

## LANmark-6 FTP Plenum

Berk-Tek's LANmark-6 FTP is the first independently verified Category 6 FTP cable. It is ideal for applications that require the most advanced cable performance and the additional signal isolation advantages of an FTP design. Completely characterized using power sum crosstalk, LANmark-6 FTP introduces new electrical performance parameters to an FTP cable, addressing the needs of full duplex operation over four pairs. LANmark-6 FTP is also the first FTP cable to set requirements for cable balance, the performance parameter which affects cable emissions and protects the network from the damaging effects of outside noise sources such as alien crosstalk.

### Description

#### Construction:

23 AWG, bare copper wire insulated with foam FEP. Two insulated conductors twisted together to form a pair and four pairs laid up to form the basic unit. The cable is shielded with an overall polyester/aluminum foil with stranded tinned copper drain wire and jacketed in flame-retardant PVC.

#### Standards:

- North American ANSI/TIA/EIA-568-B.2 Category 5, 5e, 6
- International ISO/IEC 11801
- European EN 50173

#### Flame Rating:

Plenum-NFPA 262

#### Applications:

LANmark-6 FTP cable is intended for high speed data applications up to 250 MHz including:

- ANSI X3T12 TP-PMD 100 Mb/s Ethernet
- 10GBASE-T, 1000BASE-T, 100BASE-TX, 10BASE-T and
- Token Ring and ATM 155 Mb/s

#### Features:

- ETL verified to TIA/EIA-568-B.2 Category 6
- Outstanding signal isolation
- Can be used with RJ-45 style FTP connectivity
- RoHS Compliant

#### Benefits:

- Increased signal isolation prevents contaminant noise from entering cabling system
- Enhanced bandwidth cable system vs. Category 5e
- Lower bit errors resulting in increased network performance



#### Standards

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

#### Contact

Copper Product Inquiry  
United States  
Phone: 717-354-6200  
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## LANmark-6 FTP Plenum

### Characteristics

#### Dimensional characteristics

Length per reel 1000.0 ft

Number of pairs 4

#### Usage characteristics

Packaging Reel

Field of application Indoor

Category Cat. 6

Fire safety Plenum Rated

### Technical Data - Physical

	CMP	
<b>Conductor diameter-in. (mm)</b>	0.022	(0.57)
<b>Cable diameter-in. (mm) (horizontal)</b>	0.285	(7.24)
<b>Nominal cable weight-lb./kft. (kg/km)</b>	41.7	(62)
<b>Max. installation tension-lb. (N)</b>	25	(110)
<b>Min. bend radius-in. (mm)</b>	2.28	(57.9)

### Parametric Measurements

	HORIZONTAL
<b>Mutual Capacitance</b>	5.6 nF/100 m nominal
<b>DC resistance</b>	9.38 Ohms/100 m max.
<b>Skew</b>	45 ns/100 m max.
<b>Pair to ground Unbalance</b>	330 pF/100 m
<b>Velocity of Propagation</b>	72% nominal
<b>Characteristic Impedance</b>	100 ± 15 Ohms 1-250 MHz

### Color Code

<b>Pair 1</b>	White	Blue
<b>Pair 2</b>	White	Orange
<b>Pair 3</b>	White	Green
<b>Pair 4</b>	White	Brown

### Temperature Rating

<b>Installation</b>	0°C to +50°C
<b>Operation</b>	-10°C to +60°C

## LANmark-6 FTP Plenum

### Technical Data - Electrical Characteristics

Horizontal											
FREQ	SRL	RL	INSERTION LOSS (Attenuation)	S-NEX	NEXT	ACR	PS-ACR	ELFEXT	S-ELFEXT	LCL/TCL	
MHz	dB m	dB m	dB/100m max	dB m	dB m	dB/100m m	dB/100m m	dB m	dB m	dB @ 100m	
1	25	20	2	72.3	74.3	72.3	70.3	67.8	64.8	40	
4	25	23	3.8	63.3	65.3	61.5	59.5	55.7	52.7	40	
10	25	25	6	57.3	59.3	53.4	51.4	47.8	44.8	40	
16	25	25	7.6	54.3	56.3	48.7	46.7	43.7	40.7	38	
20	25	25	8.5	52.8	54.8	46.3	44.3	41.7	38.7	37	
31.2	23.6	23.6	10.7	49.9	51.9	41.2	39.2	37.9	34.9	35.1	
62.5	21.5	21.5	15.4	45.4	47.4	32	30	31.8	28.8	32	
100	20.1	20.1	19.8	42.3	44.3	24.5	22.5	27.8	24.8	30	
155	18.8	18.8	25.2	39.4	41.4	16.2	14.2	23.9	20.9	28.1	
200	18	18	29	37.8	39.8	10.8	8.8	21.7	18.7	27	
250	17.3	17.3	32.8	36.3	38.3	5.5	3.5	19.8	16.8	26	

### Product List

Berk-Tek P/N	Description	Colour
10057903	LANmark-6 FTP Plenum	Grey
10063671	LANmark-6 FTP Plenum	Red
10081254	LANmark-6 FTP Plenum	Violet
10089751	LANmark-6 FTP Plenum	Green
10095838	LANmark-6 FTP Plenum	Orange
10062608	LANmark-6 FTP Plenum	Yellow
10063672	LANmark-6 FTP Plenum	Black
10081255	LANmark-6 FTP Plenum	White
10091131	LANmark-6 FTP Plenum	Blue