

LANmark-350 Plenum

Berk-Tek's LANmark-350 Premium Category 5e UTP cables are designed to meet the most advanced UTP horizontal cable applications. Tested up to 350 MHz, the guaranteed performance of this cable far exceeds the ANSI/TIA/EIA-568-B.2 and ISO/IEC 11801 horizontal cable requirements for PS-NEXT, attenuation, structural return loss, attenuation-to-crosstalk ratio (ACR) and impedance, making it ideal for high-end transmission links supporting today's networking protocols.

Description

Construction

24 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 Category 5e

Flame Rating

Plenum - NFPA 262, CMP

Applications

Berk-Tek's LANmark-350 Premium Category 5e UTP cable is intended for high speed data applications up to 350 MHz including:

IEEE 802.3 1000BASE-T, 100BASE-TX, 10BASE-T

155 Mb/s ATM

ANSI X3.263 100Mb/s

4/16 Mb/s Token Ring

Features

- Specified and tested
- Small, round design
- ETL verified to TIA/ ISO/IEC 11801

Benefits

- Reliably supports today's network protocols
- Reduced installation costs and maintenance
- Lower Bit Error Rates, increases network efficiency and uptime



Standards

National TIA/EIA-568-B.2

Contact

Copper Product Inquiry
United States
Phone: 717-354-6200
Fax: 717-354-7944
copper-pc.us@nexans.com

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Characteristics

Dimensional characteristics

Length per reel 1000.0 ft

Usage characteristics

Category Cat. 5e

Fire safety Plenum Rated

Technical Data - Physical

	CMP	
Conductor diameter-in. (mm)	0.02	(0.52)
Cable diameter-in. (mm)	0.165	(4.2)
Nominal cable weight-lb./kft. (kg/km)	21	(31)
Max. installation tension-lb. (N)	25	(110)
Min. bend radius-in. (mm)	1	(25.4)

Parametric Measurements

	HORIZONTAL
Mutual Capacitance	4.4 nF/100 m nom.
DC resistance	9.38 Ohms/100 m max.
Skew	25 ns/100 m max.
Pair to ground Unbalance	330 pF/100 m max.
Velocity of Propagation	72% nom. Plenum
Input Impedance	100 ± 14% 0.772-100 MHz, 100 ± [14+15log (F/100)] 100-350 MHz

Temperature Rating

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

Color Code

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

Technical Data - Electrical

HORIZONTAL

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FREQ	SRL		RL		INSERTION LOSS		PS-NEXT		NEXT	
	(dB)		(dB)		(dB/100m)		(dB)		(dB)	
MHz	min.	typical	min.	typical	max.	typical	min.	typical	min.	typical
1	25.5	41.6	20.0	33.9	2.0	1.9	68.3	87.6	70.3	89.6
4	25.5	43.7	23.3	31.6	4.0	3.8	59.9	76.1	61.9	78.1
10	25.5	44.9	25.5	36.8	6.4	6.0	53.3	68.9	55.3	70.9
16	25.5	42.3	25.5	39.8	8.1	7.7	50.3	64.7	52.3	66.7
20	25.5	42.0	25.5	39.1	9.2	8.6	48.8	64.2	50.8	66.2
31.25	24.4	39.5	24.4	38.3	11.6	10.9	45.9	62.1	47.9	64.1
62.5	22.7	38.3	22.7	36.4	16.8	15.7	41.4	56.2	45.4	58.2
100	21.5	35.7	21.5	34.6	21.7	20.1	38.3	52.9	40.3	54.9
155	20.4	35.7	20.4	33.9	27.7	25.5	35.5	49.7	37.5	51.7
200	19.8	36.0	19.8	33.8	32.1	29.3	33.8	47.2	35.8	49.2
300	18.8	33.3	18.8	31.7	40.5	33.2	31.2	45.5	33.2	47.5
350	18.4	31.1	18.4	30.8	44.4	35.9	30.2	43.8	32.2	45.8
400	18.1	31.0	18.1	30.2	48.0	39.4	29.3	42.6	31.3	44.7
FREQ	ACR		PS-ACR		ELFEXT		PS-ELFEXT			
	(dB@100m)		(dB@100m)		(dB)		(dB)			
MHz	min.	typical	min.	typical	min.	typical	min.	typical		
1	68.3	83.3	66.3	81.5	66.8	83.3	63.8	77.4		
4	57.3	71.8	55.3	69.7	54.7	72.4	52.7	66.1		
10	48.9	63.1	46.9	59.9	46.8	64.5	44.8	58.2		
16	44.1	57.2	42.1	54.9	42.7	60	40.7	53.8		
20	41.6	54.9	39.6	52.9	40.7	58	38.7	51.7		
31.25	36.3	49.4	34.3	47.5	36.9	54	34.9	48.1		
62.5	26.6	38.9	24.6	37.2	30.8	48.6	28.8	41.9		
100	18.6	32	16.6	30.1	26.8	46.2	24.8	38.6		
155	9.7	23.6	7.7	21.5	23	40.9	20	33.6		
200	3.7	18	1.7	15.6	20.7	39.6	17.7	31.1		
300	-	11.5	-	9.7	17.2	35.4	14.2	28.1		
350	-	4.8	-	2.4	15.9	32.4	12.9	25.2		
400	-	-	-	-	14.7	31.4	11.7	24.9		

