

Contact

Copper LAN Product Inquiry
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LANmark-6 Plenum Rated

LANmark-6 UTP Plenum

Part Number: 10188830

The Berk-Tek LANmark-6 features a reduced diameter compared to other category 6 UTP cables. This is an ANSI/TIA/EIA category 6 verified cable, constructed without the center spline for easy installation and termination. LANmark-6 is capable of transmitting applications such as 1000BASE-T. It is ideal for network applications that extend to 250 MHz. LANmark-6 is available in both CMP and CMR and conforms to ANSI/TIA/EIA 568-B.2-1 Category 6 and ISO/IEC 11801 2nd Edition Class E Category 6 requirements.

Description

Berk-Tek LANmark-6 UTP, Performance Guaranteed

Before any cable can display the **Berk-Tek LANmark-6 UTP** legend, it must pass factory tests with **a minimum of 2dB 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 cabled to form the basic unit, jacketed with flame-retardant PVC.

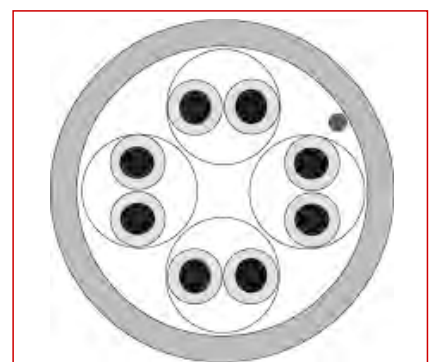
Flame Rating: Plenum -NFPA 262, CMP

Features

- Inexpensive compact design
- Meets the requirements of ANSI/TIA/EIA-568-C.2
- Usable bandwidth up to 250 MHz
- Delivered in compact, strong, easy to identify boxes
- RoHS Compliant

Benefits

- Provides Category 6 performance
- Cost effective entry level category 6 solution
- Provides additional usable bandwidth required for future applications
- Superior box design allows cable to be pulled easily from the box with minimum kinking
- Compact box design takes up less shelf space.
- Clearly identified packaging eliminates potential confusion



Standards

International ISO/IEC 11801

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

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Characteristics

Construction characteristics	
Type of cable	UTP
Colour	Black
Dimensional characteristics	
Length per reel	1000.0 ft
Number of pairs	4
Usage characteristics	
Packaging	Box
Field of application	Indoor
Category	Cat. 6
Fire safety	CMP - Plenum Rated

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LANmark-6 Parametric Data: Electrical

RL (dB)				NEXT (dB)			PSNEXT (dB)		
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance
1	20.0	20.0	32.5	74.3	76.3	87.5	72.3	74.3	83.6
4	23.0	23.0	36.3	65.3	67.3	78.0	63.3	65.3	74.1
10	25.0	25.0	35.8	59.3	61.3	71.9	57.3	59.3	67.8
16	25.0	25.0	36.7	56.2	58.3	68.7	54.2	56.3	64.9
20	25.0	25.0	35.4	54.8	56.8	67.6	52.8	54.8	63.4
31.25	23.6	23.7	35.7	51.9	53.9	64.4	49.9	51.9	60.3
62.5	21.5	21.5	34.0	47.4	49.4	59.7	45.4	47.4	55.8
100	20.1	20.1	33.6	44.3	46.3	56.3	42.3	44.3	52.6
150	18.9	18.9	32.5	41.7	43.7	53.7	39.7	41.7	49.6
200	18.0	18.0	31.6	39.8	41.8	51.5	37.8	39.8	47.3
250	17.3	17.3	30.2	38.3	40.4	49.5	36.3	38.4	45.4
300	—	—	30.3	—	—	48.2	—	—	43.9
350	—	—	29.3	—	—	46.9	—	—	42.5
400	—	—	28.5	—	—	45.9	—	—	41.8
450	—	—	27.8	—	—	44.6	—	—	40.5
500	—	—	26.9	—	—	44.0	—	—	40.0

IL (dB/100m)				ACR (dB/100m)			PSACR (dB/100m)		
FREQ MHz	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	74.3	83.9	70.3	72.3	81.8
4	3.8	3.8	3.5	61.5	63.5	72.4	59.5	61.5	70.5
10	6.0	6.0	5.6	53.3	55.4	64.1	51.3	53.4	62.0
16	7.6	7.6	7.1	48.7	50.7	59.7	46.7	48.7	57.7
20	8.5	8.5	7.9	46.3	48.4	57.1	44.3	46.4	55.3
31.25	10.7	10.7	10.0	41.2	43.3	52.0	39.2	41.3	50.0
62.5	15.4	15.4	14.4	32.0	34.0	43.1	30.0	32.0	41.2
100	19.8	19.8	18.4	24.5	26.6	35.8	22.5	24.6	33.9
150	24.7	24.7	22.8	16.9	19.1	28.3	14.9	17.1	26.3
200	29.0	29.0	26.5	10.8	12.9	22.3	8.8	10.9	20.3
250	32.8	32.8	29.8	5.5	7.5	16.9	3.5	5.5	15.0
300	—	—	32.8	—	—	12.6	—	—	10.4
350	—	—	35.6	—	—	8.1	—	—	6.2
400	—	—	38.1	—	—	4.3	—	—	2.5

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450	—	—	40.7	—	—	0.1	—	—	-1.6
500	—	—	43.2	—	—	-3.4	—	—	-5.0

All swept frequency values above 250 MHz are for engineering purposes only.

LANmark-6 Parametric Data: Electrical (cont.)

ACRF (dB/100m)				PSACRF (dB/100m)				LCL/TCL	EL TCTL
FREQ		Product	Expected		Product	Expected	Product	Product	
MHz	TIA Spec	Guarantee	Performance	TIA Spec	Guarantee	Performance	Guarantee	Guarantee	

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1	67.8	67.8	81.7	64.8	64.8	77.5	40.0	35.0
4	55.8	55.8	69.9	52.8	52.8	65.7	40.0	23.0
10	47.8	47.8	62.0	44.8	44.8	57.5	40.0	15.0
16	43.7	43.7	58.1	40.7	40.7	53.6	38.0	10.9
20	41.8	41.8	56.1	38.8	38.8	51.6	37.0	9.0
31.25	37.9	37.9	52.2	34.9	34.9	47.8	35.1	5.1
62.5	31.9	31.9	46.1	28.9	28.9	41.8	32.0	—
100	27.8	27.8	41.8	24.8	24.8	38.1	30.0	—
150	24.3	24.3	38.2	21.3	21.3	34.5	28.2	—
200	21.8	21.8	35.6	18.8	18.8	31.9	27.0	—
250	19.8	19.8	33.7	16.8	16.8	29.7	26.0	—
300	—	—	32.3	—	—	28.0	25.2	—
350	—	—	30.5	—	—	26.7	24.6	—
400	—	—	28.8	—	—	25.3	24.0	—
450	—	—	27.3	—	—	23.1	23.5	—
500	—	—	25.1	—	—	20.8	23.0	—

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LANmark-6 Plenum 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)	0.041	(1.04)	Pair-3	White/Green	Green
Cable diameter - in. (mm)	0.224	(5.69)	Pair-4	White/Brown	Brown
Nom. cable wt.-lb./kft. (kg/kft)	29	(13.2)	Temperature Rating (degrees C)		
Max. installation tension - lb. (N)	25	(110)	Installation	0 to +50	
Min. bend radius - in. (mm)	1	(25.4)	Operation	-20 to +60	

LANmark-6 Plenum 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	72% nom.
DC Resistance unbalance	5% max.

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

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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

Selling information

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