

Nominee: Belden® PatchPro® by Belden

Nomination title: Belden PatchPro® Intelligent Patching Solution

Belden® PatchPro® is a family of intelligent patching products that can be combined to provide complete and cost-effective intelligent patching solutions for applications in which network security, reliability and operational uptime are critical. Belden PatchPro® is particularly suited for data centers, airports, finance, government, healthcare and educational campuses.

The Belden PatchPro® provides wireless identification of cables and real-time monitoring of unintended physical changes in the network infrastructure. These are automatically detected and instantaneously transmitted to the software platform facilitating immediate action. To allow for remote management, any unwanted change is signaled to the Network Manager via an e-mail and a text message. At rack level the changes are signaled first by a red light on top of the rack, secondly as a clear text in the Belden PatchPro® Rack Manager display, and with LED signaling at patch panel level.

The Belden PatchPro® uses RFID (Radio Frequency Identification) technology, which enables wireless identification and tracking of each individual patchcord added to the network. All smart patchcords are equipped with an RFID chip containing idiosyncratic identification information (such as name, standard, manufacturer), which can be recognized by the Panel and fed automatically into the software. This permits a seamless real-time data base work and documentation. By keeping the construction of the patch cable intact, the RFID technology does not alter the density of the data center, nor does it affect the flexibility or the reliability of the patch cord.

Belden PatchPro® Intelligent Patching Solution consists of the following:

Rack Manager

The communication bridge between the Belden PatchPro® Panels and the Management Console. Embedded display supplies information from up to 30 Panels linked via a bus cable. The Bus cable signals are converted to a SNMP/Ethernet protocol and sent to the Management Console.

Belden PatchPro® Panels

The RFID component permanently monitors all ports and transmits information to the Rack Manager. The LED lights provide visual support during the patching process and signals unwanted changes.

Belden PatchPro® CU Panel

Fully assembled panel (available in Cat 6 and Cat 6A) with integrated RFID scanner component.

Belden PatchPro® FO Panel

Fully assembled FO Panel 24xLC/LC (optional SC/SC) DX SM or MM (with splicing cassette kit, cassette expander, sleeve holder, fusion protection sleeve) with integrated RFID scanner component.

Belden PatchPro® CU Modular Cord

RJ45 Patch Cord with RFID transponder on both ends (available in Cat 6 U/UTP and S/FTP and Cat 6A S/FTP).

Belden PatchPro® FO Modular Cord

LC/LC (or SC/SC) DX Patch Cord with RFID transponder on both ends (cable: OM2,OM3 or OM4).

Belden PatchPro® Software - Patch Manager

The software front end. Facilitates real time mapping of all physical layer connection points and automated documentation of the data base.

Belden PatchPro® Software - smartLINK™

The software interface between the front end platform and the RFID components. Organizes and optimizes the data stream to and from all Rack Manager Units of the network.

Belden PatchPro® Software - Firmware

The software that runs directly on the electronic of the RFID components.

Compliance with International Standards

For Cat 6A and Cat 6:

- Supports current and future Cat 6 and 6A applications, such as: 10GBase-T (10 Gigabit Ethernet),
- 1000Base-T (Gigabit Ethernet), 100 Base-T, 10 Base-T, FDDI, ATM
- Standards:
 - International standard: ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
 - European standard: EN 50173-1 (2002) and EN 50173-1 Amendment 1 (2009)

For OFC:

- Supports current and future optical fiber applications such as 10G Ethernet, FDDI
- Standards:
 - International standard: ISO/IEC 11801 2nd edition (2002) and ISO/IEC 11801 Amendment 2 (2010)
 - GR-326-CORE for OFC Jumper

Why nominee should win

- A complete and cost-effective intelligent patching solution for applications in which network security, reliability and operational uptime are critical i.e for data centers, airports, finance, government, healthcare and educational campuses.
- The easy-to-use three-way real time signaling system significantly reduces the time needed for correction of unwanted changes and minimizes downtime.
- The ability to identify and correct any unwanted changes brings greater security as well as a significant cost reduction.
- Continuous monitoring of the network infrastructure provides transparency and the ability to make immediate adjustments brings greater efficiency.
- The availability of automated documentation of the data box through real-time mapping of the physical layer saves time and cuts down maintenance costs.