

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-568.2-D Category 6 and ISO/IEC 11801 2nd Edition Class E Category 6 requirements.

## DESCRIPTION

### Berk-Tek LANmark-6 UTP, Performance Guaranteed

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-6 has a Converged Application Score (CA Score) of 6.4 and is recommended for basic desktop and phone applications, and a low density of connected devices.

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

**Construction:** 24 AWG bare copper wire insulated with polypropylene. 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

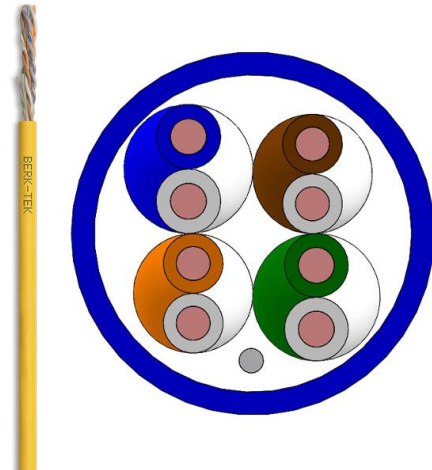
#### Features

- Inexpensive compact design
- Meets the requirements of ANSI/TIA-568.2-D
- Characterized to 500 MHz, 250 MHz greater than the standard
- Delivered in compact, strong, easy to identify boxes
- RoHS Compliant

#### Benefits

- Provides Category 6 performance
- Cost effective 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

## PROUDLY MADE IN THE USA



## STANDARDS

International ISO/IEC 11801

National ANSI/TIA 568.2-D;  
UL 444

## CHARACTERISTICS

### Construction characteristics

Type of cable UTP

### Dimensional characteristics

Number of pairs 4

### Usage characteristics

Field of application Indoor






















Category Cat. 6



Fire safety CMP - Plenum Rated

Recommended installation temperature range 0 .. 50 °C

Recommended operating temperature range -20 .. 75 °C

## PRODUCT LIST

Part Number	Description	Colour	Length per reel [ft]	Packaging
 10136233	LANmark-6 UTP Plenum	Blue	1000.0	Reel
 10136226	LANmark-6 UTP Plenum	Blue	1000.0	Box
 10136265	LANmark-6 UTP Plenum	White	1000.0	Reel
 10136230	LANmark-6 UTP Plenum	White	1000.0	Box
 10136749	LANmark-6 UTP Plenum	Yellow	1000.0	Box
 10136751	LANmark-6 UTP Plenum	Yellow	1000.0	Reel
 10137364	LANmark-6 UTP Plenum	Violet	1000.0	Box
 10136748	LANmark-6 UTP Plenum	Green	1000.0	Box
 10136750	LANmark-6 UTP Plenum	Green	1000.0	Reel
 10137365	LANmark-6 UTP Plenum	Red	1000.0	Box
 10141073	LANmark-6 UTP Plenum	Orange	1000.0	Box
 10188830	LANmark-6 UTP Plenum	Black	1000.0	Box
 11049196	LANmark-6 UTP Plenum	Pink	1000.0	Box
 11060822	LANmark-6 UTP Plenum	Brown	1000.0	Box
 11091284	LANmark-6 UTP Plenum	Dark grey	1000.0	Reel
 11091258	LANmark-6 UTP Plenum	Dark grey	1000.0	Box
 11074702	LANmark-6 UTP Plenum 1500 ft. smartPAK	Blue	1500.0	Box
 11074742	LANmark-6 UTP Plenum 1500 ft. smartPAK	White	1500.0	Box
 11074893	LANmark-6 UTP Plenum 1500 ft. smartPAK	Yellow	1500.0	Box
 11074897	LANmark-6 UTP Plenum 1500 ft. smartPAK	Green	1500.0	Box
 11094952	LANmark-6 UTP Plenum 1500 ft. smartPAK	Dark grey	1500.0	Box