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 350 MHz are for engineering information. Limited combustible version also available. Other jacket colors available.

Product List

Berk-Tek P/N	Description	Type of cable	Colour	Number of pairs	Packaging
10032059	LANmark-350 Plenum	UTP	Yellow	4	Reel
10032060	LANmark-350 Plenum	UTP	Yellow	4	Box
10032058	LANmark-350 Plenum	UTP	Yellow	4	Reel in a box
10032064	LANmark-350 Plenum	UTP	Blue	4	Reel

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10032065	LANmark-350 Plenum	UTP	Blue	4	Box
10032063	LANmark-350 Plenum	UTP	Blue	4	Reel in a box
10032085	LANmark-350 Plenum	UTP	Green	4	Reel
10032086	LANmark-350 Plenum	UTP	Green	4	Box
10032084	LANmark-350 Plenum	UTP	Green	4	Reel in a box
10032078	LANmark-350 Plenum	UTP	Grey	4	Reel
10032079	LANmark-350 Plenum	UTP	Grey	4	Box
10032077	LANmark-350 Plenum	UTP	Grey	4	Reel in a box
10032087	LANmark-350 Plenum	UTP	Violet	4	Reel
10032088	LANmark-350 Plenum	UTP	Violet	4	Box
10047430	LANmark-350 Plenum	UTP	Violet	4	Reel in a box
10032100	LANmark-350 Plenum	UTP	Brown	4	Reel
10032101	LANmark-350 Plenum	UTP	Brown	4	Box
10032099	LANmark-350 Plenum	UTP	Brown	4	Reel in a box
10032068	LANmark-350 Plenum	UTP	Pink	4	Reel
10032069	LANmark-350 Plenum	UTP	Pink	4	Box
10032067	LANmark-350 Plenum	UTP	Pink	4	Reel in a box
10032071	LANmark-350 Plenum	UTP	White	4	Reel
10032072	LANmark-350 Plenum	UTP	White	4	Box
10032070	LANmark-350 Plenum	UTP	White	4	Reel in a box
10032081	LANmark-350 Plenum	UTP	Orange	4	Reel
10032082	LANmark-350 Plenum	UTP	Orange	4	Box
10032080	LANmark-350 Plenum	UTP	Orange	4	Reel in a box
10032075	LANmark-350 Plenum	UTP	Red	4	Reel
10032076	LANmark-350 Plenum	UTP	Red	4	Box
10032074	LANmark-350 Plenum	UTP	Red	4	Reel in a box
10032102	LANmark-350 Plenum	UTP	Black	5	Reel
10034514	LANmark-350 Plenum	UTP	Black	6	Box
10067869	LANmark-350 Plenum	UTP	Black	7	Reel in a box