

**LANmark-350 Plenum**  
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**Part Number: 10032059**

Berk-Tek's LANmark-350 Premium Category 5e UTP cables are ideally suited to support 100BASE-TX Ethernet. Tested up to 450 MHz, the guaranteed performance of this cable far exceeds the ANSI/TIA/EIA-568-B.2 and ISO/IEC 11801 Category 5e horizontal cable requirements for PSNEXT, attenuation, return loss, attenuation-to-crosstalk ratio (ACR) and impedance.

**Description**

**Construction**

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, UL 444 and C22.2 No.214-02
- International: ISO/IEC 11801-2nd Edition Category 5, EU Directive 2002/95/EC (RoHS)

**Flame Rating**

- Plenum - NFPA 262, CMP
- UL Listed

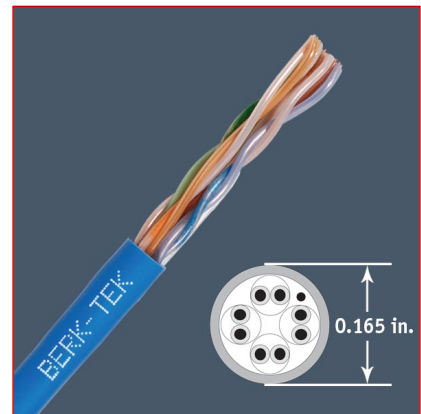
**Applications**

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      1 Gb/s
- ATM                      155 Mb/s                      155 Mb/s
- IEEE 802.3      100BASE-TX      100 Mb/s
- CDDI    100 Mb/s
- IEEE 802.3      10BASE-T              10 Mb/s

**Features**

- Small, round design
- ETL verified to TIA/EIA-568-B.2 and ISO/IEC 11801



**Standards**  
**National TIA/EIA-568-B.2**



**Contact**

Copper LAN Product Inquiry  
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### **Benefits**

- Reliably supports 100BASE-TX Ethernet
- Reduced installation costs and maintenance
- Characterized to 450 MHz, 350 MHz greater than standard
- Lower bit error rates, increases network efficiency and uptime



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**Characteristics**

<b>Construction characteristics</b>	
Type of cable	UTP
Colour	Yellow
<b>Dimensional characteristics</b>	
Length per reel	1000.0 ft
Number of pairs	4
<b>Usage characteristics</b>	
Packaging	Reel
Field of application	Indoor
Category	Cat. 5e
Fire safety	Plenum Rated

**Technical Data**

Technical Data - Physical			Color Code		
			Pair-1	White/Blue	Blue
Conductor	24 AWG Bare Copper		Pair-2	White/Orange	Orange
Conductor diameter-in. (mm)	0.02	(0.52)	Pair-3	White/Green	Green
Insulated Conductor Diameter- in. (mm)	0.035	(0.89)	Pair-4	White/Brown	Brown
Cable diameter-in. (mm)	0.165	(4.2)	<b>Temperature Rating</b>		
Nominal cable weight-lb./kft. (kg/km)	21	(31)	Installation	0°C to +50°C	
Max. installation tension-lb. (N)	25	(110)	Operation	-20°C to +60°C	
Min. bend radius-in. (mm)	1	(25.4)			

**Technical Data - Parametric Measurements**

<b>Mutual Capacitance</b>	4.4 nF/100 m nom.
<b>DC resistance</b>	9.38 Ohms/100 m max.
<b>Skew</b>	25 ns/100 m max.
<b>Pair to ground Unbalance</b>	330 pF/100 m max.
<b>Velocity of Propagation</b>	72% nom.
<b>Input Impedance</b>	100 ± 13% 0.772-100 MHz 100 ± [13 +15log (F/100)] 100-350 MHz
<b>DC Resistance Unbalance of a Pair</b>	5% max.



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### Technical Data - Electrical Characteristics

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	44.7	20.0	38.2	2.0	1.7	68.3	82.7	70.3	89.1
4	25.5	44.9	23.3	36.0	4.0	3.5	59.9	73.3	61.9	81.9
10	25.5	47.7	25.0	39.0	6.4	5.6	53.3	65.9	55.3	75.1
20	25.5	45.9	25.5	47.5	9.2	8.1	48.8	60.6	50.8	66.3
31.25	24.4	55.3	24.4	43.0	11.6	10.1	45.9	59	47.9	65
62.5	22.7	41.6	22.7	39.5	16.8	14.6	41.4	55.7	43.4	62.1
100	21.5	37.3	21.5	35.5	21.7	18.7	38.3	51.4	40.3	57.5
200	19.8	43.1	19.8	46.5	32.1	27.2	33.8	47.7	35.8	53.2
300	18.8	36.1	18.8	35.7	40.5	33.9	31.2	45.2	33.2	53.4
350	18.4	35.4	18.4	35.0	44.4	36.9	30.2	42.2	32.2	48.8
400	18.1	38.0	18.1	34.4	48.0	39.6	29.3	39.4	31.3	45.6
450	17.8	34.7	17.8	34.5	51.5	42.4	28.5	36.2	30.5	43.4

### Technical Data - Electrical Characteristics

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	66.3	80.8	66.8	86.2	63.8	77
4	57.3	71	55.3	69.6	54.7	73.2	42.7	64.8
10	48.9	61	46.9	59.8	46.8	65.5	44.8	57
20	41.6	55	39.6	52	40.7	60.8	38.7	51.5
31.25	36.3	50	34.3	48.1	36.9	56.6	34.9	47.8
62.5	26.6	42	24.6	40	30.8	50.5	28.8	42.1
100	18.6	33	16.6	31.2	26.8	45.5	24.8	38.5
200	3.7	21.2	1.7	18.4	20.7	44.7	17.7	37.4
300	—	9.6	—	8.3	17.2	38.1	14.2	31.9
350	—	4.9	—	1.9	15.9	36.4	12.9	30.6
400	—	-1.8	—	-4	14.7	33.4	11.7	27.5
450	—	-8.9	—	-10.6	13.7	36.7	10.7	28.3

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 table 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.

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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.

