

LANmark-6A Cable

LANMARK-6A F/FTP AWG23 CAT 6A LSZH CCA S1A D1 A1 ORANGE 500M REEL

Aginode Ref: N100.694G-OC

- 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
- Enhanced reaction-to-fire performance according to CPR classification Cca-s1a,d1,a1 (h/EN50575:2014+A1:2016)

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
- 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



STANDARDS

ANSI/TIA 568.2-D
EN 50173-1
EN 50288-4-1
IEC 60332-3-24
IEC 61156-5
IEEE 802.3bt (PoE++)
ISO/IEC 11801

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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.

Electrical Performance LANmark-6A FFTP Cable

| Freq in MHz | Att 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 | 104.3 | 72.3 | 102.3 | 67.8 | 92.8 | 64.8 | 89.8 | 67.0 | 90.0 | 67.0 | 76.7 | 20.0 | 26.0 |
| 4 | 3.8 | 3.8 | 65.3 | 95.3 | 63.3 | 93.3 | 55.8 | 80.8 | 52.8 | 77.8 | 67.0 | 90.0 | 66.0 | 75.9 | 22.0 | 29.0 |
| 10 | 5.9 | 5.9 | 59.3 | 89.3 | 57.3 | 87.3 | 47.8 | 72.8 | 44.8 | 69.8 | 67.0 | 87.0 | 58.2 | 67.9 | 25.0 | 31.0 |
| 16 | 7.5 | 7.5 | 56.2 | 86.2 | 54.2 | 84.2 | 43.7 | 68.7 | 40.7 | 65.7 | 67.0 | 85.0 | 54.1 | 63.8 | 25.0 | 31.0 |
| 20 | 8.4 | 8.4 | 54.8 | 84.8 | 52.8 | 82.8 | 41.8 | 66.8 | 38.8 | 63.8 | 67.0 | 84.0 | 52.2 | 61.9 | 25.0 | 31.0 |
| 31.25 | 10.5 | 10.5 | 51.9 | 81.9 | 49.9 | 79.9 | 37.9 | 62.9 | 34.9 | 59.9 | 67.0 | 82.1 | 48.3 | 58.0 | 23.0 | 29.0 |
| 62.5 | 15.0 | 15.0 | 47.4 | 77.4 | 45.4 | 75.4 | 31.9 | 56.9 | 28.9 | 53.9 | 65.6 | 79.0 | 42.3 | 52.0 | 21.5 | 27.5 |
| 100 | 19.1 | 19.1 | 44.3 | 74.3 | 42.3 | 72.3 | 27.8 | 52.8 | 24.8 | 49.8 | 62.5 | 77.0 | 38.2 | 47.9 | 20.1 | 26.1 |
| 150 | 24.1 | 24.1 | 41.4 | 71.4 | 39.4 | 69.4 | 24.0 | 49.0 | 21.0 | 46.0 | 59.6 | 74.1 | 34.4 | 44.1 | 18.8 | 24.8 |
| 200 | 27.6 | 27.6 | 39.8 | 69.8 | 37.8 | 67.8 | 21.8 | 46.8 | 18.8 | 43.8 | 58.0 | 72.5 | 32.2 | 41.9 | 18.0 | 24.0 |
| 250 | 31.1 | 31.1 | 38.3 | 68.3 | 36.3 | 66.3 | 19.8 | 44.8 | 16.8 | 41.8 | 56.5 | 71.0 | 30.2 | 39.9 | 17.3 | 23.3 |
| 300 | 34.3 | 34.3 | 37.1 | 67.1 | 35.1 | 65.1 | 18.3 | 43.3 | 15.3 | 40.3 | 55.3 | 69.6 | 28.7 | 38.4 | 16.8 | 22.8 |
| 500 | 45.3 | 45.3 | 33.8 | 63.8 | 31.8 | 61.8 | 13.8 | 38.8 | 10.8 | 35.8 | 52.0 | 66.5 | 24.2 | 33.9 | 15.2 | 21.2 |

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LANmark-6A F/FTP AWG23 Cat 6A LSZH Cca s1a d1 a1 Orange

500m reel

Characteristics

Construction characteristics

| | |
|---------------|--------|
| Colour | Orange |
| Outer sheath | LSZH |
| Type of cable | F/FTP |

Dimensional characteristics

| | |
|-------------------------------------|----------|
| Approximate weight | 59 kg/km |
| Conductor cross-section (AWG/KCMIL) | 23 |
| Diameter over insulation | 1.36 mm |
| Nominal outer diameter (mm) | 7.7 mm |

Electrical characteristics

| | |
|---|------------|
| Mutual capacitance | 45 nF/km |
| Characteristic impedance | 100 Ohm |
| Max. transfer impedance at 30 MHz (Ohm/km) | 120 Ohm/km |
| Max. DC resistance of the conductor at 20°C | 80 Ohm/km |

Mechanical characteristics

| | |
|---------------------------------|-------|
| Maximum operating pulling force | 100 N |
|---------------------------------|-------|

Transmission characteristics

| | |
|---------------------------------------|-------------|
| Skew | 30 ns/100m |
| Nominal Velocity of Propagation (NVP) | 82 % |
| Coupling attenuation at 30 MHz | >85 dB |
| Propagation delay, max. 100 MHz | 536 ns/100m |

Usage characteristics

| | |
|------------------------------|--------------------------|
| Range | LANmark-6A |
| Gases corrosivity | IEC 60754-1; IEC 60754-2 |
| Length | 500 m |
| Operating temperature, range | -20...60 °C |

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| | |
|---|-------------|
| Category | Cat. 6A |
| 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) | 62 mm |
| Minimum Bend Radius - Installed | 31 mm |

ドキュメンテーション

Freetable LM6A FFTP V3.xls xls — 25.5 KB [ダウンロード ↓](#)

パフォーマンス宣言

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