

#### Contact

LAN Systems (Nexans Cabling Solutions) Phone: +44 (0)1256 486640 ncs.uk@nexans.com

# **LANmark-5 Cable**

LANconnect/LANmark-5 U/UTP LSZH 305m Box

Nexans ref.: N100.507

- Offers headroom to Category 5e standards
- · Performance guaranteed to 155MHz
- · Supports Gigabit Ethernet

### Description

### **Application**

Nexans LANconnect/LANmark-5 cable is designed to provide additional performance and bandwidth over and above the basic requirements of Category 5e. With modern high speed applications, installation effects can have a serious influence on the initial cable performance and therefore without sufficient headroom, problems can arise. The addition of transition points within the link can also lead to additional losses. Nexans LANconnect/LANmark-5 provides the additional headroom necessary to ensure that applications such as Gigabit Ethernet can run efficiently after installation. It is available in Grey PVC or Orange LSZH.



With guaranteed performance to 155MHz, Nexans LANconnect/LANmark-5 cables provide guaranteed additional headroom and bandwidth over and above the requirements of TIA 568-B and IEC 61156-5.

### Guarantees

Nexans LANconnect/LANmark-5 cables are covered by the guarantee that they are Category 5e and by a parts and labour warranty as described in the Nexans Certified System Warranty. Moreover they come with following guarantees:

- 3dB min. headroom over IEC 61156-5 and TIA 568-B Cat 5e NEXT
- Improved ACR
- Superior EMC performance
- 155MHz guaranteed performance
- When used in a full LANmark system, full LANmark D channel warranty can be obtained.



# LANmark-5

### Standards

International ISO/IEC 11801; ISO/IEC 61156-5

National TIA/EIA-568-B.2



operation bending rad. 40 mm



static bending rad. 20 mm



Ambient installation T°C range 0 .. 50 °C



Operating temp range -20 .. 60 °C



Storage temperature, range -20 .. 70 °C



Flame retardant IEC 60332-1



#### Contact

LAN Systems (Nexans Cabling Solutions) Phone: +44 (0)1256 486640 ncs.uk@nexans.com

# **LANmark-5 Cable**

LANconnect/LANmark-5 U/UTP LSZH 305m Box

Nexans ref.: N100.507

### Characteristics

| Construction characteristics            |             |
|---|-------------|
| Type of cable                           | U/UTP       |
| Outer sheath                            | LSZH        |
| Colour                                  | Orange      |
| Dimensional characteristics             |             |
| Diameter over insulation                | 0.9 mm      |
| Nominal outer diameter                  | 4.9 mm      |
| Approximate weight                      | 30 kg/km    |
| Conductor cross-section (AWG)           | 24          |
| Electrical characteristics              |             |
| Characteristic impedance                | 100 Ohm     |
| Transfer impedance                      | 20          |
| Transmission characteristics            |             |
| Coupling attenuation at 30 MHz          | 45 dB       |
| Skew                                    | 45 ns/100m  |
| Velocity of propagation                 | 68.0 %      |
| Propagation delay, max. 100 MHz         | 536 ns/100m |
| Jsage characteristics                   |             |
| Category                                | Cat. 5e     |
| Range                                   | LANmark-5   |
| Component function                      | Cable       |
| Laying operation bending radius         | 40 mm       |
| Minimum static operating bending radius | 20 mm       |
| Ambient installation temperature, range | 0 50 °C     |
| Operating temperature, range            | -20 60 °C   |
| Storage temperature, range              | -20 70 °C   |
| Fire load                               | 400 MJ/km   |
| Flame retardant                         | IEC 60332-1 |
| Length                                  | 305 m       |
| Packaging                               | Вох         |
|   |             |

## **Electrical Performance**

all values are specified at 20°C

| Frequency | Attenuation<br>dB/100m | NEXT<br>dB | ACR<br>dB/100m | PSNEXT(*)<br>dB | ELFEXT<br>dB/100m | PSELFEXT<br>dB/100m | RL<br>dB |
|-----------|------------------------|------------|----------------|-----------------|-------------------|---------------------|----------|
| 1         | 2.1                    | 68.3       | 66.2           | 65.3            | 63.8              | 61.0                | 20.0     |
| 4         | 4.0                    | 59.3       | 55.3           | 56.3            | 51.7              | 49.0                | 23.0     |
| 10        | 6.3                    | 53.3       | 47.0           | 50.3            | 43.8              | 41.0                | 25.0     |
| 16        | 8.0                    | 50.3       | 42.3           | 47.3            | 39.7              | 36.9                | 25.0     |
| 20        | 9.0                    | 48.8       | 39.8           | 45.8            | 37.7              | 35.0                | 25.0     |
| 31.25     | 11.4                   | 45.9       | 34.5           | 42.9            | 33.9              | 31.1                | 23.6     |



#### Contact

LAN Systems (Nexans Cabling Solutions) Phone: +44 (0)1256 486640 ncs.uk@nexans.com

# **LANmark-5 Cable**

### LANconnect/LANmark-5 U/UTP LSZH 305m Box

| 62.5 | 16.5 | 41.4 | 24.9 | 38.4 | 27.9 | 25.1 | 21.5 |
|------|------|------|------|------|------|------|------|
| 100  | 21.3 | 38.3 | 17.0 | 35.3 | 23.8 | 21.0 | 20.1 |
| 155  | 27.2 | 35.5 | 8.3  | 32.5 | 19.9 | 17.2 | 18.7 |

<sup>(\*)</sup> Dual cable versions additionally comply to the additional PSNEXT requirements for multi-unit cables as specified in the relevant TIA and IEC cable standards.

### Selling delivery information

Installation: Nexans LANconnect/LANmark-5 cables are designed to be installer friendly. The additional performance headroom provides confidence for difficult installations.