

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. At Berk-Tek, we understand that your business runs through us.

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.

Keep your business running by relying on Berk-Tek.

Berk-Tek ...Because Your Business Runs Through Us.

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

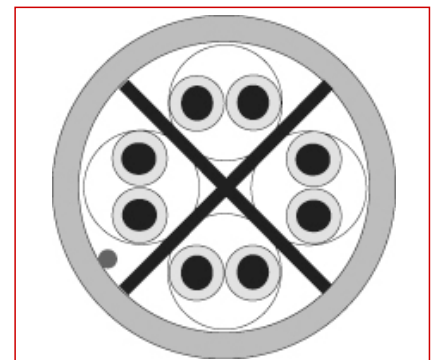
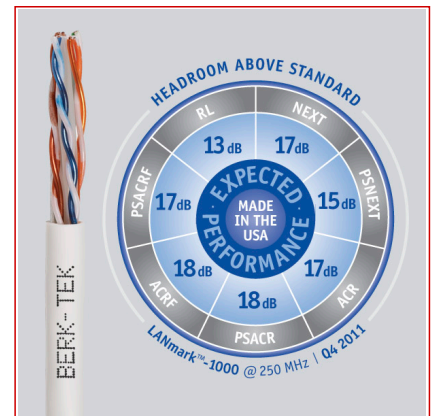
Plenum - NFPA 262, CMP, UL Listed

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

Construction characteristics	
Type of cable	19x0.32
Dimensional characteristics	
Length per reel	1000.0 ft
Number of pairs	4
Usage characteristics	
Field of application	Indoor
Category	Cat. 6
Fire safety	Plenum Rated

Product List

☎=Make to order, 📦=Make to stock

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

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LANmark-1000 Parametric Data: Electrical

FREQ MHz	RL (dB)			NEXT (dB)			PSNEXT (dB)		
	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	20.0	20.0	31.4	74.3	79.3	92.4	72.3	77.3	88.6
4	23.0	23.6	32.8	65.3	70.3	83.8	63.3	68.3	80.2
10	25.0	26.0	35.0	59.3	64.3	77.4	57.3	62.3	73.7
16	25.0	26.0	37.7	56.2	61.3	74.0	54.2	59.3	70.6
20	25.0	26.0	37.2	54.8	59.8	72.6	52.8	57.8	68.9
31.25	23.6	25.0	36.6	51.9	56.9	69.9	49.9	54.9	66.3
62.5	21.5	23.5	33.9	47.4	52.4	65.0	45.4	50.4	61.5
100	20.1	22.5	32.7	44.3	49.3	61.9	42.3	47.3	58.2
150	18.9	21.6	32.2	41.7	46.7	59.1	39.7	44.7	55.4
200	18.0	21.0	31.8	39.8	44.8	56.9	37.8	42.8	53.2
250	17.3	20.5	30.7	38.3	43.4	55.5	36.3	41.4	51.7
300	—	20.1	30.2	—	42.2	54.1	—	40.2	50.4
350	—	19.8	29.3	—	41.2	53.0	—	39.2	49.2
400	—	—	28.6	—	—	51.8	—	—	48.0
450	—	—	28.0	—	—	50.2	—	—	46.2
500	—	—	26.9	—	—	48.6	—	—	44.4

FREQ MHz	IL (dB/100m)			ACR (dB/100m)			PSACR (dB/100m)		
	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	2.0	2.0	1.7	72.3	77.3	88.8	70.3	75.3	86.8
4	3.8	3.8	3.5	61.5	66.6	78.3	59.5	64.6	76.4
10	6.0	5.9	5.6	53.3	58.4	69.6	51.3	56.4	67.8
16	7.6	7.5	7.1	48.7	53.8	65.0	46.7	51.7	63.3
20	8.5	8.4	7.9	46.3	51.4	62.4	44.3	49.4	60.7
31.25	10.7	10.6	10.0	41.2	46.4	57.8	39.2	44.3	56.1
62.5	15.4	15.3	14.3	32.0	37.1	48.4	30.0	35.1	46.8
100	19.8	19.7	18.3	24.5	29.7	41.3	22.5	27.6	39.5
150	24.7	24.5	22.6	16.9	22.2	33.9	14.9	20.2	32.2
200	29.0	28.8	26.4	10.8	16.0	27.8	8.8	14.0	26.1
250	32.8	32.6	29.7	5.5	10.8	22.8	3.5	8.7	21.1
300	—	36.1	32.7	—	6.1	18.6	—	4.1	16.8
350	—	39.4	35.5	—	1.8	14.4	—	-0.2	12.6
400	—	—	38.2	—	—	10.6	—	—	8.7
450	—	—	40.9	—	—	5.8	—	—	4.1
500	—	—	43.4	—	—	1.2	—	—	-0.2

All swept frequency values above 350 MHz are for engineering purposes only.

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LANmark-1000 Parametric Data: Electrical (cont)

		ACRF (dB/100m)		PSACRF (dB/100m)		LCL/TCL	EL TCTL	
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	Product Guarantee	Product Guarantee
1	67.8	72.8	85.9	64.8	69.8	81.7	50.0	35.0
4	55.8	60.7	74.1	52.8	57.7	70.0	44.0	23.0
10	47.8	52.8	66.2	44.8	49.8	62.1	40.0	15.0
16	43.7	48.7	62.3	40.7	45.7	57.9	38.0	10.9
20	41.8	46.8	60.5	38.8	43.8	56.0	37.0	9.0
31.25	37.9	42.9	56.5	34.9	39.9	52.2	35.1	5.1
62.5	31.9	36.8	50.5	28.9	33.8	46.6	32.0	—
100	27.8	32.8	46.4	24.8	29.8	42.7	30.0	—
150	24.3	29.3	42.8	21.3	26.3	39.2	28.2	—
200	21.8	26.7	40.0	18.8	23.7	36.5	27.0	—
250	19.8	24.8	37.8	16.8	21.8	34.2	26.0	—
300	—	23.2	36.5	—	20.2	32.7	25.2	—
350	—	21.9	35.2	—	18.9	31.3	24.6	—
400	—	—	33.8	—	—	30.0	24.0	—
450	—	—	32.0	—	—	27.8	23.5	—
500	—	—	29.9	—	—	25.6	23.0	—

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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	(0.58)	Pair-2	White/Orange	Orange
Insulated conductor dia.-in.(mm)	0.037	(1.04)	Pair-3	White/Green	Green
Cable diameter - in. (mm)	0.226	(5.69)	Pair-4	White/Brown	Brown
Nom. cable wt.-lb./kft. (kg/km)	29	(13.2)	Temperature Rating (degrees C)		
Max. installation tension - lb. (N)	25	(110)			
Min. bend radius - in. (mm)	1	(25.4)			
			Installation	0 to +50	
			Operation	-20 to +60	

LANmark-1000 Plenum Technical Data - Parametric Measurements

Mutual Capacitance	5.6 nF/100 m max.
DC Resistance	9.38 Ohms/100 m max.
Skew	35 ns/100 m max.
Pair to Ground Unbalance	330 pF/100 m max.
Velocity of Propagation	72% nom.
DC Resistance unbalance	5% max.

Contact

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

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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

Selling delivery information

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