

Contact

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LANmark-1000 Enhanced Category 6 Patch

LANmark-1000 Patch

Part Number: 10032678

LANmark-1000 is an ANSI/TIA/EIA Enhanced Category 6 verified cable that is ideal for Gigabit Ethernet applications. Exceptional electrical characteristics include: PSNEXT, PAELFEXT, ELFEXT, RL and LCL/TCL/EL TCTL (balance). LANmark-1000 was the first cable in the industry which set requirements for cable balance. Cable balance helps protect the network from the damaging effects of outside noise sources.

Description

Construction

24 AWG, stranded tinned copper wire insulated with polyethylene. 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

International ISO/IEC 11801

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

Standards

North American: ANSI/TIA/EIA-568-C.2, UL 444 and C22.2 No. 214-02

International: ISO/IEC 11801-2nd Edition Category 6, UU Directive 2002/95/EC (RoHS)

Flame Rating

Patch-UL 1581, CM, IEC 332-1

UL Listed

Features

- Full power sum performance
- Documented balance characteristics (LCL, LCTL)
- ELT verified to ANSI/TIA/EIA-568-C.2

Benefits

- Optimal support for Gigabit Ethernet with headroom
- Power sum characterization gives highest performance for existing applications
- Addition of balance requirements improves overall cable performance and reduces transmission errors
- Characterized to 500 MHz, 250 MHz greater than the standard

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Characteristics

Construction characteristics	
Type of cable	UTP
Colour	Grey
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	CM

Technical Data - Physical

Technical Data - Physical			Color Code		
			Pair-1	White/Blue	Blue
Conductor	24 AWG Stranded Tinned Copper		Pair-2	White/Orange	Orange
Conductor diameter-in. (mm)	0.024	(0.61)	Pair-3	White/Green	Green
Insulated Conductor Diameter- in. (mm)	0.04	(1.02)	Pair-4	White/Brown	Brown
Cable diameter-in. (mm)	0.224	(5.69)			
Nominal cable weight-lb./kft. (kg/km)	25	(37)	Temperature Rating		
Max. installation tension-lb. (N)	25	(110)	Installation	0°C to +50°C	
Min. bend radius-in. (mm)	1	(25.4)	Operation	-20°C to +75°C	

Parametric Measurements

Mutual Capacitance	4.4 nF/100 m nom., 5.6 nF/100 m max. @ 1 KHz
DC resistance	9.09 Ohms/100 m max.
Skew	25 ns/100 m nom, 30 nsec/100 m max.
Pair to ground Unbalance	330 pF/100 m max.
Velocity of Propagation	70% nom.
Input Impedance	100 ± 13% 0.772-100 MHz 100 ± [13+15log (F/100)] 100-350 MHz
DC Resistance Unbalance:	5% max.

Technical Data - Electrical

FREQ MHz	SRL (dB)	RL (dB)	IL (dB/100m)	PS-NEXT (dB)	NEXT (dB)	ELFEXT (dB)	PS-ELFEXT (dB)	LCL/TCL (dB)	EL TCTL (dB)
	min.	min.	max.	min.	min.	min.	min.	min.	min.
1	26.0	20.0	2.4	73.3	75.3	68.8	65.8	50.0	35.0
4	26.0	23.6	4.6	64.3	66.3	56.7	53.7	43.0	22.0

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10	26.0	26.0	7.1	58.3	60.3	48.8	45.8	40.0	15.0
16	26.0	26.0	9.0	55.3	57.3	44.7	41.7	37.0	10.9
20	26.0	26.0	10.1	53.8	55.8	42.7	39.7	36.0	9.0
31.25	25.0	25.0	12.7	50.9	52.9	38.9	35.9	35.1	5.1
62.5	23.5	23.5	18.4	46.4	48.4	32.8	29.8	32.0	—
100	22.5	22.5	23.6	43.3	45.3	28.8	25.8	30.0	—
200	21.0	21.0	34.6	38.8	40.8	22.7	19.7	27.0	—
250	20.5	20.5	39.1	37.3	39.3	20.8	17.8	26.0	—
350	19.8	19.8	47.4	35.2	37.2	17.9	14.9	—	—
500	19.0	19.0	58.3	32.8	34.8	14.8	11.8	—	—

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 tables of data shown which are presented to demonstrate our guarantees at “representative” frequencies. Values above 350 MHz are provided for engineering information. Limited Combustible version also available. Other jacket colors available.

Supported Category 6 Applications

STANDARD	APPLICATION	SPEED
IEEE 802.3	1000BASE-T	1 Gb/s
TIA/EIA-854	1000BASE-TX	1 Gb/s
ATM	155Mb/s	155 Mb/s
IEEE 802.3	100BASE-TX	100 Mb/s
CDDI		100 Mb/s
IEEE 802.3	10BASE-T	10 Mb/s
IEEE 802.3 af	PoE	1 Gb/s
IEEE 802.3 at	PoE+, Type 1 & 2	1 Gb/s

Selling information

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