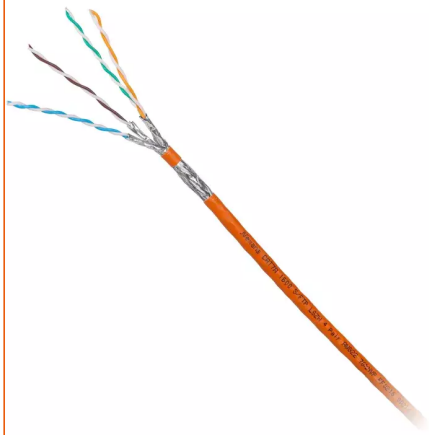
LANmark-7A Cable

LANMARK-7A 1250 S/FTP DUAL AWG23 CAT 7A 1250MHZ LSZH CCA S1A D1 A1 ORANGE 500M REEL





Aginode Ref: N100.373-OC

- High Quality Data Cables for simultaneous use with POE+ and POE++
- All Cable exceed Category 7A in terms of ACR and Frequency Range
- Superior Performance with positive ACR over the full frequency range
- Optimised for use with LANmark-7A GG45 connector
- Easy to install with GG45 connectivity through special foil construction
- 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

p>**Description**

LANmark-7A is a 4 pair S/FTP cable with individual pair foils and an overall braid offering superior performance up to at least 1250MHz. It is fully compliant with the latest Category 7A standard and offers even large headroom above the Cat 7A requirement. Due to this excellent electrical performance and positive ACR up to at least 1250MHz the cable supports the applications like 10GBASE-T as well as 25GBASE-T

Application

LANmark-7A is the highest performing standardised cabling solution in the market and will support all current Ethernet applications up to 25G and all planned applications using cabling up to Class FA.

- All Ethernet applications including
- 10/100/1000Base-T
- 1000Base-TX
- 10GBase-T
- 25GBase-T
- POE, POE+, POE++ (Draft)
- Cable sharing applications including CATV up to 862MHz
- Any future Class FA application

STANDARDS

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

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Installation

Ease of Installation is one of the main features of the LANmark-7A cable. Extra attention has been paid to ensure that the screen coverage is maintained and foils do not open during installation. The cable has been specially designed to be used in conjunction with the LANmark-7A GG45 12C connector.

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-7A 1250 Cable

Frequency (in MHz)	Attenuation (in dB/100m)		NEXT pp (in dB)		ACR-F (in dB)		RL (in dB)		Coupling Att. (in dB)		PSANEXT (in dB)		PSAFEXT (in dB)	
	Std Max	Typical	Std Min	Typical	Std Min	Typical	Std Min	Typical	Std Min	Typical	Std Min	Typical	Std Min	Typical
1	4,0	4,0	65,0	104,8	65,0	70,0	19,0	38,0	80,0	106,0	67,0	92,4	80,0	83,0
4	4,1	4,0	65,0	94,6	65,0	70,0	19,0	32,0	68,0	94,0	67,0	92,1	79,8	82,8
10	6,4	6,3	65,0	87,8	65,0	70,0	19,0	28,0	60,0	86,0	67,0	91,0	75,9	78,9
16	8,0	7,9	65,0	84,2	63,3	68,3	18,0	26,0	55,9	81,9	67,0	90,0	73,9	76,9
20	9,0	8,9	65,0	82,5	61,4	66,4	17,5	25,0	54,0	80,0	67,0	89,4	72,9	75,9
31,25	11,2	11,1	65,0	79,1	57,5	62,5	16,5	23,1	50,1	76,1	67,0	88,0	71,0	74,0
62,5	15,9	15,6	65,0	73,7	51,5	56,5	14,0	20,0	44,1	70,1	67,0	86,3	68,0	71,0
100	20,3	19,7	65,0	70,0	47,4	52,4	12,0	18,0	40,0	66,0	67,0	83,1	65,9	68,9
155	25,4	24,5	63,0	66,6	43,6	48,6	10,1	16,1	36,2	62,2	67,0	80,8	63,9	66,9
200	28,9	27,9	60,9	64,6	41,4	46,4	9,0	15,0	34,0	60,0	67,0	79,4	62,8	65,8
250	32,5	31,2	59,1	62,8	39,4	44,4	8,0	14,0	32,0	58,0	67,0	78,1	61,8	64,8
300	35,7	34,1	57,7	61,3	37,8	42,8	8,0	13,2	30,5	56,5	67,0	77,1	60,9	63,9
500	46,7	44,1	53,6	57,2	33,4	38,4	8,0	11,0	26,0	52,0	64,5	75,0	58,6	61,6
600	51,4	48,3	52,1	55,8	31,8	36,8	8,0	10,2	24,4	50,4	63,3	75,0	57,8	60,8
700	55,8	52,1	50,8	54,5	30,5	35,5	7,5	9,5	23,1	49,1	62,3	75,0	57,1	60,1
800	59,9	55,7	49,7	53,5	29,3	34,3	7,0	9,0	21,9	47,9	61,5	75,0	56,4	59,4
900	63,8	59,1	48,8	52,5	28,3	33,3	6,5	8,5	20,9	46,9	60,7	74,0	55,9	58,9
1000	67,6	62,3	47,9	51,6	27,4	32,4	6,0	8,0	20,0	46,0	60,0	73,0	55,4	58,4
1250		70,0		42,0		25,0		8,0		40,0		70,0		50,0

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LANmark-7A 1250 S/FTP Dual AWG23 Cat 7A 1250MHz LSZH Cca s1a d1 a1 Orange 500m reel

Characteristics

Construction characteristics	
Sheath colour	Orange
Screen	Aluminium foil + tinned copper braiding
Drain wire	No
Outer sheath	LSZH
Type of cable	S/FTP Shotgun
Dimensional characteristics	
Nominal outer diameter (mm)	7.9 mm
Diameter over insulation	1.45 mm
Approximate weight	136 kg/km
Number of pairs	8
Conductor cross-section (AWG/KCMIL)	23
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	
Coupling attenuation at 30 MHz	>85 dB
Skew	25 ns/100m
Propagation delay, max. 100 MHz	536 ns/100m
Nominal Velocity of Propagation (NVP)	82 %
Usage characteristics	
Category	Cat. 7A

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Packaging	Reel
Gases corrosivity	IEC 60754-1; IEC 60754-2
Smoke density	IEC 61034-2
Range	LANmark-7A
Length	500 m
Minimum Bend Radius - During Installation (under Tension)	63 mm
Fire retardant	IEC 60332-3-24 (cat C)
Flame retardant	IEC 60332-1
Minimum Bend Radius - Installed	32 mm
Operating temperature, range	-20...60 °C
Ambient installation temperature, range	0...50 °C

Documentation

Freetable LM7A Channel - 1250.xls xls — 24 KB Download

Declaration of Performance

LANmark-7A 1250 S/FTP Dual AWG23 Cat 7A 1250MHz LSZH Cca s1a d1 a1 Orange 500m reel pdf — 140.72 KB Download

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