LANmark-6 U/UTP Cable

LANMARK-6 U/UTP AWG23 CAT 6 350MHZ PVC ECA GREY 305M BOX

Aginode Ref: N100.617-DE

- 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 50173-1
EN 50288
IEC 61156-5
ISO/IEC 11801

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 U/UTP cables have a central cross element which helps maintaining the stability of the cable geometry and reduces the risk of a reduction in performance when bending the cable.
The cables are available with a Dark Grey PVC or an Orange LSZH sheath. Both versions have flame retardant properties compliant with IEC 60332-1 and are compliant with EuroClass Eca according to EN50575:2014 +A1:2016.

EuroClass Dca and Cca versions are also available.

Performance

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.

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

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 U/UTP 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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LANmark-6 U/UTP AWG23 Cat 6 350MHz PVC Eca Grey 305m box

Characteristics

Construction characteristics	
Colour	Grey
Screen	Unshielded
Outer sheath	PVC
Type of cable	U/UTP
Dimensional characteristics	
Approximate weight	43 kg/km
Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.02 mm
Nominal outer diameter (mm)	6.3 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)	68 %
Coupling attenuation at 30 MHz	45 dB
Propagation delay, max. 100 MHz	536 ns/100m
Usage characteristics	
Range	LANmark-6
Field of application	Indoor
Length	305 m

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Operating temperature, range	-20...60 °C
Category	Cat. 6
Flame retardant	IEC 60332-1
Packaging	Box
Ambient installation temperature, range	-10...60 °C
Minimum Bend Radius - During Installation (under Tension)	50 mm
Minimum Bend Radius - Installed	25 mm

Documentation

DoP EN N100617-DE pdf — 182 KB Download

Declaration of Performance

LANmark-6 U/UTP AWG23 Cat 6 350MHz PVC Eca Grey 305m box pdf — 141.43 KB Download

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