# LANmark-7A/-8 GG45 Connector

LANmark GG45 Snap-In Connector Cat 7A/8 2000MHz Screened Solid Wire

Aginode Ref.: N420.735

- RJ45-compatible Cat 7A/Cat 8 connector using Aginode unique GG45 interface
- · Specified up to 2 GHz
- Able to support applications beyond 10G, including 25GBase-T and 40GBase-T
- Cat7A / Class FA Channel compliance with Cat 7A Cable
- Cat 8 / Class I / II Channel compliance with Cat 8 Cable
- Supports PoE++ Type 4 applications delivering up to 90W/71W (IEEE 802.3bt)
- 360° shielding offering Alien Crosstalk immunity
- · Accepts solid wire from 22 to 24 AWG
- · Version for stranded wire available for CP to TO links
- Fits all Aginode LANmark Snap-In panels and mounting hardware
- An adapter can be added to fit the keystone format

#### **DESCRIPTION**

# Design and application

Aginode LANmark GG45 is a screened RJ45-compatible jack specified up to 2000 MHz and specifically designed to support the high frequencies required for applications beyond 10 Gigabit Ethernet.

- Combined with LANmark-7A cable, the GG45 connector supports 25GBase-T applications. (\*)
- Combined with LANmark-8 cable, the GG45 connector supports 40GBase-T applications. (\*)

(\*) over 30m Channel lengths.

The LANmark GG45 connector features 12 contacts: 8 contacts for the 2000 MHz transmission (GG-mode) and 4 additional contacts to ensure RJ45 compatibility (RJ Mode).

An overall die-cast housing and a fully closed metal rear cover, providing 360 degrees shielding, offer excellent coupling attenuation and immunity to Alien Crosstalk and other external interferences.

LANmark GG45 connectivity, in conjunction with LANmark-7A cable, fully complies with the requirements for Category 7A / Class FA Channels as specified in ISO/IEC 11801 and EN 50173-1. In conjunction with LANmark-8 cable, the requirements for Class I/II Channels over max. 30m distance are met, as described in ISO 11801.

As such, LANmark-7A/8 Channels support all applications up to 1000 MHz and 2000 MHz respectively, providing at the same time backward compatibility with lower speed applications:





You may see a combination of brands on documents or products during the transition.

## **STANDARDS**

International EN 50173-1; IEC 60603-7-71; IEEE 802.3af (PoE); IEEE 802.3bt (PoE++); IEEE 802.3at (PoE+); ISO/ IEC 11801



# LANmark-7A/-8 GG45 Connector

LANmark GG45 Snap-In Connector Cat 7A/8 2000MHz Screened Solid Wire

- 10Base-T Ethernet
- 100Base-TX Fast Ethernet
- 1000Base-TX Gigabit Ethernet
- 10GBase-T 10 Gigabit Ethernet IEEE 802.3
- 25GBase-T 25 Gigabit Ethernet IEEE 802.3bg
- 40GBase-T 40 Gigabit Ethernet IEEE 802.3bq
- 155 Mbit ATM
- 1.2 Gbit ATM
- POE Plus IEEE802.3at
- POE Plus IEEE802.3bt
- CATV up to 862MHz
- · all future Cat 6A and Class EA applications
- all future Cat 7 and Class F applications
- · all future Cat 7A and Class FA applications
- all future Cat 8 and Class I / II applications

#### **Performance**

LANmark GG45 meets the stringent requirements of Category 7A up to 1000 MHz and Category 8 up to 2000 MHz. The connector engine features a metal cross to keep the 4 pairs separated from each other, ensuring a significant reduction of internal and external crosstalk (NEXT/FEXT, Power Sum NEXT/FEXT and Alien Crosstalk) and optimising Signal to Noise Ratios.

# Installation

The wire organiser which is specifically designed for terminating the GG45 connector allows for a smooth and reliable wiring. In addition, using the Aginode patented Easy Termination Tool (N422.117) ensures adequate and swift preparation of the shielded pairs of the cable and fool-proof installation.

The LANmark GG45 connector fits all structural hardware designed for LANmark Snap-In connectors and can be used in all positions of a 4 connector Channel (Patch Panel, Cross Connect, Consolidation Point, Outlet).

For CP and CC configurations the GG45 version for stranded wire cable (N420.736) should be used.

## **Guarantees**

Channels built with LANmark GG45 connectivity and LANmark-7A or LANmark-8 cable qualify for a Class FA or Class I/II System warranty respectively, for a period of 25 years, including parts, installation, channel performance and application support.

For a Warranty certificate to be issued, the Warranty application process must be followed.

Traceability codes on both connector and packaging ensure quality validation.



# LANmark-7A/-8 GG45 Connector

LANmark GG45 Snap-In Connector Cat 7A/8 2000MHz Screened Solid Wire

# **CHARACTERISTICS**

Construction characteristics	
Screen	Yes
Connector type	GG45/RJ45
Dimensional characteristics	
Height	19.5 mm
Width	17 mm
Depth	41.4 mm
Approximate weight per piece	- kg
Number of connectors	-
Usage characteristics	
Category	Cat 7A/8
Field of application	Fixed installations
Range	LANmark-7A