 = Make to order,  = In stock

## LANMARK-6 PLENUM - TECHNICAL INFORMATION

### Electrical Characteristics

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

FQ	RL (dB)	NEXT (dB)	PSNEXT (dB)	ACRF (dB)	LCL/TCL
	TIA / PG	TIA / PG	TIA / PG	TIA / PG	PG
1	20.00 / 20.00	74.30 / 74.30	72.30 / 72.30	67.80 / 67.80	40.00
4	23.00 / 23.00	65.30 / 65.30	63.30 / 63.30	55.80 / 55.80	40.00
10	25.00 / 25.00	59.30 / 59.30	57.30 / 57.30	47.80 / 47.80	40.00
16	25.00 / 25.00	56.20 / 56.30	54.20 / 54.30	43.70 / 43.70	38.00
20	25.00 / 25.00	54.80 / 54.80	52.80 / 52.80	41.80 / 41.80	37.00
31.25	23.60 / 23.60	51.90 / 51.90	49.90 / 49.90	37.90 / 37.90	35.10
62.5	21.50 / 21.50	47.40 / 47.40	45.40 / 47.40	31.90 / 31.90	32.00
100	20.10 / 20.10	44.30 / 44.30	42.30 / 42.30	27.80 / 27.80	30.00
150	18.90 / 18.90	41.70 / 41.70	39.70 / 39.70	24.30 / 24.30	28.20
200	18.00 / 18.00	39.80 / 39.80	37.80 / 37.80	21.80 / 21.80	27.00
250	17.30 / 17.30	38.30 / 38.30	36.30 / 36.30	19.80 / 19.80	26.00
300	— / 16.80*	— / 39.10*	— / 37.10*	— / 18.30*	25.20
350	— / 16.30*	— / 38.20*	— / 36.20*	— / 16.90*	24.60*
400	— / 15.90*	— / 37.30*	— / 35.30*	— / 15.80*	24.00*
450	— / 15.50*	— / 36.50*	— / 34.50*	— / 14.70*	23.50*
500	— / 15.20*	— / 35.80*	— / 33.80*	— / 13.80*	23.00*

FQ	IL (dB/100 m)	ACR (dB/100 m)	PSACR (dB/100 m)	PSACRF (dB/100 m)	EL TCTL
	TIA / PG	TIA / PG	TIA / PG	TIA / PG	PG
1	2.00 / 2.00	72.20 / 72.20	70.30 / 70.30	64.80 / 64.80	35.00
4	3.80 / 3.80	61.50 / 61.50	59.50 / 59.50	52.80 / 52.80	23.00
10	6.00 / 6.00	53.40 / 53.40	51.30 / 51.30	44.80 / 44.80	15.00
16	7.60 / 7.60	48.80 / 48.80	46.70 / 46.70	40.70 / 40.70	10.90
20	8.50 / 8.50	46.40 / 46.40	44.30 / 44.30	38.80 / 38.80	9.00
31.25	10.70 / 10.70	41.40 / 41.40	39.20 / 39.20	37.90 / 34.90	—
62.50	15.40 / 15.40	32.40 / 32.40	30.00 / 30.00	28.90 / 28.90	—
100	19.80 / 19.80	25.20 / 25.20	22.50 / 22.50	24.80 / 24.80	—
150	24.70 / 24.60	16.90 / 16.90	14.90 / 14.90	21.30 / 21.30	—
200	29.00 / 29.00	10.80 / 12.90	8.80 / 8.80	18.80 / 18.80	—
250	32.80 / 32.80	7.30 / 7.30	3.50 / 5.50	16.80 / 16.80	—
300	— / 36.40*	— / 2.70*	— / —	— / 15.30*	—
350	— / 39.80*	— / —	— / —	13.90 / 13.90*	—
400	— / 43.00*	— / —	— / —	12.80 / 12.80*	—
450	— / 46.00*	— / —	— / —	— / 11.70*	—
500	— / 48.90*	— / —	— / —	10.80 / 10.80*	—

\*Values provided for reference only

### Parametric Measurements

#### Description

Mutual Capacitance	5.2 nF/100m nominal
DC Resistance	9.38 Ohms/100m max.
Skew	45 ns/100m max.
Pair-to-Ground Unbalance	330 pF/100m max.
Velocity of Propagation	67% nom.
DC Resistance Unbalance	5% max.

Color Code		
Pair-1	White/Blue	Blue
Pair-2	White/Orange	Orange
Pair-3	White/Green	Green
Pair-4	White/Brown	Brown

Supported Category 6 Applications		
Standard	Application	Speed
IEEE 802.3	1000BASE-T	1 Gb/s
ATM	155 Mb/s	155 Mb/s
CDDI		100 Mb/s
IEEE 802.3	100BASE-T	10 Mb/s
IEEE 802.3 af	PoE	1 GB/s
IEEE 802.3 at	PoE+, Type 1 & 2	1 Gb/s
IEEE 802.3bt	PoE++, Type 3 & 4	1Gb/s

Technical Data - Physical		
Conductor		24 AWG Bare Copper
Conductor Diameter - in. (mm)	0.022	(0.56)
Insulated Conductor Diameter - in. (mm)	0.040	(1.02)
Cable Diameter - in. (mm)	0.230	(5.84)
Nom. Cable Weight - lb./kft (kg/kft)	27	(12.25)
Max. Installation Tension - lb. (N)	25	(110)
Min. Bend Radius - in. (mm)	1.00	(25.40)

## LANMARK-6 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-6

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.

## LANMARK-6 UTP PLENUM JACKET LEGEND

BERK-TEK LANMARK-6 24 AWG CMP 75C C(UL)US ETL VERIFIED TIA-568.2-D CAT 6 [ANY APPLICABLE PATENTS] [DATECODE] [SEQ#] FT

## SELLING INFORMATION

PLEASE NOTE: In the interest of product improvement, Berk-Tek 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.