ns/100 m max.	<b>DC Resistance unbalance</b>	5% max.

### LANmark-1000 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-1000

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.

### Supported Category 6 Applications

STANDARD	APPLICATION	SPEED
IEEE 802.3	1000BASE-T	1 Gb/s
TIA/EIA-854	1000BASE-TX	1 Gb/s
ATM	155Mb/s	155 Mb/s
IEEE 802.3	100BASE-TX	100 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-1000 UTP Plenum Jacket Legend

BERK-TEK LANMARK-1000 23 AWG CMP 75C C(UL)US ETL VERIFIED TIA-568-C.2 CAT 6 [ANY APPLICABLE PATENTS] [DATECODE] [SEQ#] FT

### Selling information

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