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LANmark-7A GG45 Connector

LANmark-7A GG45 12C Snap-In Connector Cat 7A 1000MHz Screened

Nexans ref.: N420.735

- First RJ45-compatible Cat 7A connector using Nexans unique GG45 interface
- Able to support future 40Gigabit Ethernet application
- Able to provide Shannon Capacity of 50Gbps
- Full Class FA channel compliancy according to ISO11801 Amendment 1
- Fully screened for Alien Crosstalk Immunity
- ”2 in 1” Connector using 12 contacts to run 2 separate transmission modes
- Compatible with all Snap-In panels and outlets

Description

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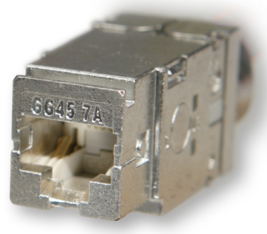
LANmark-7A GG45 is a screened RJ45-compatible cable jack specified up to 1000MHz. It is designed specifically to support the high frequencies required for applications beyond 10 Gigabit Ethernet. Combined with LANmark7A Cable and Patch Cords, LANmark-7A GG45 has double the frequency range and half of the crosstalk compared to Cat6A and provides excellent transmission capacity up to 50Gbps (4-times of Cat6A). LANmark-7A GG45 uses 12 contacts: 8 contacts for the 1000MHz transmission (GG-mode) and 4 additional contacts to ensure RJ45 compatibility (RJ Mode). Thanks to its 360° screening and a fully closed rear cover, the connector allows excellent coupling attenuation and ensures immunity from alien crosstalk and other external interference. The LANmark-7A GG45 connector fits in all structural hardware designed for the Snap-In Connectors and can be used in all positions of a 4 connector twisted pair cabling channel (PP, CC, CP, TO).



LANmark-7A

Applications

- 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
- CATV up to 862MHz
- all future Cat 6A and Class EA applications
- all future Cat 7 and Class F applications
- all future Cat 7 and Class FA applications

Performance

The LANmark-7A GG45 12C Snap-In Connector is the first RJ45 compatible which meets the stringent requirements of Cat 7A up to 1000MHz. It has outstanding performance for Insertion Loss, Return Loss, NEXT/FEXT, Power Sum NEXT/FEXT, and especially Alien Crosstalk.

When used in combination with Nexans LANmark-7A cables and LANmark-7A patch cords, the four-connector channel meets Class FA requirements as defined in ISO/IEC11801 amendment 1.

Installation

The LANmark-7A GG45 12C Snap-In Connector makes use of Nexans wire organiser and is therefore very easy and fast to terminate. Using the Nexans patented Easy Termination Tool for GG45 the termination of GG45 is fool-proof and very reliable. A stranded version is available to allow the use of flexible

Standards

International EN 50173-1;
IEC 60603-7-5; ISO/IEC 11801

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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stranded cable in cross connects or consolidation points.

- Fast termination with exclusive wire organizer
- Colour code : T568A &T568B
- 360° EMC protection
- 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 adapter

Guarantees

The LANmark-7A GG45 12C Snap-In Connector is covered by the guarantee as described in “The General Terms and Conditions of Sales”. When installed in combination with other LANmark-7A components, a 25 years channel warranty can be obtained, covering full Cat 7A/Class FA compliance.

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Characteristics

Construction characteristics	
Colour	Black
Screen	Yes
Connector type	RJ45 and Tool-less IDC
Dimensional characteristics	
Height	19.5 mm
Width	17 mm
Depth	41.4 mm
Usage characteristics	
Component function	Connector
Category	Cat. 7A
Range	LANmark-7A

Electrical Performance LANmark-7A

Typical Data given for Worst Case 4-Connector Channel Configurations

	Attenuation		NEXT pp		ACR-F		RL		Coupling Att.		PSANEXT		PSAFEXT	
Frequency	(in dB)		(in dB)		(in dB)		(in dB)		(in dB)		(in dB)		(in dB)	
(in MHz)	Max	Typical	Min	Typical	Min	Typical	Min	Typical	Min	Typical	Min	Typical	Min	Typical
1	4.0	3.6	65.0	104.8	65.0	70.0	19.0	38.0	80.0	106.0	67.0	82.0	80.0	95.0
4	4.1	3.7	65.0	94.6	65.0	70.0	19.0	32.0	68.0	94.0	67.0	82.0	79.8	94.8
10	6.4	5.7	65.0	87.8	65.0	70.0	19.0	28.0	60.0	86.0	67.0	82.0	75.9	90.9
16	8.0	7.2	65.0	84.2	63.3	68.3	18.0	26.0	55.9	81.9	67.0	82.0	73.9	88.9
20	9.0	8.1	65.0	82.5	61.4	66.4	17.5	25.0	54.0	80.0	67.0	82.0	72.9	87.9
31.25	11.2	10.1	65.0	79.1	57.5	62.5	16.5	23.1	50.1	76.1	67.0	82.0	71.0	86.0
62.5	15.9	14.3	65.0	73.7	51.5	56.5	14.0	20.0	44.1	70.1	67.0	82.0	68.0	83.0
100	20.3	18.2	65.0	70.0	47.4	52.4	12.0	18.0	40.0	66.0	67.0	82.0	65.9	80.9
155	25.4	22.8	63.0	66.6	43.6	48.6	10.1	16.1	36.2	62.2	67.0	82.0	63.9	78.9
200	28.9	26.0	60.9	64.6	41.4	46.4	9.0	15.0	34.0	60.0	67.0	82.0	62.8	77.8
250	32.5	29.2	59.1	62.8	39.4	44.4	8.0	14.0	32.0	58.0	67.0	82.0	61.8	76.8
300	35.7	32.1	57.7	61.3	37.8	42.8	8.0	13.2	30.5	56.5	67.0	82.0	60.9	75.9
500	46.7	42.0	53.6	57.2	33.4	38.4	8.0	11.0	26.0	52.0	64.5	79.5	58.6	73.6
600	51.4	46.3	52.1	55.8	31.8	36.8	8.0	10.2	24.4	50.4	63.3	78.3	57.8	72.8
700	55.8	50.2	50.8	54.5	30.5	35.5	7.5	9.5	23.1	49.1	62.3	77.3	57.1	72.1
800	59.9	53.9	49.7	53.5	29.3	34.3	7.0	9.0	21.9	47.9	61.5	76.5	56.4	71.4
900	63.8	57.5	48.8	52.5	28.3	33.3	6.5	8.5	20.9	46.9	60.7	75.7	55.9	70.9
1000	67.6	60.8	47.9	51.6	27.4	32.4	6.0	8.0	20.0	46.0	60.0	75.0	55.4	70.4

all values are specified at 20°C

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