



Interchangeable modules True or false?

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Premise Networking

COMPLIANCE WITH PZP AND WARRANTY CONDITIONS

Interestingly, Polish law plays an important role in the systems based on interchangeable parts. This solution interferes with Polish law concerning public offers as the rule preventing fair competition (one system which meets these requirements) as well as other internal needs. Using the module which separates the signal we affect the “application warranty” (A producer will guarantee that applications will operate for 25 years, which were specifically designed for EA class (in accordance with ISO/IEC 11801 Am. 1,2)).

Current trends taking place in computer networks make us to switch from 100Mb/s (100BASE-TX) to 1000 Mb/s (1000BASE-T). Taking into account equipment (servers, switchers, routers, memory) placed in the data center as well as global increase of higher transmission speed. These were the reasons why a new solution with the use of pair-twisted cable 10 Gb/s was created.

TECHNOLOGY

This technology creates the connection thanks to a duct separation. Signal separation operates in two directions in a subscriber as well as in a distribution point. Separation functions in the following way: RJ45 ports designed to the given application. Thanks to it, the number of RJ45 is bigger but limits at the same time transmission possibilities and signal transmission speed.

PRACTICAL USE

According to current market analyses, majority of structured cabling systems cannot be multiplied. Further development of another logical structures can be performed with placing another ducts, jacks' termination. Such solution ensures the possibility of using the capabilities of an installed system maximally.

CONNECTIONS

Connections can be performed in two ways:

- in accordance with current norms concerning structured cabling with the use of single jack
- systems' requirements with the use of various jacks

*Modern teleinformatics systems use
all four available pairs POE, VOIP, IPTV etc.
in a duct.*

By changing the module we miss the transmission possibilities. Also, difficulties with dynamic parameters appear when a multiple module is changed- the first measured parameter "Wire Map" shows an error (no connection).

FUTURE OF COPPER CABLING SYSTEM

EA class guarantees the possibility to transmit 10Gb/s in 100m transmission channel comparing to category 6 (here 10 GBASE - T is the guarantee at the distance of 55m).

Of course, another significant aspect, which we should bear in mind is the price. Nevertheless the cost of the system is relatively low comparing to the financial resources of the whole investment, and therefore the system should operate for at least 10 years (according to norms) or 20-25 years (according to producers). Taking into account the necessity of constant increase the bandwidth and introduction of new applications, the system which fully complies with the structured cabling standards is the only and right solution.

„F' attachment from PN-EN 0173-1:2011 Informatics technology Structured cabling systems Part 1: General requirements"- applications in operation 10GBASE-T requires 4 transmission pairs

OTHER PRODUCERS OF STRUCTURED CABLING SYSTEMS

Between 2012/2013 structured cabling system and being more precise 6A system started to be implemented (finally it contributed to approx.. 33% of the market. There is a standard to change each cabling system every 6-7years (in 2004 cabling of 6 category, in 1998 of 5e category).

The producers of structured cabling systems should take this into account+ the necessity to implement IP technology. As a consequence present and future systems make use of 4 pairs of installation system, which guarantee full compatibility with all the standards and needs.

THE SAME FUNCTIONALITY, 10% PRICE

The same functionality is within reach thanks to patch modules with fanouts. This solution enables to assign a proper conductor to the given connector. This guarantee the system warranty (no change within the jack). The connection which uses BNC/F connectors is performed with the use of RJ45-> BNC/F. This type of solution significantly reduces the costs and guarantees the same functionality.

In accordance with the attachment D to EN 50174-1:2009 the symmetric cabling channels do not guarantee simultaneous operation of various transmission applications which are within the same class or different classes.



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