LANmark-7 Cable

LANMARK-7 S/FTP AWG23 CAT 7 LSZH CCA S1A D1 A1 ORANGE 1000M REEL

Aginode Ref: N100.365-OC

- S/FTP cable with individually shielded pairs and global braid
- Exceeds Category 7 ACR with >30dB
- Optimised for use with LANmark-7A GG45 connector
- Easy to install
- Enhanced reaction-to-fire performance according to CPR classification Cca-s1a,d1,a1 (h/EN50575:2014+A1:2016)



STANDARDS

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

Description

LANmark-7 cable has an S/FTP construction with individual pair foils and an overall braid offering superior performance in terms of ACR. It is fully compliant with the Category 7 standards and when installed together with the GG45 LANmark-7A connector, the system is guaranteed to exceed all channel requirements in all configuration scenarios (up to 4-connector channels).

Application

LANmark-7 will support all current and planned data applications developed for cabling up to Class F.

- All Ethernet applications including
- 1000Base-T
- 1000Base-TX
- 10GBase-T
- CATV up to 862MHz
- Any future Class F application

Installation

Ease of Installation is one of the unique features of LANmark-7 cable. Extra attention has been paid to ensure screen coverage is maintained both during and after installation. The cable has been designed specifically to offer both optimum performance and ease of termination when used in conjunction with the LANmark-7A GG45 connector.

To support the correct set-up of hand held analysers for installation testing, the actual cable NVP value is given in the

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cable’s print legend.

Electrical Performance LANmark-7 Cable

Frequency (MHz)	Attenuation (dB/100m)		NEXT (in dB)		ACR (in dB)		PS-NEXT (in dB)		ACR-F (in dB)		PS-ACR-F (in dB)		Return Loss (in dB)	
	Max.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.	Min.	Typ.
1,00	4,0	1,8	75,0	100,0	71,0	98,2	72,0	98,0	75,0	98,0	75,0	96,0	20,0	
4,00	4,0	3,5	75,0	100,0	71,0	96,5	72,0	98,0	75,0	98,0	75,0	96,0	23,0	26,0
10,00	5,9	5,5	75,0	100,0	69,1	94,5	72,0	98,0	75,0	98,0	72,3	96,0	25,0	28,0
16,00	7,4	6,8	75,0	100,0	67,6	93,2	72,0	98,0	71,2	96,0	68,2	94,0	25,0	28,0
20,00	8,3	7,7	75,0	100,0	66,7	92,3	72,0	98,0	69,3	94,0	66,3	92,0	25,0	28,0
31,25	10,4	9,6	75,0	100,0	64,6	90,4	72,0	98,0	65,4	90,0	62,4	88,0	23,6	26,0
62,50	14,9	14,0	75,0	100,0	60,1	86,0	72,0	98,0	59,4	84,0	56,4	82,0	21,5	25,0
100,00	19,0	17,7	72,4	100,0	53,4	82,3	69,4	98,0	55,3	75,0	52,3	73,0	20,1	24,0
155,00	24,0	22,8	69,5	96,0	45,6	73,2	66,5	93,0	51,5	70,0	48,5	68,0	18,8	23,0
250,00	31,0	29,0	66,4	94,0	35,5	65,0	63,4	91,0	47,3	66,0	44,3	64,0	17,3	22,0
300,00	34,2	32,1	65,2	92,0	31,1	59,9	62,2	88,0	45,8	54,0	42,8	52,0	17,3	20,0
600,00	50,1	45,5	60,7	90,0	10,6	44,5	57,7	86,0	39,7	54,0	36,7	52,0	17,3	20,0

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Characteristics

Construction characteristics	
Screen	Aluminium foil + tinned copper braiding
Outer sheath	LSZH
Sheath colour	Orange
Lead free	Yes
Type of cable	S/FTP
Drain wire	No
Dimensional characteristics	
Approximate weight	50 kg/km
Number of pairs	4
Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.42 mm
Nominal outer diameter (mm)	7.6 mm
Electrical characteristics	
Mutual capacitance	45 nF/km
Characteristic impedance	100 Ohm
Max. transfer impedance at 30 MHz (Ohm/km)	50 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	25 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	

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Range	LANmark-7
Gases corrosivity	IEC 60754-1; IEC 60754-2
Length	1000 m
Operating temperature, range	-20...60 °C
Fire retardant	IEC 60332-3-24 (cat C)
Category	Cat. 7
Flame retardant	IEC 60332-1
Smoke density	IEC 61034-2
Packaging	Reel
Ambient installation temperature, range	-10...60 °C
Minimum Bend Radius - During Installation (under Tension)	61 mm
Minimum Bend Radius - Installed	31 mm

Documentation

Freetable LM7 600_3.xls xls — 19 KB Download

Declaration of Performance

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