

## LANmark-6 10G Snap-In Connector

LANmark-6 10G EVO Snap-in connector, screened, for solid wire

Nexans ref.: N420.666G

- Complies to 10GBase-T application standards
- Complies with Category 6A and Class EA channel requirements
- Fully screened for alien crosstalk immunity
- Reduces risk of installation errors for consistent performance
- Compatible with all snap-in hardware
- An adapter can be added to fit the keystone format
- Supports POE Plus applications (15 Watts per pair)

### Description

#### Application

LANmark-6 10G consists of screened components specified to frequencies up to 500MHz. They have been designed specifically to support the higher frequencies required for 10 Gigabit Ethernet, yet is fully backwards compatible with today's needs. The LANmark-6 10G EVO connector fits in all structural hardware designed for the EVO snap-in range. In addition to the requirements of the EIA/TIA 568-B.2-1 and ISO/IEC 11801:2002 Category 6, the LANmark-6 10G products are additionally specified to 500MHz and are screened to ensure immunity from Alien Crosstalk and other external interference.

- 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
- POE Plus
- future class E 10G applications

#### Performance

The LANmark-6 10G EVO Snap-in connector has been designed to reach the highest performance in Cat 6 and Class E up to 500 MHz. It has outstanding performance for attenuation (insertion loss), NEXT/FEXT, Power Sum NEXT/FEXT and Return Loss, exceeding the Cat 6 connector specs as in IEC 60603-7-5.

When used in combination with Nexans LANmark-6 10G cables and LANmark-6 10G Ultim patch cords, and installed according to the guidelines, the system supports the 10GBase-T applications as defined in IEEE 802.3an, ISO/IEC TR 24750 and TIA/EIA TSB-155. Respecting the Nexans LANmark-6 10G design guidelines, the full 100m four-conductor channel moreover meets Category 6A and Class EA requirements as defined in TIA/EIA568B.2 Addendum 10 draft 6.0 and ISO/IEC draft amendment 1.1 (as in draft 25N1324) respectively.

#### Installation

The LANmark-6 10G EVO Snap-in connector makes termination easier and quicker thanks to exclusive design of the wire organizer and of the sliding metal EMC rear cover. The LANmark-6 10G EVO snap-in is designed to be terminated with the universal comfort tool. This tool includes also the exclusive extraction mechanism which makes the EVO series snap-in re-usable. A stranded version is available for reliable termination in consolidation point of 3 or 4 connectors channel models. The LANmark-6 10G EVO snap-in range is Nexans technology inside and user friendly outside



### LANmark-6 10G

#### Standards

**International** IEEE 802.3af (PoE);  
IEEE 802.3an;  
IEEE 802.3at (PoE Plus); ISO/  
IEC 11801:2002/Amd 1:2008/  
Cor 1:2008; ISO/IEC TR24750

**National** TIA/EIA TSB-155; TIA/  
EIA-568-B.2-10

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## LANmark-6 10G Snap-In Connector

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- Fast termination with exclusive wire organizer and sliding metal EMC rear cover
- Colour code : T568A &T568B
- Full EMC protection with metal rear cover
- 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
- Passes all tests for POE Plus Requirements (IEC 60512-99-001 Ed.1)

### Guarantees

The LANmark-6 10G EVO Snap-in connector is covered by the guarantee as in The General Terms and Conditions of Sales. When installed in combination with other LANmark-6 10G components, a 25 years channel warranty can be obtained, covering 10GBase-T support in accordance with IEEE 802.3an. Also if following the design guidelines for LANmark-6 10G systems and tested accordingly, a 25 year warranty can be obtained to Category 6A or Class EA requirements.

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### Characteristics

Construction characteristics	
Screen	Yes
Connector type	RJ45 and Tool-less IDC
Dimensional characteristics	
Height	23.2 mm
Width	16.8 mm
Depth	36 mm
Usage characteristics	
Component function	Connector

### Electrical Performance LANmark-6 10G 100m 4 connector channel

all values are specified at 20°C

Freq	Attn dB		NEXT dB		PSNEXT dB		ELFEXT dB		PS ELFEXT dB		PS ANEXT dB		PS AELFEXT dB		RL dB	
	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar	Std	Guar
1	<4	<4	72.7	>75	70.3	74.3	63.3	>60	60.3	>60	82.0	>90	77.9	87.9	19.0	21.0
4	4.2	4.1	63.0	66.0	60.5	64.5	51.2	57.2	48.2	57.2	76.0	>90	65.9	75.9	19.0	21.0
10	6.6	6.5	56.6	59.6	54.0	58.0	43.3	49.3	40.3	49.3	72.0	87.0	57.9	67.9	19.0	21.0
16	8.3	8.2	53.2	56.2	50.6	54.6	39.2	45.2	36.2	45.2	70.0	85.0	53.8	63.8	18.0	20.0
20	9.3	9.2	51.6	54.6	49.0	53.0	37.2	43.2	34.2	43.2	69.0	84.0	51.9	61.9	17.5	19.5
31.25	11.7	11.6	48.4	51.4	45.7	49.7	33.4	39.4	30.4	39.4	67.1	82.1	48.0	58.0	16.5	18.5
62.5	16.9	16.6	43.4	46.4	40.6	44.6	27.3	33.3	24.3	33.3	64.0	79.0	42.0	52.0	14.0	16.0
100	21.7	21.4	39.9	42.9	37.1	41.1	23.3	29.3	20.3	29.3	62.0	77.0	37.9	47.9	12.0	14.0
155	27.6	27.1	36.7	39.7	33.8	37.8	19.5	25.5	16.5	25.5	59.1	74.1	34.1	44.1	10.1	12.1
200	31.7	31.2	34.8	37.8	31.9	35.9	17.2	23.2	14.2	23.2	57.5	72.5	31.9	41.9	9.0	11.0
250	35.9	35.4	33.1	36.1	30.2	34.2	15.3	21.3	12.3	21.3	56.0	71.0	29.9	39.9	8.0	10.0
300	39.8	39.2	31.7	34.7	28.8	32.8	13.7	19.7	10.7	19.7	54.8	69.8	28.4	38.4	7.2	9.2
500	53.4	52.6	22.0	25.0	20.4	24.4	9.3	15.3	6.3	15.3	51.5	66.5	23.9	33.9	6.0	8.0

Guaranteed channel values apply under the condition that General Installation Guidelines from NCS and the Design and Installation Guidelines for LANmark-6 10G are respected and implemented.