LANmark-6 Cable

LANMARK-6 F/UTP LSZH 500M REEL

Aginode Ref: N100.672

- Comply with all Category 6 cable standards
- Support Class E applications
- Central cross member maintains geometry and performance
- Tested up to 350MHz



STANDARDS

ANSI/TIA-568-C.2
EN 50288
IEC 61156-5
ISO/IEC 11801-1

Application

Aginode LANmark-6 cables are the ideal solution for most of today's network requirements in normal office environments. They are manufactured and tested to the latest Category 6 specifications defined in the International and American cable standards and are designed to meet the quality and performance criteria needed to support all applications up to 250 MHz.

- 10baseT Ethernet
- 100baseTX Fast Ethernet
- 1000baseTX Gigabit Ethernet
- 155 MBit ATM
- 622 MBit ATM
- 1.2 Gbit ATM
- future class E applications

Design

The LANmark-6 F/UTP cable has AWG 23 solid copper wires complying with IEC 60228.
The PE central cross filler helps maintaining the stability of the cable geometry and reduces the risk of a reduction in performance when bending the cable.
The cable has an Orange LSZH sheath with flame retardant properties compliant with IEC 60332-1.

Performance

Tested to 350 MHz and with guaranteed performance to 250 MHz, Aginode LANmark-6 cables exceed the requirements of

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the International, European and American cable standards, including ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.

Installation

The LANmark-6 F/UTP cable has a shielded construction offering a global foil around the 4 pairs with the aluminium side facing inwards. For bonding purposes, the foil should be folded back so that the aluminium side faces outwards, in order to establish contact with the EMC rear cover of the LANmark connector, allowing continuity of the shielding throughout the entire link.

To support the correct set-up of hand held analysers for installation testing, the actual cable NVP value is given in the cable's print legend.

Guarantees

The LANmark-6 cable performance is guaranteed to meet or exceed the requirements of the above mentioned standards.

Traceability codes on both cable and packaging ensure quality validation of the installed cable.

Installations with LANmark-6 cable and connectivity are qualified for a 25 year full system warranty, which includes Parts, Channel Performance, Application Support and Labour, as described in the Aginode Certified System Warranty.

Electrical Performance LANmark-6 Cable

	IL		NEXT		PSNEXT		ACR-F		PS ACR-F		RL	
Freq.	in Db/100m		in dB		in dB		in dB		in dB		in dB	
in MHz	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
1	2,0	2,0	74,3	80,3	72,3	78,3	67,8	72,8	64,8	69,8	20,0	22,0
4	3,8	3,8	65,3	71,3	63,3	69,3	55,8	60,8	52,8	57,8	23,0	25,0
10	6,0	6,0	59,3	65,3	57,3	63,3	47,8	52,8	44,8	49,8	25,0	27,0
16	7,6	7,6	56,2	62,2	54,2	60,2	43,7	48,7	40,7	45,7	25,0	27,0
20	8,5	8,5	54,8	60,8	52,8	58,8	41,8	46,8	38,8	43,8	25,0	27,0
31,25	10,7	10,7	51,9	57,9	49,9	55,9	37,9	42,9	34,9	39,9	23,6	25,6
62,5	15,4	15,4	47,4	53,4	45,4	51,4	31,9	36,9	28,9	33,9	21,5	23,5
100	19,8	19,8	44,3	50,3	42,3	48,3	27,8	32,8	24,8	29,8	20,1	22,1
155	25,2	25,2	41,4	47,4	39,4	45,4	24,0	29,0	21,0	26,0	18,8	20,8
200	29,0	29,0	39,8	45,8	37,8	43,8	21,8	26,8	18,8	23,8	18,0	20,0
250	32,8	32,8	38,3	44,3	36,3	42,3	19,8	24,8	16,8	21,8	17,3	19,3
300	-	36,4	-	43,1	-	41,1	-	23,3	-	20,3	-	18,8
350	-	39,8	-	42,1	-	40,1	-	21,9	-	18,9	-	18,3

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Characteristics

Construction characteristics	
Colour	Orange
Screen	Aluminium foil
Outer sheath	LSZH
Type of cable	F/UTP
Dimensional characteristics	
Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.13 mm
Nominal outer diameter (mm)	7.4 mm
Electrical characteristics	
Mutual capacitance	56 nF/km
Characteristic impedance	100 Ohm
Max. DC resistance of the conductor at 20°C	85 Ohm/km
Mechanical characteristics	
Maximum operating pulling force	100 N
Transmission characteristics	
Skew	30 ns/100m
Attenuation Crosstalk Ratio, 250MHz	5.5 dB/100m
Nominal Velocity of Propagation (NVP)	69 %
Coupling attenuation at 30 MHz	>70 dB
Propagation delay, max. 100 MHz	536 ns/100m
Usage characteristics	
Range	LANmark-6
Operating temperature, range	-20...60 °C
Category	Cat. 6
Flame retardant	IEC 60332-1
Smoke density	IEC 61034
Packaging	Reel

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Ambient installation temperature, range	-10...60 °C
Minimum Bend Radius - During Installation (under Tension)	58 mm
Minimum Bend Radius - Installed	29 mm

Documentation

Freetable LM6 cables_Family_2.xls xls — 23 KB Download

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