

# 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<br>in MHz | Att<br>in dB |      | NEXT<br>in dB |       | PSNEXT<br>in dB |       | ACR-F<br>in dB |      | PS ACR-F<br>in dB |      | PS ANEXT<br>in dB |      | PS AACR-F<br>in dB |      | RL<br>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 |
| 600            | 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

#### 구조적 특성

|               |           |
|---------------|-----------|
| 색상            | 주황색       |
| 피복            | 저연 할로겐 프리 |
| Type of cable | F/FTP     |

#### 치수

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

#### 전기적 특성

|  |            |
|--|------------|
| Mutual capacitance                         | 45 nF/km   |
| Characteristic impedance                   | 100 Ohm    |
| Max. transfer impedance at 30 MHz (Ohm/km) | 120 Ohm/km |
| 20° C에서 최대 도체 DC저항                         | 80 Ohm/km  |

#### 기계적 특성

|                                 |       |
|---------------------------------|-------|
| 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 |

#### 사용 특성

|                   |                          |
|-------------------|--------------------------|
| Range             | LANmark-6A               |
| Gases corrosivity | IEC 60754-1; IEC 60754-2 |
| Length            | 500 m                    |
| 操作温度范围            | -20...60 °C              |

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|   |             |
|---|-------------|
| Category                                | Cat. 6A     |
| 난연                                      | IEC 60332-1 |
| 연기밀도                                    | IEC 61034   |
| Packaging                               | Reel        |
| Ambient installation temperature, range | -10...60 °C |
| 최소 굽힘 반지름 - 설치시 (장력작용)                  | 62 mm       |
| 최소 굽힘 반지름 - 설치 후                        | 31 mm       |

## 문서

Freetable LM6A FFTP V3.xls xls — 25.5 KB [다운로드](#) ↓

## 성과 선언

LANmark-6A F/FTP AWG23 Cat 6A LSZH Cca s1a d1 a1 Orange 500m reel pdf — 141.41 KB [다운로드](#) ↓