CrossTalk

Your Source for Industry News & Insight

IN THIS **ISSUE**

New Global Solutions:
MILLENNIUM™ Copper Systems
and OPT-X™ Fiber Systems

Leviton Invests in
Network Solutions

TIA Adopting IEC Standards

News You Can Use

Tech Tips

Ask The Experts
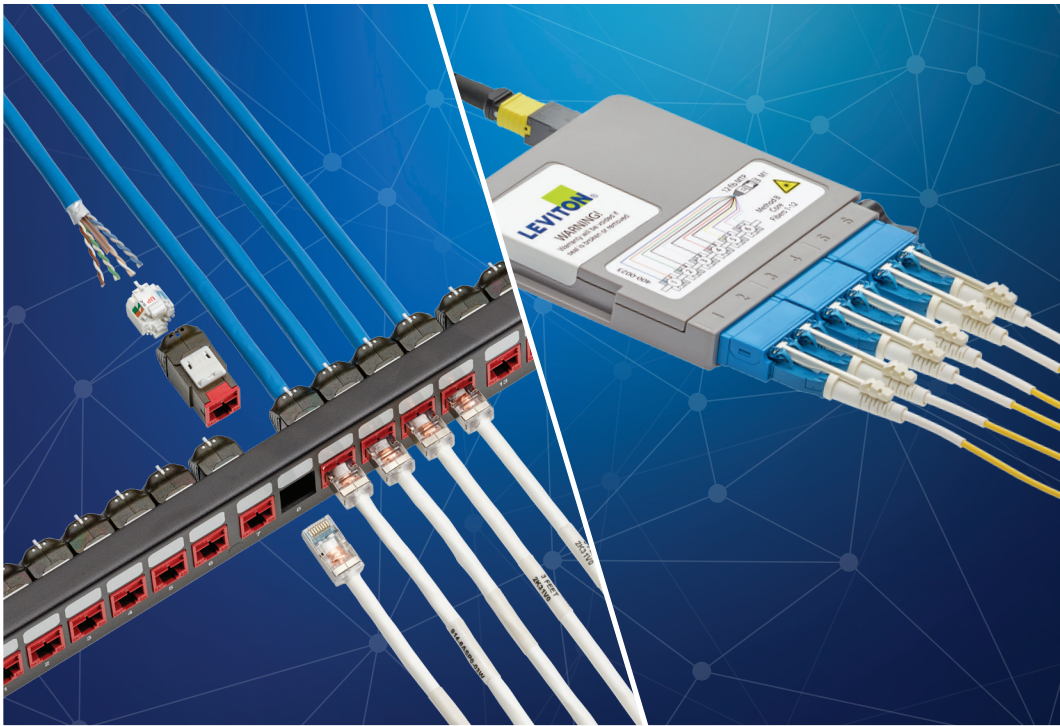
Leviton Introduces Innovative Global Copper and Fiber Systems

Leviton Network Solutions is entering 2023 with a robust expansion of its global service capabilities and product offerings. Leviton's new **MILLENNIUM™ Copper Systems** and **OPT-X™ Fiber Systems** are innovative solutions designed with multinational deployments in mind.

As network deployments continue to cross national and international boundaries, multinational organizations need greater network consistency, reliable service, and optimal performance. Leviton Network Solutions has developed a variety of copper and fiber solutions that broaden Leviton's ability to service multinational businesses with superior performance, a consistent worldwide product offering, and industry-leading support. Most importantly, these solutions allow global customers to standardize network design and deployments with products that meet multinational specifications, and are measured with consistent, specifiable performance parameters.

LEVITON **POLL**

What type of wireless network do you expect to deploy in the next three years?

Wi-Fi and 5G
50%

27% Mostly Wi-Fi

17% Not Sure

6% Mostly 5G

From a November 2022 survey of 207 network professionals.

MILLENNIUM™ Copper Systems

These three new systems are made up of cable, jacks, consolidation points, patch panels, and patch cords. To fully enable these systems to succeed, Leviton completed refinements to its high-quality copper patch cord portfolio, resulting in an enhanced line of Cat 6A and Cat 6 solutions for better flexibility, durability, and reduced bend radius, while delivering performance guarantees on data rates up to 10 Gb/s. In addition, the industry-leading SST Cat 6A UTP cable is now available in Europe and to customers worldwide in CPR ratings.

