

Contact

Copper LAN Product Inquiry
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LANmark-5e FTP Plenum Category 5e F/UTP

LANmark-5e FTP Plenum

Part Number: 10093001

With independently verified performance that meets the TIA/EIA Category 5e standard, Berk-Tek's LANmark-5e FTP provides the additional signal isolation advantages of an F/UTP design and is ideal for network installations that may be subjected to higher than normal external electromagnetic noise sources.

Description

Construction: Bare copper wire insulated with 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 a 26 AWG stranded tinned copper drain wire and is jacketed with flame-retardant PVC.

Standards:

- North American: ANSI/TIA/EIA-568-C.2, Category 5e, UL 444 and C22.2 No. 214-02
- International: ISO/IEC 11801-2nd Edition, EU Directive 2002/95/EC (RoHS)

Flame Rating:

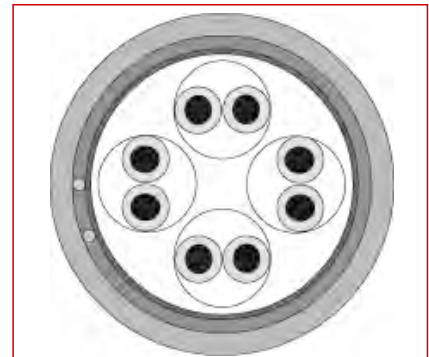
- Plenum-NFPA 262
- UL Listed

Features

- Independently verified to TIA/EIA Category 5e
- Supports 10BASE-T, 100BASE-T, 1000BASE-T
- Reduces signal emissions for secure transmission

Benefits

- Reduced cable interference problems in areas of high EMI
- Extends performance limits for network applications thus increasing cabling lifetime
- Reduces signal emissions for secure transmissions



Standards

International ISO/IEC 11801

National ANSI/TIA-568-C.2; UL 444

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Characteristics

Construction characteristics

Type of cable	FTP
Colour	Green

Dimensional characteristics

Length per reel	1000.0 ft
Number of pairs	4

Usage characteristics

Packaging	Reel
Field of application	Indoor
Category	Cat. 5e
Fire safety	CMP - Plenum Rated

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LANmark-5e FTP Parametric: Electrical

FREQ MHz	RL (dB)			NEXT (dB)			PSNEXT (dB)		
	TIA Spec	Product Guarantee	<u>Expected Performance</u>	TIA Spec	Product Guarantee	<u>Expected Performance</u>	TIA Spec	Product Guarantee	<u>Expected Performance</u>
1	20.0	20.0	31.1	65.3	65.3	83.0	62.3	62.3	78.9
4	23.0	23.0	31.1	56.3	56.3	72.3	53.3	53.3	67.5
10	25.0	25.0	35.8	50.3	50.3	65.6	47.3	47.3	62.0
16	25.0	25.0	33.5	47.2	47.3	64.7	44.2	44.3	59.7
20	25.0	25.0	31.6	45.8	45.8	61.8	42.8	42.8	55.8
31.25	23.6	23.7	32.5	42.9	42.9	59.5	39.9	39.9	54.4
62.5	21.5	21.5	30.9	38.4	38.4	53.1	35.4	35.4	49.2
100	20.1	20.1	31.7	35.3	35.3	49.7	32.3	32.3	45.9
150	18.9	18.9	29.4	—	—	45.8	—	—	42.0
200	18.0	18.0	28.1	—	—	44.5	—	—	38.5
250	17.3	17.3	27.1	—	—	42.5	—	—	38.4
FREQ MHz	IL (dB/100m)			ACR (dB/100m)			PSACR (dB/100m)		
	TIA Spec	Product Guarantee	<u>Expected Performance</u>	TIA Spec	Product Guarantee	<u>Expected Performance</u>	TIA Spec	Product Guarantee	<u>Expected Performance</u>
1	2.0	2.0	1.8	63.3	63.3	77.4	60.3	60.3	76.9
4	4.1	4.0	3.5	52.2	52.3	66.0	49.2	49.3	64.1
10	6.5	6.5	5.5	43.8	43.9	59.3	40.8	40.9	56.5
16	8.2	8.2	7.0	39.0	39.0	53.9	36.0	36.0	52.4
20	9.3	9.3	7.8	36.5	36.6	48.5	33.5	33.6	47.9
31.25	11.7	11.7	9.9	31.2	31.3	45.9	28.2	28.3	44.5
62.5	17.0	17.0	14.1	21.4	21.4	36.7	18.4	18.4	34.7
100	22.0	21.9	17.9	13.3	13.4	28.6	10.3	10.4	27.7
150	—	—	22.1	—	—	21.3	—	—	19.2
200	—	—	25.7	—	—	12.5	—	—	12.4
250	—	—	28.8	—	—	10.3	—	—	8.7

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LANmark-5e FTP Parametric: Electrical (cont)

ACRF (dB/100m)				PSACRF (dB/100m)			LCL/TCL	EL TCTL
FREQ MHz	TIA Spec	Product Guarantee	Expected Performance	TIA Spec	Product Guarantee	Expected Performance	Product Guarantee	Product Guarantee
1	63.8	63.8	85.4	60.8	60.8	81.3	40.0	35.0
4	51.8	51.7	74.8	48.8	48.7	71.2	40.0	23.0
10	43.8	43.8	67.7	40.8	40.8	63.1	40.0	15.0
16	39.7	39.7	64.5	36.7	36.7	59.3	38.0	10.9
20	37.8	37.8	61.2	34.8	34.8	57.6	37.0	9.0
31.25	33.9	33.9	59.4	30.9	30.9	52.4	35.1	5.1
62.5	27.9	27.8	53.0	24.9	24.8	44.9	32.0	—
100	23.8	23.8	47.4	20.8	20.8	41.8	30.0	—
150	—	—	40.8	—	—	37.9	28.2	—
200	—	—	42.2	—	—	37.3	27.0	—
250	—	—	38.8	—	—	33.8	26.0	—

LANmark-5e FTP Plenum UTP Physical Data

Technical Data - Physical			Color Code		
Conductor	24 AWG Bare Copper		Pair-1	White/Blue	Blue
Conductor diameter - in. (mm)	0.022	(0.58)	Pair-2	White/Orange	Orange
Insulated conductor dia.-in.(mm)	0.042	(1.04)	Pair-3	White/Green	Green
Cable diameter - in. (mm)	0.235	(5.69)	Pair-4	White/Brown	Brown
Nom. cable wt.-lb./kft. (kg/kft)	31	(13.2)	Temperature Rating (degrees C)		
Max. installation tension - lb. (N)	25	(110)			
Min. bend radius - in. (mm)	1	(25.4)	Installation	0 to +50	Operation -20 to +60

LANmark-5e FTP Plenum Technical Data: Parametric Measurements

Mutual Capacitance	4.8 nF/100 m max.
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	71% nom.
DC Resistance unbalance	5% max.

Supported Category 5e Applications

STANDARD	APPLICATION	SPEED
IEEE 802.3	1000BASE-T	1 Gb/s
ATM	155Mb/s	155 Mb/s
IEEE 802.3	100BASE-TX	100 Mb/s

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CDDI		100 Mb/s
IEEE 802.3	10BASE-T	10 Mb/s

Selling information

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