

LANmark-6A Cable (International)

LANMARK-6A F/FTP AWG23 CAT 6A LSZH ORANGE 500M REEL

Aginode Ref: N100.694G

- Ideal cable for 10GBase-T application
- Full compliance to latest standards for Category 6A and Class EA
- Guaranteed performance up to 500MHz
- Individual pair shielding offering Alien Crosstalk immunity

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

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-C.2.

When used in combination with Aginode LANmark-6A Evo 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 requirements for Category 6A and Class EA as defined in TIA/EIA 568-C.2 and ISO/IEC 11801.

Installation



STANDARDS

ANSI/TIA-568-C.2
EN 50173-1
EN 50288-4-1
IEC 61156-5
ISO/IEC 11801

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The LANmark-6A cables have the advantage of offering flexibility for installation and termination.

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 Cable (International)

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 ACR-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	67.8	64.8	64.8	67.0	90.0	67.8	78.7	20.0	26.0
4	3.8	3.8	65.3	70.3	63.3	68.3	55.8	55.8	52.8	52.8	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	47.8	44.8	44.8	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	43.7	40.7	40.7	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	41.8	38.8	38.8	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	37.9	34.9	34.9	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	31.9	28.9	28.9	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	27.8	24.8	24.8	65.5	77.9	39.2	47.9	20.1	26.1
150	25.1	25.1	41.4	46.4	39.4	44.4	24.0	24.0	21.0	21.0	65.6	74.1	34.4	41.1	19.8	24.8
200	27.6	27.6	39.8	44.8	37.8	42.8	21.8	21.8	18.8	18.8	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	19.8	16.8	16.8	56.5	71.0	30.2	39.9	17.3	23.3
300	34.3	34.3	37.1	42.1	35.1	40.1	18.3	18.3	15.3	15.3	55.3	69.8	28.7	38.4	16.8	22.8
600	45.3	45.3	33.8	38.8	31.8	36.8	13.8	13.8	10.8	10.8	52.0	66.5	24.2	33.9	15.2	21.2

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Characteristics

Construction characteristics

Outer sheath	LSZH
Type of cable	F/FTP
Colour	Orange

Dimensional characteristics

Conductor cross-section (AWG/KCMIL)	23
Nominal outer diameter (mm)	7.2 mm
Diameter over insulation	1.36 mm

Electrical characteristics

Max. DC resistance of the conductor at 20°C	85 Ohm/km
Mutual capacitance	45 nF/km
Max. transfer impedance at 30 MHz (Ohm/km)	120 Ohm/km
Characteristic impedance	100 Ohm

Mechanical characteristics

Maximum operating pulling force	100 N
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Transmission characteristics

Propagation delay, max. 100 MHz	536 ns/100m
Nominal Velocity of Propagation (NVP)	75 %
Skew	45 ns/100m
Coupling attenuation at 30 MHz	>85 dB
Attenuation Crosstalk Ratio, 250MHz	37.2 dB/100m

Usage characteristics

Packaging	Reel
Operating temperature, range	-20...60 °C
Minimum Bend Radius - During Installation (under Tension)	60 mm
Minimum Bend Radius - Installed	30 mm
Gases corrosivity	IEC 60754-1; IEC 60754-2
Smoke density	IEC 61034

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Ambient installation temperature, range	-10...60 °C
Category	Cat. 6A
Range	LANmark-6A
Flame retardant	IEC 60332-1

Documentation

Freetable LM6A FFTP V3.xls xls — 25.5 KB [Download](#)