All MILLENNIUM copper systems are specifically designed to meet the specific needs of different organizations:

ATLAS-X1™
SST

The **ATLAS-X1™ SST** is the premier global Cat 6A UTP structured cabling system, featuring high performing ATLAS-X1 jacks and SST cable. This system is designed for mission critical applications where reliable high performance is required, and downtime is not an option. This system is ideal for use cases in public safety, automotive, health care, defense, and finance.

- Any IP-based system utilizing UTP cabling
- Wireless applications supporting IEEE 802.11ax/Wi-Fi 6/6E and in-building 5G deployments

EXTREME™
SST

The **EXTREME™ SST** enhanced global Cat 6A UTP structured cabling system features EXTREME jacks and SST cable. This system is ideal for enterprise, government, or smart building applications where time-tested connectivity and cabling provide performance reassurance for network managers with an eye on emerging technologies and capabilities.

- Optimal total cost of ownership for education environments and commercial buildings
- IP-based security and building automation systems utilizing UTP cabling
- Wireless applications supporting IEEE 802.11ac/Wi-Fi 5 and higher
- Audiovisual system installations for conference rooms and classrooms

EXTREME™
6

The **EXTREME™ 6** global Cat 6 UTP structured cabling system features EXTREME jacks and Cat 6 cable. This system is ideal for commercial or enterprise applications that require a reliable, compact, high-density design and reduced outside diameter cable.

- 1000BASE-T and 2.5GBASE-T network applications
- Enterprise and intelligent building systems
- IP-based security and intelligent building systems utilizing UTP cabling
- Applications optimizing environmental sustainability

Learn more at Leviton.com/millennium
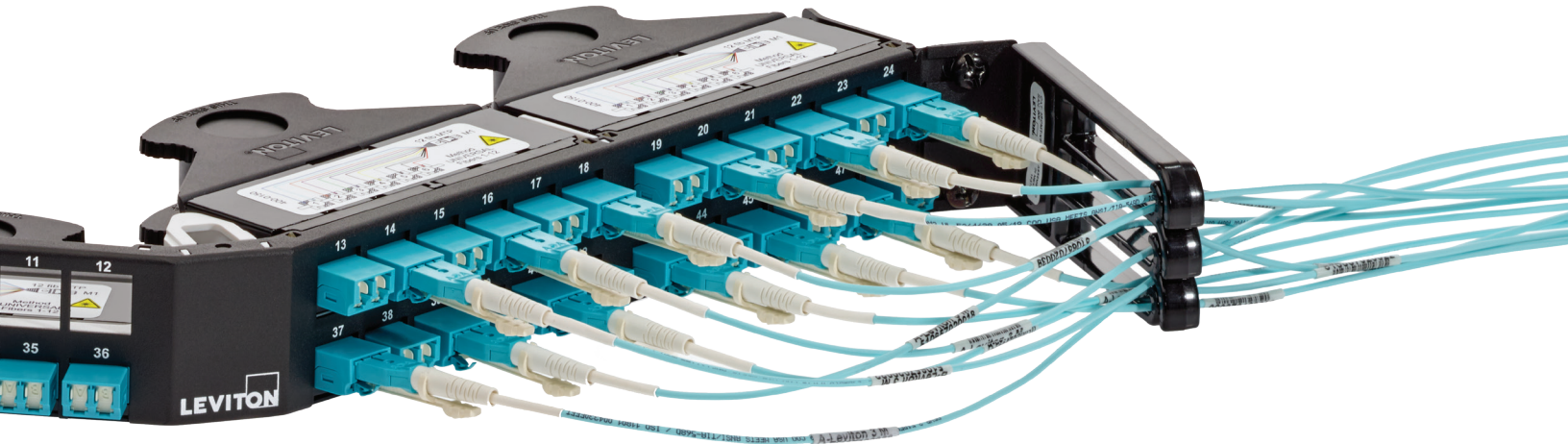
OPT-X™ Fiber Systems

Leviton Network Solutions also rolled out five globally available OPT-X fiber systems. As part of the global availability of these fiber systems, the industry-leading OPT-X SJX fiber cable and pre-terminated fiber trunks are now available to customers around the globe. The OPT-X family of solutions are engineered for simplified deployment and manageability, streamlined network designs, and extended distance capabilities.

