# LANmark-6 Cable

**LANMARK-6 U/UTP LSZH IEC 60332-3-24 305M REEL**

**Aginode Ref:** N100.604FR

- Complies to all Category 6 cable standards
- Supports all Class E applications
- Central cross member maintains geometry and performance
- Tested up to 350MHz
- Fire retardant according to IEC 60332-3-24



## STANDARDS

ANSI/TIA-568-C.2
EN 50173-1
IEC 60332-3
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 cables have AWG 23 solid copper wires. The 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 cables has fire retardant properties compliant with IEC 60332-3-24.

## Performance

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,

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including ISO/IEC 11801, IEC 61156-5, EN 50173, EN 50288 and TIA/EIA 568-C.2.

## 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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# LANmark-6 U/UTP LSZH IEC 60332-3-24 305m reel

## Characteristics

| | |
|---|---|
| **Construction characteristics** | |
| Outer sheath | LSZH-FR |
| Screen | Unshielded |
| Type of cable | U/UTP |
| Colour | Orange |
| **Dimensional characteristics** | |
| Conductor cross-section (AWG/KCMIL) | 23 |
| Nominal outer diameter (mm) | 6.6 mm |
| Diameter over insulation | 1.02 mm |
| **Electrical characteristics** | |
| Max. DC resistance of the conductor at 20°C | 85 Ohm/km |
| Mutual capacitance | 56 nF/km |
| Characteristic impedance | 100 Ohm |
| **Mechanical characteristics** | |
| Maximum operating pulling force | 100 N |
| **Transmission characteristics** | |
| Propagation delay, max. 100 MHz | 536 ns/100m |
| Nominal Velocity of Propagation (NVP) | 67 % |
| Skew | 45 ns/100m |
| Coupling attenuation at 30 MHz | 45 dB |
| Attenuation Crosstalk Ratio, 250MHz | 5.5 dB/100m |
| **Usage characteristics** | |
| Packaging | Reel |
| Operating temperature, range | -20...60 °C |
| Minimum Bend Radius - During Installation (under Tension) | 52 mm |
| Minimum Bend Radius - Installed | 26 mm |
| Smoke density | IEC 61034 |
| Ambient installation temperature, range | -10...60 °C |

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| | |
|---|---|
| Category | Cat. 6 |
| Range | LANmark-6 |
| Fire retardant | IEC 60332-3-24 (cat C) |
| Flame retardant | IEC 60332-1 |

## Documentation

Freetable LM6 cables_Family_2.xls xls — 23 KB Download

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