

## NEW LANmark-6 Category 6 UTP Plenum

The NEW 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

**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.

### Standards:

- North American: ANSI/TIA/EIA-568-B.2-1 Category 6, UL 444 and C22.2 No. 214-02
- International: ISO/IEC 11801 2nd Edition Category 6, EU Directive 2002/95/EC (RoHS)

### Flame Rating:

Plenum -NFPA 262, CMP

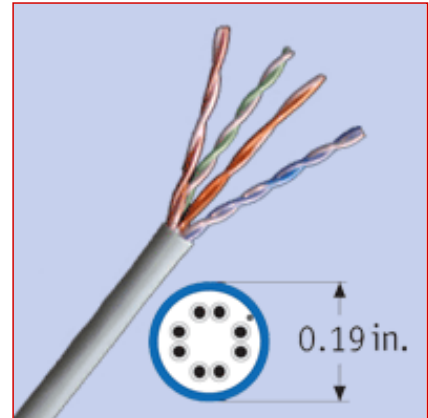
UL Listed

**Applications:** Berk-Tek's LANmark-6 UTP cable is intended for high speed data applications including:

- |               |             |          |     |
|---------------|-------------|----------|-----|
| • IEEE 802.3  | 1000BASE-T  | 1 Gb/s   |     |
| • TIA/EIA-854 | 1000BASE-TX | 1 Gb/s   |     |
| • ATM         | 155 Mb/s    |          | 155 |
| • IEEE 802.3  | 100BASE-TX  | 100 Mb/s |     |
| • CDDI        |             |          |     |
| • 100 Mb/s    |             |          |     |
| • IEEE 802.3  | 10BASE-T    | 10 Mb/s  |     |

### Features

- Inexpensive compact design with no center spline and an OD of 0.190 inches
- Meets the requirements of ANSI/TIA/EIA-568-B.2-1
- Usable bandwidth up to 250 MHz
- Delivered in compact, strong, easy to identify boxes



### Standards

**International** ISO/IEC 11801  
**National** TIA/EIA-568-B.2

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### Benefits

- Simplified installation
- Cost effective, entry level category 6 solution
- Superior box design allows cable to be pulled easily from the box with minimum kinking
- Compact box design takes up less shelf space.
- Characterized to 500 Mhz, 250 MHz greater than the standard

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### Characteristics

<b>Construction characteristics</b>	
Type of cable	UTP
<b>Dimensional characteristics</b>	
Length per reel	1000.0 ft
Number of pairs	4
<b>Usage characteristics</b>	
Field of application	Indoor
Category	Cat. 6
Fire safety	Plenum Rated

### Technical Data - Physical

Technical Data - Physical			Color Code		
			<b>Pair-1</b>	<b>White/Blue</b>	<b>Blue</b>
<b>Conductor</b>	23 AWG Bare Copper		<b>Pair-2</b>	<b>White/Orange</b>	<b>Orange</b>
<b>Conductor diameter-in. (mm)</b>	0.022	(0.56)	<b>Pair-3</b>	<b>White/Green</b>	<b>Green</b>
<b>Insulated Conductor Diameter- in. (mm)</b>	0.037	(0.94)	<b>Pair-4</b>	<b>White/Brown</b>	<b>Brown</b>
<b>Cable diameter-in. (mm)</b>	0.19	(4.8)			
<b>Nominal cable weight-lb./kft. (kg/km)</b>	24	(35.4)	<b>Temperature Rating</b>		
<b>Max. installation tension-lb. (N)</b>	25	(110)	<b>Installation</b>	0°C to +50°C	
<b>Min. bend radius-in. (mm)</b>	1	(25.4)	<b>Operation</b>	-20°C to +60°C	

### Technical Data - Parametric Measurements

<b>Mutual Capacitance</b>	5.6 nF/100 m max.
<b>DC resistance</b>	9.38 Ohms/100 m max.
<b>Skew</b>	45 ns/100 m max.
<b>Pair to ground Unbalance</b>	330 pF/100 m max.
<b>Velocity of Propagation</b>	72% nom.
<b>DC Resistance Unbalance</b>	5% max.