OPT-X fiber systems have versatile density options to meet specific network demands, ensuring migration options for future bandwidth growth:

The **OPT-X HDX Unity** and **E2X Unity** system are Leviton's premier Unity fiber cabling performance level, ideal for larger data centers. They support applications requiring ultra-low-loss performance, extended distances, and multiple connection points between active devices. Unity cabling systems are available with the high-density HDX platform, which allows for open and closed patching, or e2XHD panels with rear-loading snap-in cassettes for quick deployment. Both OPT-X HDX Unity and OPT-X E2X Unity systems accept Base8, Base12, and Base24 configurations, and support network migration to 400 Gb/s and beyond.

The **OPT-X HDX Engage** system and **E2X Engage** system offer low-loss connectivity and high performing pre-terminated cable to meet extended reach links and network architectures typical of large enterprise, and data center applications. These systems are also available with HDX and e2XHD patching platforms.

The **OPT-X SDX Premises** system is a versatile solution offering a range of enclosure and panel options, with standard density at 72 fibers per rack unit. Ideal for most enterprise and campus deployments, the system includes bulk cable and standard loss connectivity that deliver reliable performance, easy mechanical or spliced field termination, and solutions for simplified MAC work.

Learn more at Leviton.com/optx

Leviton Makes Significant Investments in Network Solutions Business Unit, Supporting Extraordinary Growth and World Class Service

Leviton is making significant investments into Network Solutions to increase worldwide production capacity, shorten lead times, and upgrade facility equipment to further enable product innovation.

With an $80 million investment, Leviton is doubling the size of the Fuquay-Varina, NC fiber optic cabling facility and expanding global production capacity in multiple manufacturing plants. "In 2020, when many companies were hedging their bets due to the global pandemic, we doubled down and decided to make this significant investment to deliver world class service and products to our customers," said Ross Goldman, Executive Vice President and General Manager of Leviton Network Solutions. "More than $20 million of the planned investment is complete and is already contributing to strong growth and additional capacity across all areas of our business. The remaining investments will add further capacity to address the strong demand for our global end-to-end solutions."

In addition to the investment into Fuquay-Varina facility, Leviton is making a **£600,000 capital investment in its manufacturing facility in Glenrothes, Scotland.** With this investment, the carbon neutral facility will be fitted with solar panels to offset energy costs and further reduce its carbon emissions.
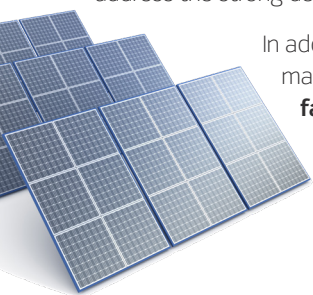
INTERNATIONAL STANDARDS HARMONIZATION IS AN ONGOING PROCESS

The most significant benefit of the adoption process is that product specifications can become truly global.

Not long ago, something as simple as the specified operating temperature range of a fiber optic cable could be different in the US versus Europe due to variations in the way the test standard was written. This created problems when specifying a product for export sale. The fact that TIA is adopting ISO/IEC standards and vice versa means that, by definition, the standards are harmonized, even though there can still be a time lag from adoption. Adopting these standards eliminates at least one barrier to market entry, it lowers the product cost, and it simplifies the global understanding of the expected product performance. For standards news, visit the quarterly **Standards Report**.

