# LANmark-6 Shielded Cable

**LANMARK-6 F1/UTP AWG24 CAT 6 350MHZ LSZH DCA S2 D1 A1 ORANGE 500M REEL**



**Aginode Ref:** N100.624-OD

- F1/UTP construction
- Compliant with all Category 6 cable standards
- Support Class E applications
- Central cross member maintains geometry and performance
- Tested up to 350 MHz
- Orange LSZH sheath

## 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 shielded cables have AWG 24 solid copper wires and comply with IEC 60228.
The PE 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 come standard with an Orange LSZH sheath.

## Performance

## STANDARDS

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

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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 Shielded 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 F1/UTP AWG24 Cat 6 350MHz LSZH Dca s2 d1 a1 Orange 500m reel

## Characteristics

| | |
|---|---|
| **Construction characteristics** | |
| Colour | Orange |
| Screen | Aluminium foil |
| Outer sheath | LSZH |
| Type of cable | F/UTP |
| **Dimensional characteristics** | |
| Approximate weight | 52 kg/km |
| Conductor cross-section (AWG/KCMIL) | 24 |
| Diameter over insulation | 1.13 mm |
| Nominal outer diameter (mm) | 7.3 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) | 70 % |
| Coupling attenuation at 30 MHz | >70 dB |
| Propagation delay, max. 100 MHz | 536 ns/100m |
| **Usage characteristics** | |
| Range | LANmark-6 |
| Field of application | Indoor |
| Length | 500 m |

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| | |
|---|---|
| Operating temperature, range | -20...60 °C |
| Category | Cat. 6 |
| Flame retardant | IEC 60332-1 |
| Smoke density | IEC 61034 |
| Packaging | Reel |
| Ambient installation temperature, range | -10...60 °C |
| Minimum Bend Radius - During Installation (under Tension) | 58 mm |
| Minimum Bend Radius - Installed | 29 mm |

## ドキュメンテーション

Freetable LM6 cables_Family_2.xls xls — 23 KB　ダウンロード

## パフォーマンス宣言

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