# LANmark-6A Cable

**LANMARK-6A S/FTP AWG23 CAT 6A LSZH DCA S2 D1 A1 ORANGE 500M REEL**

**Aginode Ref:** N100.684G-OD

- 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 with global braid offering Alien Crosstalk immunity
- PoE++ Type 4 support up to 90W/71W (IEEE 802.3bt)
- Reaction-to-fire performance according to CPR classification Dca-s2,d1,a1 (h/EN50575:2014+A1:2016)

## STANDARDS

ANSI/TIA 568.2-D
EN 50173-1
EN 50288-4-1
IEC 61156-5
IEEE 802.3bt (PoE++)
ISO/IEC 11801

## 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. LANmark-6A shielded cables 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
- 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 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.

# LANmark-6A S/FTP AWG23 Cat 6A LSZH Dca s2 d1 a1 Orange 500m reel

## Characteristics

| | |
|---|---|
| **Construction characteristics** | |
| Colour | Orange |
| Outer sheath | LSZH |
| Type of cable | S/FTP |
| **Dimensional characteristics** | |
| Approximate weight | 49 kg/km |
| Conductor cross-section (AWG/KCMIL) | 23 |
| Diameter over insulation | 1.36 mm |
| Nominal outer diameter (mm) | 7.0 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 | >85 dB |
| Nominal Velocity of Propagation (NVP) | 82 % |
| Propagation delay, max. 100 MHz | 536 ns/100m |
| Skew | 25 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 |

| | |
|---|---|
| Length | 500 m |
| Minimum Bend Radius - During Installation (under Tension) | 56 mm |
| Minimum Bend Radius - Installed | 28 mm |
| Operating temperature, range | -20...60 °C |
| Packaging | Reel |
| Range | LANmark-6A |
| Smoke density | IEC 61034 |

## Documentation

Electrical performance LANmark-6A SFTP cable_030325.pdf pdf — 71.57 KB Download

## Declaration of Performance

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