Front Loading QUICKPORT™ UTP Patch Panel
With an innovative front-loading bezel, these panels are designed to ease deployment in existing networks, enable easy upgrades and simplify frequent adds, moves, and changes for a variety of media applications. The panels are available in 2RU 48-port format, compatible with all QUICKPORT connectors and fit all industry-standard 19-inch racks and cabinets.
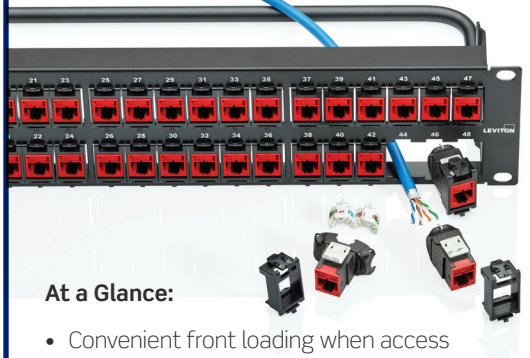
At a Glance:

- Convenient front loading when access to the back of the panel is limited
- Easy port mapping with vertical numbering
- Dual rear cable management bar mounting locations
- A global solution, supporting North American and European panel grounding and bonding requirements

The **LM-RDT cable family has expanded** to include the **LM-RDT CMR** and **LM-RDT I/O**, rounding out the LM-RDT product line. The innovative RDT product line can now be used in all enterprise environments including plenum, riser, and indoor/outdoor applications. The new LM-RDT CMR and LM-RDT I/O cables not only offer very small outside diameters, but also offer enhanced margin guarantees beyond standard, including 8 dB for alien crosstalk performance to ensure robust 10G network performance.

LM-RDT CMR: An industry-first Cat 6A UTP CMR without a spline, for customers who need high-density Cat 6A solutions that can fit into limited or existing pathways and spaces.

LM-RDT I/O: Dual-rated for CMP and CMX outdoor applications. This cable includes the award-winning FLX-1™ technology which reduces recoil and enhances cable flexibility.

TECH TIPS

Leviton's new Panel Extension Kit solves an incompatibility challenge that sometimes arises when installing the e2XHD Rear Flat Cable Manager (e2X1F-CMB) with the e2XHD Flat Patch Panel in most data cabinets, and in Chatsworth 4-post racks (15213-703) and other racks of similar design.

This Panel Extension Kit not only overcomes this issue, but it also moves the slack management features on the cable manager back, enabling easy access to the e2XHD cassettes in the panel without having to remove the cable manager. In addition, the brackets can be used to create a recessed panel solution and may be used to mount rear cable management bars in cabinets and 4-post racks.

E2X1F-BKT
1RU Panel Extension Kit

E2X2F-BKT
2RU Panel Extension Kit

NEWS YOU CAN USE
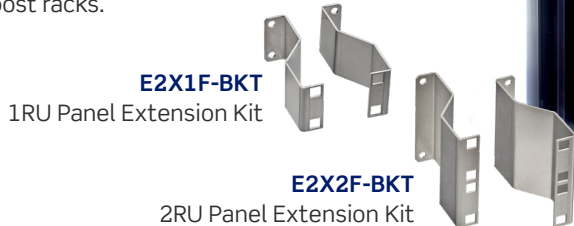
INDUSTRY

Congratulations to our own Chuck Bowser III, RCDD, TECH, who was awarded the David K. Blythe University of Kentucky Award for Outstanding Member of the Year at the 2023 BICSI Winter Conference! For the past 11 years Chuck has mentored and taught thousands of students across the US and UK as a Technical Training Manager at Leviton Network Solutions. As a longtime veteran of the ICT industry, he has designed, installed, and certified cable projects for small and large contractors. He is an RCDD, BICSI Technician, and former BICSI Certified Trainer who participates on several BICSI committees to help shape the future of the industry. Well done, Chuck!

ASK THE EXPERTS

DISCONTINUOUS ISOLATION WRAP

FULL ISOLATION WRAP

Q: Why use a cable with a full isolation wrap rather than one with a discontinuous isolation wrap?

A: Constructing UTP cables, such as SST and LM-RDT, with a full isolation wrap provides superior signal protection. In terms of EMI protection, the full isolation wrap eliminates "entry paths" in the cable for interfering signals, greatly improving performance over a discontinuous isolation wrap UTP cable construction. This is because the coverage provided by a continuous isolation wrap gives better protection from unwanted signals by fully blocking and neutralizing them continuously along the length of the cable. The full isolation wrap — used in both Leviton SST and LM-RDT Cat 6A cables — has been shown to be a highly effective method of reducing external noise, including alien crosstalk.

Questions? Comments? Ideas?

We want to hear from you! Email: crosstalk@leviton.com