

LANmark-6 is an ANSI/TIA/EIA category 6 verified cable, ideal for communication network applications capable to gigabit network applications. Lanmark-6 is capable of transmitting applications such as 1000BASE-T and 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

Flame Rating: Plenum -NFPA 262, CMP

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

- IEEE 802.3 1000BASE-T, 100BASE-TX, 10BASE-T
- ANSI X3.263 100 Mb/s
- 1000BASE-TX (ANSI/TIA/EIA-854-2001)

Features

- Inexpensive compact design
- 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

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

National TIA/EIA-568-B.2

Contact

Copper Product Inquiry United States

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Characteristics

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

Color Code

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

Parametric Measurements

	HORIZONTAL
Mutual Capacitance	5.6 nF/100 m nom.
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.

Temperature Rating

Installation	0°C to +50°C
Operation	-10°C to +60°C

Technical Data - Physical

		CMP	
Conductor diameter-in. (mm)	0.022	(0.56)	
Cable diameter-in. (mm)	0.22	(5.6)	
Nominal cable weight-lb./kft. (kg/km)	28	(41.3)	
Max. installation tension-lb. (N)	25	(110)	
Min. bend radius-in. (mm)	1	(25.4)	



Technical Data - Electrical

FREQ	RL	INSERTION LOSS	PS-NEXT	NEXT	ACR
FKEQ	(dB)	(dB/100m)	(dB)	(dB)	(dB@100m)
MHz	min.	max.	min.	min.	min.
1	20.0	2.0	72.3	74.3	72.3
4	23.0	3.8	63.3	65.3	61.5
10	25.0	6.0	57.3	59.3	53.3
16	25.0	7.6	54.3	56.3	48.7
20	25.0	8.5	52.8	54.8	46.3
31.25	23.6	10.7	49.9	51.9	41.2
62.5	21.5	15.4	45.4	47.4	32.0
100	20.1	19.8	42.3	44.3	24.5
250	17.3	32.8	36.3	38.3	5.5
350	16.3	39.8	34.2	36.2	-
400	15.9	43.0	33.3	35.3	-
500	15.2	48.9	31.8	33.8	-
	PS-ACR	ELFEXT	PS-ELFEXT	LCL/TCL	Prop. Delay
FREO	10 Ack	LLI LXI	1 J-LLI LXI	LCL/ ICL	i top. Delay
FREQ	(dB@100m)	(dB)	(dB)	(dB@100m)	(ns@100m)
FREQ MHz	(dB@100m) min.	(dB) min.	(dB) min.	(dB@100m) min.	(ns@100m) min.
	(dB@100m) min. 70.3	(dB)	(dB) min. 64.8	(dB@100m)	(ns@100m)
MHz 1 4	(dB@100m) min. 70.3 59.3	(dB) min. 67.8 55.7	(dB) min. 64.8 52.7	(dB@100m) min. 40.0 40.0	(ns@100m) min. 570 552
MHz	(dB@100m) min. 70.3	(dB) min. 67.8	(dB) min. 64.8	(dB@100m) min. 40.0	(ns@100m) min. 570
MHz 1 4	(dB@100m) min. 70.3 59.3	(dB) min. 67.8 55.7 47.8 43.7	(dB) min. 64.8 52.7	(dB@100m) min. 40.0 40.0	(ns@100m) min. 570 552 545 543
MHz 1 4 10	(dB@100m) min. 70.3 59.3 51.3	(dB) min. 67.8 55.7 47.8	(dB) min. 64.8 52.7 44.8	(dB@100m) min. 40.0 40.0 40.0	(ns@100m) min. 570 552 545
MHz 1 4 10 16	(dB@100m) min. 70.3 59.3 51.3 46.7 44.3 39.2	(dB) min. 67.8 55.7 47.8 43.7	(dB) min. 64.8 52.7 44.8 40.7	(dB@100m) min. 40.0 40.0 40.0 38.0	(ns@100m) min. 570 552 545 543 542 539
MHz 1 4 10 16 20	(dB@100m) min. 70.3 59.3 51.3 46.7 44.3	(dB) min. 67.8 55.7 47.8 43.7 41.7	(dB) min. 64.8 52.7 44.8 40.7 38.7	(dB@100m) min. 40.0 40.0 40.0 38.0 37.0	(ns@100m) min. 570 552 545 543 542
MHz 1 4 10 16 20 31.25	(dB@100m) min. 70.3 59.3 51.3 46.7 44.3 39.2	(dB) min. 67.8 55.7 47.8 43.7 41.7 37.9	(dB) min. 64.8 52.7 44.8 40.7 38.7 34.9	(dB@100m) min. 40.0 40.0 40.0 38.0 37.0 35.1	(ns@100m) min. 570 552 545 543 542 539
MHz 1 4 10 16 20 31.25 62.5	(dB@100m) min. 70.3 59.3 51.3 46.7 44.3 39.2 29.9	(dB) min. 67.8 55.7 47.8 43.7 41.7 37.9	(dB) min. 64.8 52.7 44.8 40.7 38.7 34.9 28.8	(dB@100m) min. 40.0 40.0 40.0 38.0 37.0 35.1 32.0	(ns@100m) min. 570 552 545 543 542 539 538
MHz 1 4 10 16 20 31.25 62.5 100	(dB@100m) min. 70.3 59.3 51.3 46.7 44.3 39.2 29.9 22.5	(dB) min. 67.8 55.7 47.8 43.7 41.7 37.9 31.8 27.8	(dB) min. 64.8 52.7 44.8 40.7 38.7 34.9 28.8 24.8	(dB@100m) min. 40.0 40.0 40.0 38.0 37.0 35.1 32.0 30.0	(ns@100m) min. 570 552 545 543 542 539 538 537
MHz 1 4 10 16 20 31.25 62.5 100 250	(dB@100m) min. 70.3 59.3 51.3 46.7 44.3 39.2 29.9 22.5 3.5	(dB) min. 67.8 55.7 47.8 43.7 41.7 37.9 31.8 27.8	(dB) min. 64.8 52.7 44.8 40.7 38.7 34.9 28.8 24.8 16.8	(dB@100m) min. 40.0 40.0 40.0 38.0 37.0 35.1 32.0 30.0 26.0	(ns@100m) min. 570 552 545 543 542 539 538 537 536

IMPORTANT: Berk-Tek performance guarantees are based on swept-frequency testing and apply to all frequencies for the entire specified frequency range and are not limited to the tables of data shown which are presented to demonstrate our guarantees at "representative" frequencies. Values above 250 MHz are for engineering information. limited combustible version also available. Other jacket colors available.

Product List

Berk-Tek P/N	Description	Colour	Packaging
10119943	LANmark-6 UTP Plenum	Grey	Reel
10119944	LANmark-6 UTP Plenum	Grey	Вох
10119946	LANmark-6 UTP Plenum	White	Reel
10119947	LANmark-6 UTP Plenum	White	Вох
10119950	LANmark-6 UTP Plenum	Yellow	Reel



Berk-Tek P/N	Description	Colour	Packaging
10119951	LANmark-6 UTP Plenum	Yellow	Вох
10119953	LANmark-6 UTP Plenum	Blue	Reel
10119954	LANmark-6 UTP Plenum	Blue	Вох
10119956	LANmark-6 UTP Plenum	Green	Reel
10119957	LANmark-6 UTP Plenum	Green	Вох