LANmark-6A Cable

LANMARK-6A F1/UTP AWG23 CAT 6A LSZH CCA S1A D1 A1 ORANGE 1000M REEL

Aginode Ref: N100.622G-OC

- Ideal cable for 10GBase-T application
- Full compliance to latest standards for Category 6A and Class EA
- Guaranteed performance up to 500MHz
- Global screen offering Alien Crosstalk immunity
- Foil with aluminium side facing outwards providing easy bonding with connector
- Enhanced reaction-to-fire performance according to CPR classification Cca-s1a,d1,a1 (h/EN50575:2014+A1:2016)



STANDARDS

ANSI/TIA 568.2-D
EN 50173-1
IEC 61156-5
IEEE 802.3bt (PoE++)
ISO/IEC 11801
EN 50288

Application

LANmark-6A cables are the ideal solution for a 10G Ethernet network. The range has been designed specifically to support the higher frequencies required for 10 Gigabit Ethernet, while maintaining full backwards compatibility with today's needs. All LANmark-6A cables are shielded, in order to ensure immunity to Alien Crosstalk and other external interferences.

- 10Base-T Ethernet
- 100Base-TX Fast Ethernet
- 1000Base-TX Gigabit Ethernet
- 10GBase-T 10 Gigabit Ethernet IEEE 802.3
- 155 Mbit ATM
- 1.2 Gbit ATM
- future Cat 6A and Class EA applications
- PoE++ Type 4 (IEEE 802.3bt)

Performance

With guaranteed performance to 500MHz, Aginode LANmark-6A 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 568.2-D

When used in combination with Aginode LANmark-6A connectors and LANmark-6A Ultim patch cords, the system supports the 10GBase-T applications as defined in IEEE 802.3an and meets or exceeds the link and channel

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requirements for Category 6A and Class EA as defined in TIA/EIA 568.2-D and ISO/IEC 11801.

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

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

Installations with LANmark-6A 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-6A F1/UTP Cable

Freq in MHz	Attn in dB		NEXT in dB		PSNEXT in dB		ACR-F in dB		PS ACR-F in dB		PS ANEXT in dB		PS AACR-F in dB		RL in dB	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
1	2,1	2,1	74,3	79,3	72,3	77,3	67,8	87,8	64,8	84,8	67,0	90,0	67,0	76,7	20,0	26,0
4	3,8	3,8	65,3	70,3	63,3	68,3	55,8	75,8	52,8	72,8	67,0	90,0	66,2	75,9	23,0	29,0
10	5,9	5,9	59,3	64,3	57,3	62,3	47,8	67,8	44,8	64,8	67,0	87,0	58,2	67,9	25,0	31,0
16	7,5	7,5	56,2	61,2	54,2	59,2	43,7	63,7	40,7	60,7	67,0	85,0	54,1	63,8	25,0	31,0
20	8,4	8,4	54,8	59,8	52,8	57,8	41,8	61,8	38,8	58,8	67,0	84,0	52,2	61,9	25,0	31,0
31,25	10,5	10,5	51,9	56,9	49,9	54,9	37,9	57,9	34,9	54,9	67,0	82,1	48,3	58,0	23,6	29,6
62,5	15,0	15,0	47,4	52,4	45,4	50,4	31,9	51,9	28,9	48,9	65,6	79,0	42,3	52,0	21,5	27,5
100	19,1	19,1	44,3	49,3	42,3	47,3	27,8	47,8	24,8	44,8	62,5	77,0	38,2	47,9	20,1	26,1
155	24,1	24,1	41,4	46,4	39,4	44,4	24,0	44,0	21,0	41,0	59,6	74,1	34,4	44,1	18,8	24,8
200	27,6	27,6	39,8	44,8	37,8	42,8	21,8	41,8	18,8	38,8	58,0	72,5	32,2	41,9	18,0	24,0
250	31,1	31,1	38,3	43,3	36,3	41,3	19,8	39,8	16,8	36,8	56,5	71,0	30,2	39,9	17,3	23,3
300	34,3	34,3	37,1	40,1	35,1	38,1	18,3	38,3	15,3	35,3	55,3	69,8	28,7	38,4	16,8	22,8
500	45,3	45,3	33,8	36,8	31,8	34,8	13,8	33,8	10,8	30,8	52,0	66,5	24,2	33,9	15,2	21,2

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LANmark-6A F1/UTP AWG23 Cat 6A LSZH Cca s1a d1 a1 Orange 1000m reel

Characteristics

Construction characteristics	
Colour	Orange
Outer sheath	LSZH
Type of cable	F/UTP
Dimensional characteristics	
Approximate weight	52 kg/km
Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.2 mm
Nominal outer diameter (mm)	7.5 mm
Electrical characteristics	
Characteristic impedance	100 Ohm
Max. DC resistance of the conductor at 20°C	80 Ohm/km
Max. transfer impedance at 30 MHz (Ohm/km)	120 Ohm/km
Mutual capacitance	45 nF/km
Mechanical characteristics	
Maximum operating pulling force	100 N
Transmission characteristics	
Coupling attenuation at 30 MHz	>70 dB
Nominal Velocity of Propagation (NVP)	68 %
Propagation delay, max. 100 MHz	536 ns/100m
Skew	45 ns/100m
Usage characteristics	
Ambient installation temperature, range	-10...60 °C
Category	Cat. 6A
Flame retardant	IEC 60332-1
Gases corrosivity	IEC 60754-1; IEC 60754-2

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Length	1000 m
Minimum Bend Radius - During Installation (under Tension)	60 mm
Minimum Bend Radius - Installed	30 mm
Operating temperature, range	-20...60 °C
Packaging	Reel
Range	LANmark-6A
Smoke density	IEC 61034

Documentation

Freetable LM6A F1UTP V3_2.xls xls — 21 KB Download

Declaration of Performance

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