LANmark-7 Cable

LANMARK-7 S/FTP DUAL AWG23 CAT 7 LSZH CCA S1A D1 A1 ORANGE 500M REEL

Aginode Ref: N100.367-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)
- Dual version (2 x 4 prs) permits two cables to be installed in one go

Note: product picture showing 4pr version



STANDARDS

EN 50173
EN 50288-4-1
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.

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

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.

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

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

LANmark-7 S/FTP Dual AWG23 Cat 7 LSZH Cca s1a d1 a1 Orange 500m reel

Characteristics

Construction characteristics	
Drain wire	No
Lead free	Yes
Outer sheath	LSZH
Screen	Aluminium foil + tinned copper braiding
Sheath colour	Orange
Type of cable	S/FTP Shotgun
Dimensional characteristics	
Approximate weight	100 kg/km
Conductor cross-section (AWG/KCMIL)	23
Diameter over insulation	1.42 mm
Nominal outer diameter (mm)	7.0 mm
Number of pairs	8
Electrical characteristics	
Characteristic impedance	100 Ohm
Max. DC resistance of the conductor at 20°C	80 Ohm/km
Max. transfer impedance at 30 MHz (Ohm/km)	50 Ohm/km
Mutual capacitance	45 nF/km
Mechanical characteristics	
Maximum operating pulling force	100 N
Transmission characteristics	
Coupling attenuation at 30 MHz	>85 dB
Nominal Velocity of Propagation (NVP)	82 %
Propagation delay, max. 100 MHz	536 ns/100m
Skew	25 ns/100m
Usage characteristics	

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

Ambient installation temperature, range	-10...60 °C
Category	Cat. 7
Fire retardant	IEC 60332-3-24 (cat C)
Flame retardant	IEC 60332-1
Gases corrosivity	IEC 60754-1; IEC 60754-2
Length	500 m
Minimum Bend Radius - During Installation (under Tension)	56 mm
Minimum Bend Radius - Installed	28 mm
Operating temperature, range	-20...60 °C
Packaging	Reel
Range	LANmark-7
Smoke density	IEC 61034-2

Documentation

Freetable LM7 600_3.xls xls — 19 KB Download

Declaration of Performance

LANmark-7 S/FTP Dual AWG23 Cat 7 LSZH Cca s1a d1 a1 Orange 500m reel pdf — 141.17 KB Download

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