

## LANmark-5e FTP Plenum

Berk-Tek's LANmark-5e FTP cables are designed for horizontal applications in a structured cabling network to connect between the user outlet and the horizontal cross-connect. With independently verified performance that meets the TIA/EIA Category 5e standard, LANmark-5e FTP provides the additional signal isolation advantages of an FTP design and is ideal for general installations that may be subjected to higher than normal external electromagnetic noise sources.

### Description

**Construction:** 24 AWG, bare copper wire insulated with foam FEP. Two insulated conductors twisted together to form a pair and four such 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 is jacketed with flame-retardant PVC.

**Standards:** North American ANSI/TIA/EIA-568-B.2, Category 5e, International ISO/IEC 11801

**Flame Rating:** Plenum-NFPA 262

**Applications:** LANmark-5e FTP cable is intended for high speed data applications up to 100 MHz including:

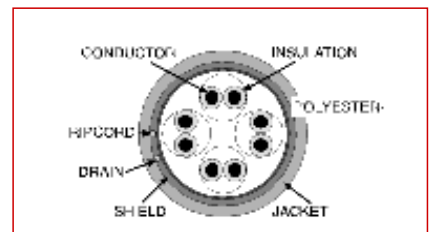
- ATM 155 Mb/s and Token Ring
- FDDI/CDDI 100 Mb/s
- Ethernet 1000BASE-T, 100BASE-TX, 10BASE-T

### Features

- Independently verified to TIA/EIA Category 5e
- Supports 10BASE-T, 100BASE-T, 1000BASE-T
- Can be used with RJ-45 style connectivity
- RoHS compliant

### Benefits

- Reduced cable interference problems in areas of high EMI
- Extends performance limits for network applications thus increasing cabling lifetime
- Cables satisfy a variety of safety requirements



### 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

## LANmark-5e FTP Plenum

### Characteristics

<b>Construction characteristics</b>	
Type of cable	FTP
<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 - Physical

	CMP	
<b>Conductor diameter-in. (mm)</b>	0.021	(0.55)
<b>Cable diameter-in. (mm) (horizontal)</b>	0.224	(5.69)
<b>Nominal cable weight-lb./kft. (kg/km)</b>	29	(43.5)
<b>Max. installation tension-lb. (N)</b>	25	(110)
<b>Min. bend radius-in. (mm)</b>	2	(50.8)

### Parametric Measurements

	Plenum
<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 1-100 MHz

### Temperature Rating

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

### Color Code

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

## LANmark-5e FTP Plenum

### Technical Data - Electrical

HORIZONTAL									
FREQ MHz	SRL	RL	Insertion Loss	PS-NEXT	NEXT	ACR	PS-ACR	ELFEXT	PS-ELFEXT
MHz	dB min	dB min	dB/100m max	dB min	dB min	dB/100m min	dB/100m min	dB min	dB min
1	25.0	20.0	2.0	62.3	65.3	63.3	60.3	63.8	60.8
4	25.0	23.0	4.1	53.3	56.3	52.2	49.2	51.7	48.7
8	25.0	25.0	5.8	48.8	51.8	46.0	43.0	45.7	42.7
10	25.0	25.0	6.5	47.3	50.3	43.8	40.8	43.8	40.8
20	25.0	25.0	9.3	42.8	45.8	36.5	33.5	37.7	34.7
31.25	23.6	23.6	11.7	39.9	42.9	31.2	28.2	33.9	30.9
62.5	21.5	21.5	17.0	35.4	38.4	21.4	18.4	27.8	24.8
100	20.1	20.1	22.0	32.3	35.3	13.3	10.3	23.8	20.8
155	18.8	18.8	28.1	29.5	32.5	4.4	1.4	19.9	16.9
350	16.3	16.3	44.9	24.2	27.2	-	-	12.9	9.9

Values above 100 MHz are for engineering information only.

### Product List

Berk-Tek P/N	Description	Colour
10032121	LANmark-5e FTP Plenum	Grey
10041941	LANmark-5e FTP Plenum	Violet
10053567	LANmark-5e FTP Plenum	Yellow
10047419	LANmark-5e FTP Plenum	White
10034841	LANmark-5e FTP Plenum	Blue
10053566	LANmark-5e FTP Plenum	Red
10061862	LANmark-5e FTP Plenum	Black
10093001	LANmark-5e FTP Plenum	Green