

# LANmark-6A Cable GB 31247 B1

LANMARK-6A F/UTP AWG23 CAT 6A LSZH GB 31247 B1 (D0,T0,A1) ORANGE 500M REEL

**Aginode Ref:** N100.672G-GB1

- 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
- GB 31247 B1-(d0,t0.a1) compliance

## 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

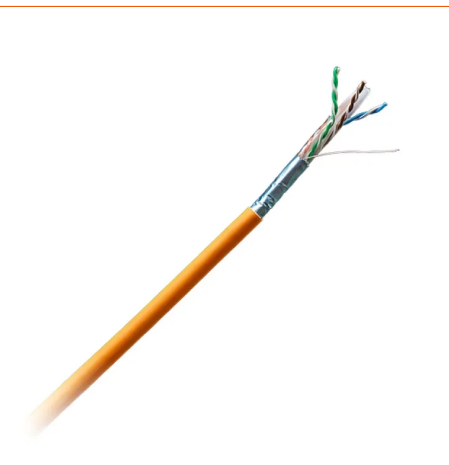
With guaranteed performance to 500MHz, Aginode LANmark-6A cables exceed the requirements of the International, European and American cable standards, including ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.

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

The LANmark-6A cables have the advantage of offering equal dimensions and flexibility as the equivalent LANmark-6

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## STANDARDS

ANSI/TIA-568-C.2  
EN 50173-1  
EN 50288-4-1  
GB 31247  
IEC 61156-5  
ISO/IEC 11801

screened cables with the same ease of installation and termination.

The LANmark-6A F/UTP cable has a shielded construction featuring a global foil around the 4 pairs. 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, providing 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

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 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	79.2	72.3	77.2	67.8	67.8	64.8	64.8	67.0	90.0	67.0	70.7	29.0	29.0
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	63.5	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	42.1	35.1	40.1	18.3	38.3	15.3	35.3	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	33.8	10.8	30.8	52.0	66.5	24.2	33.9	15.2	21.2

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# LANmark-6A F/UTP AWG23 Cat 6A LSZH GB 31247 B1 (d0,t0,a1) Orange 500m reel

## Characteristics

### Construction characteristics

Colour	Orange
Outer sheath	LSZH
Type of cable	F/UTP

### Dimensional characteristics

Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.12 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	93.8 Ohm/km

### Mechanical characteristics

Maximum operating pulling force	100 N
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### Transmission characteristics

Skew	45 ns/100m
Propagation delay, max. 100 MHz	536 ns/100m

### Usage characteristics

Range	LANmark-6A
Operating temperature, range	-20...60 °C
Category	Cat. 6A
Packaging	Reel
Ambient installation temperature, range	-10...60 °C
Minimum Bend Radius - During Installation (under Tension)	60 mm
Minimum Bend Radius - Installed	30 mm

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