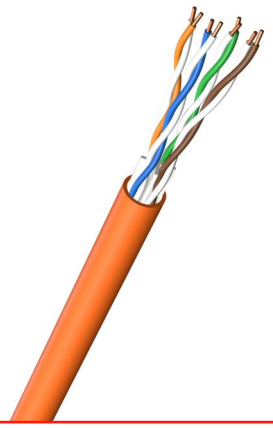
LANmark-6 U/UTP Cable

LANmark-6 U/UTP AWG23 Cat 6 350MHz LSZH Eca Orange 305m box



Nexans Ref.: N100.607-OE
Country Ref.: 1087765

FIRE PERFORMANCE CLASS

E_{ca}

Eca

- Comply with all Category 6 cable standards
- Support Class E applications
- Central cross member maintains geometry and performance
- Tested up to 350MHz

STANDARDS

Product EN 50173-1; EN 50288; IEC 61156-5

International ISO/IEC 11801

APPLICATION

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 U/UTP cables have a central cross element which helps maintaining the stability of the cable geometry and reduces the risk of a reduction in performance when bending the cable.
The cables are available with a Dark Grey PVC or an Orange LSZH sheath. Both versions have flame retardant properties compliant with IEC 60332-1 and are compliant with EuroClass Eca according to EN50575:2014 +A1:2016.

EuroClass Dca and Cca versions are also available.

Performance

Tested to 350 MHz and with guaranteed performance to 250 MHz, 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 Nexans Certified System Warranty.

Ambient installation T°C range
-10 ... 60 °C

Operating temp.
-20 ... 60 °C

Flame retardant
IEC 60332-1

Fire retardant
-

Smoke density
IEC 61034

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Nexans is indicative only and shall not be binding on Nexans or be treated as constituting a representation on the part of Nexans.

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CHARACTERISTICS

Construction characteristics	
Type of cable	U/UTP
Outer sheath	LSZH
Colour	Orange
Screen	Unshielded
Dimensional characteristics	
Minimum outer diameter	- mm
Maximum outer diameter	- mm
Diameter over insulation	1.02 mm
Conductor cross-section (AWG/KCMIL)	23
Approximate weight	43 kg/km
Nominal outer diameter	6.3 mm
Number of pairs	-
Electrical characteristics	
Characteristic impedance	100 Ohm
Max. DC resistance of the conductor at 20°C	85 Ohm/km
Mutual capacitance	56 nF/km
Transmission characteristics	
Attenuation Crosstalk Ratio, 250MHz	5.5 dB/100m
Coupling attenuation at 30 MHz	45 dB
Nominal Velocity of Propagation (NVP)	68 %
Propagation delay, max. 100 MHz	536 ns/100m
Skew	30 ns/100m
Mechanical characteristics	
Maximum operating pulling force	100 N
Usage characteristics	
Category	Cat. 6
Range	LANmark-6
Minimum Bend Radius - During Installation (under Tension)	50 mm
Minimum Bend Radius - Installed	25 mm
Ambient installation temperature, range	-10 ... 60 °C
Operating temperature, range	-20 ... 60 °C
Length	305 m
Packaging	Box
Field of application	Indoor
Fire safety characteristics	
Flame retardant	IEC 60332-1
Fire retardant	-
Smoke density	IEC 61034

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ELECTRICAL PERFORMANCE LANMARK-6 U/UTP 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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