

LANmark-6A Connector

LANmark-6A Snap-In Connector Cat.6A 500MHz Screened
Nexans ref.: N420.66A

- High bandwidth RJ45 connector to support 10Gigabit Ethernet
- Fully complies to TIA and ISO Cat 6A cabling standards
- Supports extremely short Cat 6A channel configurations needed for datacenters
- Fully screened for alien crosstalk immunity
- Compatible with all Snap-In panels and outlets

Description

Application

LANmark-6A EVO Snap-In Connector is a screened RJ45 cable jack specified up to 500MHz. It is designed specifically to support the high frequencies required for 10 Gigabit Ethernet, but is also fully backwards-compatible with lower frequency applications using the RJ45 interface. LANmark-6A EVO uses a fully closed rear cover, which provides 360° screening and excellent coupling attenuation to ensure immunity from alien crosstalk and other external interference. Cabling channels with LANmark-6A cable jack have not to be verified on site for Alien Crosstalk, as this new 10G parameter is met by design. This reduces significantly the cost for 10G networking.

- 10Base-T Ethernet
- 100Base-TX Fast Ethernet
- 1000Base-TX Gigabit Ethernet
- 10GBase-T 10 Gigabit Ethernet IEEE 802.3
- 155 Mbit ATM
- 1.2 Gbit ATM
- all future Cat6A and Class EA applications

Performance

The LANmark-6A EVO has outstanding electrical performance up to 500MHz especially for NEXT/FEXT, Power Sum NEXT/FEXT, Return Loss and all screening parameters. This enables to achieve high performing Cat 6A channels as well as very short link and channel configurations needed in data centres with up to 3 connection points within 10 meters.

Installation

LANmark-6A EVO makes use of Nexans wire organiser and is therefore very easy and fast to terminate. Using the Nexans comfort tool installation tool EVO Snap-In series is re-usable. A stranded version is available to allow the use of flexible stranded cable in cross connects or consolidation point.

The LANmark-6A EVO fits in all structural hardware designed for the EVO Snap-In range and can be used in all positions of a 4 connector twisted pair cabling channel (PP, CC, CP, TO).



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Standards

International EN 50173-1;EN 50173-3;IEC 60603-7-5; ISO11801:2002/A1:2008
National TIA/EIA-568-B.2-10

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- Fast termination with exclusive wire organizer and hinging metal EMC rear cover
- Colour code : T568A & T568B
- 360° EMC protection
- Re-usable with universal comfort tool
- Accepts solid wire from 22 to 24 AWG
- Stranded version available for consolidation point
- Snap-in format fits in all Nexans structural hardware
- 2 possibilities to terminate the drain wire : on the housing or on the rear cover
- Can be turned into keystone format using additional an adapter

Guarantees

When installed in combination with other LANmark-6A components, a 25 years channel warranty can be obtained, covering full 10GBase-T support and full Cat6A/Class EA compliance

Characteristics

Construction characteristics	
Screen	Yes
Connector type	RJ45 and Tool-less IDC
Dimensional characteristics	
Height	23.2 mm
Width	16.8 mm
Depth	36.4 mm
Usage characteristics	
Component function	Connector
Category	Cat. 6A
Range	LANmark-6A

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Electrical Performance LANmark-6A 4 Connector Channel Part 1

"All values are based on Worst Case 4 Connector Channel configurations according ISO11801:2008 AM1 Minimal and maximum values represent guaranteed channel performance"

Freq in MHz	Attn in dB		NEXT in dB			PSNEXT in dB			ACR-F in dB	
	Max	Typ	Std	Min	Typ	Std	Min	Typ	Std	Typ
1	<4	4.0	65.0	67.0	85.0	62.0	64.0	74.8	63.3	69.9
4	4.1	4.1	63.0	65.0	72.9	60.5	62.5	65.0	51.2	57.9
10	6.4	6.3	56.6	58.6	65.0	54.0	56.0	58.5	43.3	49.9
16	8.1	8.0	53.2	55.2	60.9	50.6	52.6	55.1	39.2	45.9
20	9.1	9.0	51.6	53.6	59.0	49.0	51.0	53.5	37.2	43.9
31.25	11.4	11.2	48.4	50.4	55.1	45.7	47.7	50.2	33.4	40.0
62.5	16.3	15.9	43.4	45.4	49.1	40.6	42.6	45.1	27.3	34.0
100	20.8	20.2	39.9	41.9	45.0	37.1	39.1	41.6	23.3	29.9
155	26.2	25.4	36.7	38.7	41.2	33.8	35.8	38.3	19.5	26.1
200	30.0	28.9	34.8	36.8	39.0	31.9	33.9	36.4	17.2	23.9
250	33.8	32.5	33.1	35.1	37.0	30.2	32.2	34.7	15.3	22.0
300	37.3	35.7	31.7	33.7	35.4	28.8	30.8	33.3	13.7	20.4
500	49.3	46.7	27.9	29.9	31.0	24.8	26.8	24.9	9.3	16.0

*Standard values based on ISO11801:2002/A1:2008 ClassEA

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Electrical Performance LANmark-6A 4 Connector Channel Part 2

All values are based on Worst Case 4 Connector Channel configurations according ISO11801:2008 AM1
Minimal and maximum values represent guaranteed channel performance

Freq in MHz	PS ACR-F		PS ANEXT			PS AACR-F			RL		
	in dB		in dB			in dB			in dB		
	Std	Typ	Std	Min	Typ	Std	Min	Typ	Std	Min	Typ
1	60.3	66.9	80.0	90.0	92.0	77.0	92.0	94.0	19.0	21.0	21.0
4	48.2	54.9	74.0	89.0	91.0	65.0	80.0	82.0	19.0	21.0	32.0
10	40.3	46.9	70.0	85.0	87.0	57.0	72.0	74.0	19.0	21.0	28.0
16	36.2	42.9	68.0	83.0	85.0	52.9	67.9	69.9	18.0	20.0	26.0
20	34.2	40.9	67.0	82.0	84.0	51.0	66.0	68.0	17.5	19.5	25.0
31.25	30.4	37.0	65.1	80.1	82.1	47.1	62.1	64.1	16.5	18.5	23.1
62.5	24.3	31.0	62.0	77.0	79.0	41.1	56.1	58.1	14.0	16.0	20.0
100	20.3	26.9	60.0	75.0	77.0	37.0	52.0	54.0	12.0	14.0	18.0
155	16.5	23.1	57.1	72.1	74.1	33.2	48.2	50.2	10.1	12.1	16.1
200	14.2	20.9	55.5	70.5	72.5	31.0	46.0	48.0	9.0	11.0	15.0
250	12.3	19.0	54.0	69.0	71.0	29.0	44.0	46.0	8.0	10.0	14.0
300	10.7	17.4	52.8	67.8	69.8	27.5	42.5	44.5	8.0	10.0	13.2
500	6.3	13.0	49.5	64.5	66.5	23.0	38.0	40.0	8.0	10.0	11.0

*Standard values based on ISO11801:2002/A1:2008 ClassEA