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### Technical Data - Electrical

FREQ MHz	RL (dB)		INSERTION LOSS (dB/100m)		PS-NEXT (dB)		NEXT (dB)		ACR (dB@100m)	
	min.	typical	max.	typical	min.	typical	min.	typical	min.	typical
1	20.0	35.2	2.0	1.7	72.3	87.6	74.3	92.8	72.3	88.7
4	23.0	36.7	3.8	3.5	63.3	76	65.3	86.4	61.5	73.5
10	25.0	36.9	6.0	5.6	57.3	67.4	59.3	73.3	53.3	63.7
16	25.0	39.6	7.6	7.2	54.2	67.6	56.2	76.8	48.6	61.6
20	25.0	40.0	8.5	8.1	52.8	62.8	54.8	70.2	46.3	56.7
31.25	23.6	43.5	10.7	10.1	49.9	59.9	51.9	67.3	41.2	51.3
62.5	21.5	33.5	15.4	14.6	45.4	55.3	47.4	64.2	32.0	41.6
100	20.1	43.9	19.8	18.7	42.3	55.4	44.3	62.9	24.5	37.9
250	17.3	37.6	32.8	30.7	36.3	44.9	38.3	51.2	5.5	16.3
350	16.3	38.0	39.8	36.9	34.1	42.6	36.1	51.4	—	5.0
400	15.9	34.5	43.0	39.6	33.3	38.7	35.3	44.4	—	-0.2
500	15.2	36.2	48.9	45.1	31.8	41.3	33.8	47.2	—	-3.3

### Technical Data - Electrical

FREQ Mhz	PS-ACR (dB@100m)		ELFEXT (dB)		PS-ELFEXT (dB)		LCL/TCL (dB)
	min.	typical	min.	typical	min.	typical	min.
1	70.3	85.9	67.8	90.6	64.8	83.8	40.0
4	59.5	72.5	55.8	77.5	52.8	71.8	40.0
10	51.3	61.7	47.8	68.5	44.8	63.0	40.0
16	46.6	60.5	43.7	63.9	40.7	58.5	38.0
20	44.3	54.7	41.8	61.5	38.8	56.1	37.0
31.25	39.2	49.8	37.9	58.4	34.9	51.9	35.1
62.5	30.0	40.7	31.9	59.0	28.9	50.0	62.0
100	22.5	36.6	27.8	49.9	24.8	42.0	30.0
250	3.5	13.5	19.8	40.9	16.8	29.0	26.0
350	—	4.5	16.9	35.0	13.9	25.7	24.6
400	—	-2.6	15.8	32.9	12.8	26.8	24.0
500	—	-6.1	13.8	33.2	10.8	25.8	23.0

Test data above 250 MHz is for engineering information only.

### Product List

☎ = Make to order, 📦 = Make to stock

Part Number	Description	Colour	Packaging
📦 10136231	NEW LANmark-6 UTP Plenum	Grey	Reel
📦 10132983	NEW LANmark-6 UTP Plenum	Grey	Box
📦 10136233	NEW LANmark-6 UTP Plenum	Blue	Reel
📦 10136226	NEW LANmark-6 UTP Plenum	Blue	Box

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## NEW LANmark-6 Category 6 UTP Plenum

Part Number	Description	Colour	Packaging
10136265	NEW LANmark-6 UTP Plenum	White	Reel
10136230	NEW LANmark-6 UTP Plenum	White	Box
10136749	NEW LANmark-6 UTP Plenum	Yellow	Box
10136751	NEW LANmark-6 UTP Plenum	Yellow	Reel
10137364	NEW LANmark-6 UTP Plenum	Violet	Box
10177147	NEW LANmark-6 UTP Plenum	Pink	Reel
10136748	NEW LANmark-6 UTP Plenum	Green	Box
10136750	NEW LANmark-6 UTP Plenum	Green	Reel
10137365	NEW LANmark-6 UTP Plenum	Red	Box
10141073	NEW LANmark-6 UTP Plenum	Orange	Box
10188830	NEW LANmark-6 UTP Plenum	Black	Box
10188807	NEW LANmark-6 UTP Plenum	Black	Reel

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### Selling delivery information

PLEASE NOTE: In the interest of product improvement, Berk-Tek, a Nexans company may make improvements or changes in the products, the programs or services described at any time without notice. Additionally, the information contained herein may include typographical errors or technical inaccuracies. Changes will be periodically made to address any such issues.