

LANmark-10G FTP, Category 6a, F/UTP Plenum

Berk-Tek's LANmark-10G FTP is ideal for applications that require the most advanced cable performance and the additional signal isolation advantages of an F/UTP design. The Berk-Tek design incorporates one overall foil shield rather than individually shielding each twisted pair. Having one overall shield reduces the time need for cable termination, results in a smaller outside diameter and reduces material costs.

Description

Construction:

23 AWG, bare copper wire insulated with FEP. Two insulated conductors twisted together with varying lays 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 ripcord and jacketed in flame-retardant PVC.

Standards:

- North American ANSI/TIA/EIA-568-B.2-10, Category 6A and UL444 & C22.2 No.214-02
- International: EU Directive 2002/95/EC (RoHS), IEC 61156-5 ED2.0_46C844CDV

Flame Rating:

- Plenum-NFPA 262
- ETL Listed

Applications:

LANmark-10G FTP cable is intended for high speed data applications up to 500 MHz including:

IEEE 802.3	10GBASE-T	10 Gb/s
IEEE 802.3	1000BASE-T	1 Gb/s
TIA/EIA-854	1000BASE-TX	1 Gb/s
ATM	155 Mb/s	155 Mb/s
IEEE 802.3	100 BASE-TX	100 Mb/s
CDDI		100 Mb/s

Features:

- ETL verified to TIA/EIA-568-B.2-10 Category 6a
- Outstanding signal isolation
- Superior alien crosstalk performance

Benefits:

- Increased signal isolation prevents contaminant noise from entering cabling system
- Completely compliant with IEEE requirements
- Lower bit errors resulting in increased network performance



Standards

National ANSI/TIA-568-C.2

Contact

Copper LAN Product Inquiry
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Characteristics

Dimensional characteristics





Length per reel	1000.0 ft
Number of pairs	4



Usage characteristics

Packaging	Reel
Field of application	Indoor
Category	Cat. 6a
Fire safety	Plenum Rated

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Product List

Part Number	Description	Colour
 10143424 New	LANmark-10G FTP Plenum	Blue
 10167485 New	LANmark-10G FTP Plenum	White
 10167487 New	LANmark-10G FTP Plenum	Grey
 10167488 New	LANmark-10G FTP Plenum	Yellow

 = Make to order,  = Make to stock

Technical Data

Technical Data - Physical			Color Code		
			Pair-1	White	Blue
Conductor	23 AWG Bare Copper		Pair-2	White	Orange
Conductor diameter-in. (mm)	0.022	(0.56)	Pair-3	White	Green
Insulated Conductor Diameter- in. (mm)	0.044	(1.12)	Pair-4	White	Brown
Cable diameter-in. (mm)	0.28	(7.11)			
Nominal cable weight-lb./kft. (kg/km)	38	(17.24)	Temperature Rating		
Max. installation tension-lb. (N)	25	(110)	Installation	0°C to +50°C	
Min. bend radius-in. (mm)	1.2	(30.48)	Operation	-20°C to +60°C	

Technical Data - Parametric Measurements

Mutual Capacitance	5.6 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	66% nom. Riser
DC Resistance Unbalance of a Pair	4% max.
Transfer Impedance	45 mOhms/m @ 10 MHz
Coupling Attenuation	75 dB @ 30 MHz

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Technical Data - Electrical Characteristics

FREQ MHz	SRL (dB)	RL (dB)	IL (dB/100m)	PS-NEXT (dB)	NEXT (dB)	ACR (dB@100m)	PS-ACR (dB@100m)
	min.	min.	max.	min.	min.	min.	min.
1	NA	20.0	2.1	72.3	74.3	72.2	70.2
4	NA	23.0	3.8	63.3	65.3	61.5	59.5
10	25.0	24.5	5.9	57.3	59.3	53.4	51.4
16	25.0	25.0	7.5	54.3	56.3	48.8	46.8
20	25.0	25.0	8.4	52.8	54.8	46.4	44.4
31.25	23.6	23.6	10.5	49.9	51.9	41.4	39.4
62.5	21.5	21.5	15.0	45.4	47.4	32.4	30.4
100	20.1	20.1	19.1	42.3	44.3	25.2	23.2
250	17.3	17.3	31.1	36.3	38.3	7.2	5.3
350	16.3	16.3	37.2	34.2	36.2	—	—
500	15.2	15.2	45.3	31.8	33.8	—	—
600	14.7	14.7	50.1	30.6	32.6	—	—
750	14.0	14.0	56.7	29.2	31.2	—	—

Technical Data - Electrical Characteristics

FREQ MHz	ACRF (dB)	PS-ACRF (dB)	PS-ANEXT (dB)	PS-AACRF (dB)	LCL/TCL (dB)	EL TCTL (dB)
	min.	min.	min.	min.	min.	min.
1	67.8	64.8	67	67	50.0	35.0
4	55.7	52.7	67	66.2	44.0	23.0
10	47.8	44.8	67	58.2	40.0	15.0
16	43.7	40.7	67	54.1	38.0	10.9
20	41.7	38.7	67	52.2	37.0	9.0
31.25	37.9	34.9	67	48.3	35.1	5.5
62.5	31.8	28.8	65.6	42.3	32.0	—
100	27.8	24.8	62.5	38.2	30.0	—
250	19.8	16.8	56.5	30.2	26.0	—
350	16.9	13.9	54.3	27.3	24.6	—
500	13.8	10.8	52	24.2	23.0	—
600	12.2	9.2	50.8	22.6	22.2	—
750	10.3	7.3	49.3	20.7	21.2	—

Electrical Characteristics above 500 MHz are for engineering information

Selling delivery information

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