

# Berk-Tek LANmark-HD High-Definition AV Plenum Cable



Berk-Tek's LANmark-HD (High Definition) cable is specifically designed to provide outstanding AV performance over IP. Its unique design and foil shield deliver error-free transmission and excellent PoE performance to maximize performance, minimize latency, and provide excellent PoE performance.

## DESCRIPTION

When converging AV onto your IP network, you need more than just a cable to establish a connection. You need a solution that will not only provide crystal clear high-definition resolution but also power simultaneously. The challenge is that power is inherently noisy and will cause heat rise, especially when cable is bundled. Heat increases signal attenuation in copper cabling. Therefore, your cabling solution needs to overcome this so your AV system works flawlessly. Berk-Tek LANmark-HD was designed especially for AV applications. It has a foil shield to protect your video packets from noise and to allow heat rise to dissipate quickly and efficiently. Your AV system will operate with peak efficiency when connected via LANmark-HD.

### Construction:

23 AWG, bare copper wire insulated with FEP. Two insulated conductors twisted together to form a pair and four pairs laid up with a central filler to form the basic unit. The cable is shielded with an overall aluminum/polyester tape with a 26 AWG stranded tinned copper drain wire and jacketed in polymer alloy..

### Flame Rating:

- Plenum: NFPA 262, CMP
- UL listed as CMP-LP (0.6A)

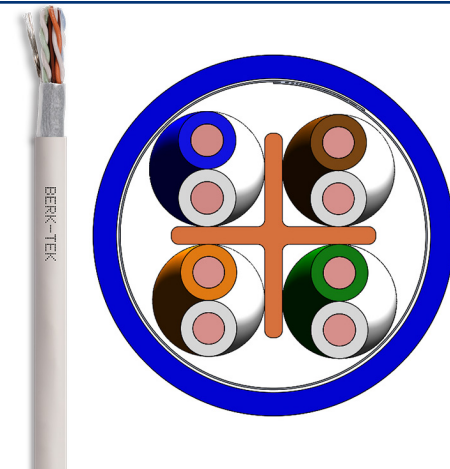
### Features:

- ETL verified to ANSI/TIA-568.2-D
- Supports High Definition video (1080P) resolution applications
- RoHS Compliant

### Benefits:

- Ideal for point-to-point AV connections in classrooms or conference rooms
- Easier installation and cable management with a reduced outer diameter of 0.275"
- Supports high power PoE/PoH applications
- 85% PoE/PoH efficiency
- Supports 720 cable bundles at 100W PoE
- Full shield for alien crosstalk protection
- Available in 500-foot lengths for cost-effective installations
- Available in 1,000' reels and additional colors upon request

## Country of Origin: USA



## STANDARDS

International ISO/IEC 11801

National ANSI/TIA 568.2-D;  
UL 444

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## CHARACTERISTICS





### Dimensional characteristics



Number of pairs	4
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### Usage characteristics

Packaging	Reel
Field of application	Indoor
Category	Cat. 6
Fire safety	CMP - Plenum Rated
Recommended installation temperature range	0 .. 50 °C
Recommended operating temperature range	-20 .. 90 °C

## PRODUCT LIST

Part Number	Description	Type of cable	Colour	Length per reel [ft]
 11100942	LANmark-HD High-Definition AV Plenum Cable	F/UTP	Blue	500.0
 11100943	LANmark-HD High-Definition AV Plenum Cable	F/UTP	White	500.0
 11100944	LANmark-HD High-Definition AV Plenum Cable	F/UTP	Grey	500.0
 11102178	LANmark-HD High-Definition AV Plenum Cable	F/UTP	Black	500.0

 = Make to order,  = In stock

## LANMARK-HD 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 / 55.70	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	41.80 / 52.80	41.80 / 41.70	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 / 45.40	31.90 / 31.80	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 / 21.70	27.00
250	17.30 / 17.30	38.30 / 38.30	36.30 / 36.30	19.80 / 19.80	26.00
300	— / 16.77*	— / 37.16*	— / 35.16*	— / —	25.20*
350	— / 16.30*	— / 36.20*	— / 34.20*	— / 16.90*	24.60*

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 / 72.30	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 / 52.70	23.00
10	6.00 / 6.00	53.40 / 53.40	51.30 / 51.40	44.80 / 44.80	15.00
16	7.60 / 7.60	48.80 / 48.70	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 / 38.70	9.00
31.25	10.70 / 10.70	41.40 / 41.30	39.20 / 39.20	37.90 / 34.90	—
62.50	15.40 / 15.40	32.40 / 32.00	30.00 / 30.00	28.90 / 28.80	—
100	19.80 / 19.80	25.20 / 24.60	22.50 / 22.50	24.80 / 24.80	—
150	24.70 / 24.60	16.90 / 17.10	14.90 / 15.10	21.30 / 21.30	—
200	29.00 / 29.00	10.80 / 10.90	8.80 / 8.90	18.80 / 18.70	—
250	32.80 / 32.80	7.30 / 5.50	3.50 / 3.50	16.80 / 16.80	—
300	— / 36.43*	— / 0.73*	— / —	— / —	—
350	— / 39.80*	— / —	— / —	13.90 / 13.90*	—

\*Values provided for reference only

### Parametric Measurements

#### Description

Mutual Capacitance	5.1 nF Ohms/100m max.
DC Resistance	9.38 Ohms/100m max.
Skew	45 ns/100m max.
Pair-to-Ground Unbalance	330 pF/100m max.
Velocity of Propagation	70% 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

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## 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 802.3 bt	PoE++, Type 3 & 4	1 Gb/s

## Technical Data - Physical

Conductor		23 AWG Bare Copper
Conductor Diameter - in. (mm)	0.022	(0.56)
Insulated Conductor Diameter - in. (mm)	0.042	(1.07)
Cable Diameter - in. (mm)	0.275	(7.0)
Nom. Cable Weight - per 500 ft. (kg)	20	(9.07)
Max. Installation Tension - lb. (N)	25	(110)
Min. Bend Radius - in. (mm)	2.20	(55.88)

## LANMARK-HD PLENUM JACKET LEGEND

BERK-TEK LANMARK-HD FTP 23 AWG CMP 90C C(UL)US CMP-LP (0.6) --- ETL VERIFIED TIA-568.2-D CAT 6 [DATE] [COUNTER] 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.