

Application note



LANmark-6 The 4 connector model

Nexans was the first in the industry to offer complete Category 6 / Class E performance of the full 4 connector model channel, as specified in the new cabling standard ISO/IEC 11801:2002. This 2nd edition of the generic cabling standard has been ratified in August 2002.

The development of the new classes and categories implies both channel modeling issues as performance specification, including link, channel, cable and mated connector specs.

With the launch of the LANmark-6 connectivity range, Nexans is the industry's first to be in full compliance with all of these aspects of the standards.

Definitions

A **permanent link** is the **fixed part of the cabling**, which is to be tested after installation, and which gives information on installation quality. The permanent link extends from patch panel at the cabinet side to the Telecommunications Outlet at the user side.

The link can optionally contain a Consolidation Point which makes it possible to allow for open office cabling

environments, allowing freedom of including an extra patch facility at a multi-user outlet. The permanent link excludes work area and equipment cords and cross-connections.

These three connections (PP, TO and CP) contribute to the worst case model of the permanent link.

The **channel configuration** has been **defined for application purposes**. It represents the complete end-to-end path between the user equipment (PC, phone, printer, video equipment,...) and the active equipment at the cabinet side (switch, hub, PABX, video equipment,...).

The channel includes the patchcords at both sides and allows for an extra cross connection at the cabinet side. This cross connection is in certain environments desirable in order to allow or facilitate

patching.

The worst case configuration that has to be taken into account for full ISO/IEC compliance therefore includes the 90m of horizontal cable, 4 connectors and a total of 10m of patchcords.

4 connector model in the standards

In the ISO/IEC 11801:2002, cable and connector requirements ensure compliance to the worst case models, allowing for any environment the configuration of choice. On the basis of the worst case models, cable and connector specifications are determined, as well as link and channel values. All values are amply met by the LANmark-6 solution.

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