

LANmark-10G2 Augmented Category 6 Riser Rated

LANmark-10G2 Augmented Category 6a Riser
Part Number: 10137703

LANmark™-10G2 is a next generation cable for 10 gigabit Ethernet. LANmark-10G2 is a true multi-media cable and is specifically designed to handle voice, video and data simultaneously. This convergence of technologies simplifies even the most dynamic network. The 10G2 is a breakthrough in cable technology, and its patented design minimizes alien crosstalk while maintaining a nominal .32" outside diameter (CMR).

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, 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

Bare copper wire insulated with polyethylene and cellular polyethylene. 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.

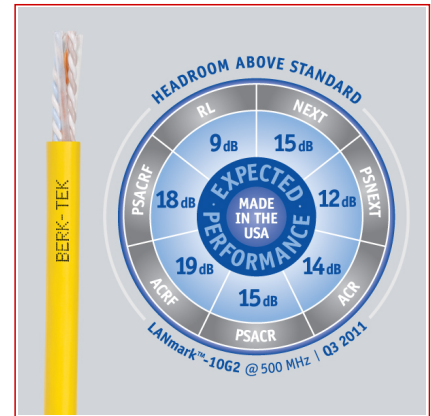
Flame Rating

- Riser - UL 1666, CMR
- 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



Standards

International ISO/IEC 11801

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

Contact

Copper LAN Product Inquiry
Phone: 717-354-6200
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- 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

Characteristics

Construction characteristics	
Type of cable	UTP
Colour	White
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	Riser Rated

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LANmark-10G2 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	30.2	74.3	76.3	92.0	72.3	74.3	87.7
4	23.0	23.0	32.5	65.3	67.3	82.5	63.3	65.3	78.5
10	25.0	25.0	31.3	59.3	61.3	76.2	57.3	59.3	72.0
16	25.0	25.0	34.0	56.2	58.3	73.4	54.2	56.3	69.1
20	25.0	25.0	34.5	54.8	56.8	71.4	52.8	54.8	67.7
31.25	23.6	23.7	35.3	51.9	53.9	68.9	49.9	51.9	64.8
62.5	21.5	21.5	34.6	47.4	49.4	64.3	45.4	47.4	60.2
100	20.1	20.1	32.3	44.3	46.3	61.6	42.3	44.3	57.6
150	18.9	18.9	29.9	41.7	43.7	58.7	39.7	41.7	54.5
200	18.0	18.0	30.6	39.8	41.8	56.9	37.8	39.8	52.8
250	17.3	17.3	29.8	38.3	40.4	55.3	36.3	38.4	51.3
300	16.8	16.8	28.9	37.1	39.2	54.2	35.1	37.2	50.2
350	16.3	16.3	28.2	36.1	38.2	53.1	34.1	36.2	49.0
400	15.9	15.9	27.6	35.3	37.3	51.8	33.3	35.3	47.7
450	15.5	15.5	26.6	34.5	36.5	50.7	32.5	34.5	46.2
500	15.2	15.2	24.4	33.8	35.8	48.6	31.8	33.8	43.8
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	2.1	2.1	1.7	72.2	74.2	87.7	70.2	72.2	85.9
4	3.8	3.8	3.4	61.5	63.5	76.8	59.5	61.5	75.0
10	5.9	5.9	5.4	53.4	55.4	68.0	51.4	53.4	66.4
16	7.5	7.5	6.9	48.8	50.8	63.7	46.8	48.8	62.0
20	8.4	8.4	7.7	46.4	48.5	61.3	44.4	46.5	59.7
31.25	10.5	10.5	9.6	41.4	43.5	56.9	39.4	41.5	55.0
62.5	15.0	15.0	13.8	32.4	34.4	47.7	30.4	32.4	46.0
100	19.1	19.1	17.6	25.2	27.3	41.3	23.2	25.3	39.8
150	23.7	23.6	21.7	18.0	20.1	33.7	16.0	18.1	32.3
200	27.6	27.6	25.3	12.2	14.3	28.9	10.2	12.3	27.1
250	31.1	31.0	28.4	7.3	9.3	24.0	5.3	7.3	22.2
300	34.3	34.2	31.3	2.9	5.0	19.8	0.9	3.0	18.0
350	37.2	37.1	33.9	-1.1	1.1	15.8	-3.1	-0.9	14.5
400	40.1	39.8	36.4	-4.8	-2.5	11.8	-6.8	-4.5	10.4

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450	42.7	42.6	38.9	-8.2	-6.1	7.5	-10.2	-8.1	6.3
500	45.3	45.3	41.2	-11.4	-9.4	2.8	-13.4	-11.4	1.5

LANmark-10G2 Parametric Data: Electrical (cont.)

FREQ MHz	ACRF (dB/100m)			PSACRF (dB/100m)			LCL/TCL	EL TCTL
	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	Product Guarantee	Product Guarantee
1	67.8	71.8	86.8	64.8	68.8	82.5	40.0	35.0
4	55.8	59.7	75.3	52.8	56.7	71.1	40.0	23.0

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10	47.8	51.8	67.7	44.8	48.8	63.4	40.0	15.0
16	43.7	47.7	63.8	40.7	44.7	59.4	38.0	10.9
20	41.8	45.8	61.8	38.8	42.8	57.6	37.0	9.0
31.25	37.9	41.9	57.9	34.9	38.9	53.8	35.1	5.1
62.5	31.9	35.8	51.1	28.9	32.8	47.0	32.0	—
100	27.8	31.8	47.3	24.8	28.8	43.4	30.0	—
150	24.3	28.3	44.1	21.3	25.3	39.4	28.2	—
200	21.8	25.7	41.3	18.8	22.7	37.6	27.0	—
250	19.8	23.8	39.7	16.8	20.8	35.0	26.0	—
300	18.3	22.2	38.1	15.3	19.2	33.5	25.2	—
350	16.9	20.9	36.9	13.9	17.9	32.8	24.6	—
400	15.8	19.8	35.3	12.8	16.8	30.9	24.0	—
450	14.7	18.7	34.3	11.7	15.7	30.1	23.5	—
500	13.8	17.8	33.0	10.8	14.8	28.9	23.0	—

LANmark-10G2 Riser UTP Physical Data

Technical Data - Physical			Color Code		
Conductor	23 AWG Bare Copper		Pair-1	White/Blue	Blue
Conductor diameter - in. (mm)	0.023	(0.58)	Pair-2	White/Orange	Orange
Insulated conductor dia.-in.(mm)	0.047	(1.04)	Pair-3	White/Green	Green
Cable diameter - in. (mm)	0.320	(8.13)	Pair-4	White/Brown	Brown
Nom. cable wt.-lb./kft. (kg/km)	46	(13.2)	Temperature Rating (degrees C) Installation 0 to +50 Operation -20 to +76		
Max. installation tension - lb. (N)	25	(110)			
Min. bend radius - in. (mm)	1.3	(25.4)			

LANmark-10G2 Riser Technical Data - Parametric Measurements

Mutual Capacitance	5.6 nF/100 m max.
DC Resistance	9.38 Ohms/100 m max.
Skew	45 ns/100 m max.
Pair to Ground Unbalance	330 pF/100 m max.
Velocity of Propagation	66% nom.
DC Resistance unbalance	5% 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

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IEEE 802.3

10 BASE-T

10 Mb/s

Selling delivery information

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