10 Ways to Create More Network Capacity in Data Centers

Over the past decade, the demand for more computing power and data center servers has not slowed. Yet while computing demand continues to increase, not all IT budgets are growing. So instead of expanding to larger facilities, many data centers are consolidating and improving infrastructure for efficiency and higher density. A 2012 Uptime Institute survey of 1,100 data center owners and operators found that 30% of respondents say they will run out of data center capacity at one of their sites this year. And the large majority of those said they will make due with the sites they have by consolidating servers and upgrading their facilities' infrastructure.

To support these applications, Leviton offers a broad selection of high-density connectivity and high capacity cable management. Here are just a few:

High Density Patch Panels

1: e2XHD Patching System

Using high density angled panels, this system allows users to mix and match Leviton copper and fiber snap-in cassettes. The panels, available in 1RU and 4RU configurations, support up to 48 copper ports or duplex fiber channels per 1RU (192 copper or 192 fiber in a 4RU space).



2: QuickPort[®] Copper Panels

Leviton QuickPort High Density Patch Panels are an efficient way to increase port density in zone enclosures, racks, and cabinets. 1RU 48-port flat and angled panels double the port count over traditional panels, while 2RU 72-port flat, angled, and recessed angled panels increase port density by 50% over typical 2RU panels.

High Density Fiber

3: 24-fiber MTP[®] Cabling and Connectivity

Leviton's Opt-X Unity 24-fiber MTP system offers at least double the density of legacy 12-fiber cabling, and allows for fewer cable pathways and improved airflow in data centers.

4: High Density Flush Mount Enclosures

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Leviton's Flush Mount Series Enclosures utilize MTP connections on the back with choice of fiber connectors on the front, or can be pre-assembled with harnesses. The largest enclosures accept up to 576 fibers (using LC). The enclosures come in 1RU, 4RU, 6RU, and 8RU configurations.

5: Replicator[®] Enclosures

Leviton's innovative Replicator Kit Series supports the latest high-density SAN switches available from Cisco, IBM, EMC, Brocade and others, and offers up to 384-channel capacity (768 fiber strands). The enclosure incorporates Logical Port Management (LPM), providing an exact replication (blade number and port count) of switch inputs at main distribution.

6: Opt-X Ultra[®] Rack Mount Enclosures

The Opt-X Ultra Rack Mount Enclosures have a 17" depth for high-density fiber terminations and splicing. The family of enclosures are available in 1RU, 2RU, and 4RU sizes, and the 4RU can hold up to 288 fibers (using LC).



7: Opt-X[®] 1000i Rack Mount Enclosures

This family of enclosures is available in 1RU, 2RU, 3RU, and 4RU sizes, and the 4RU can hold up to 360 fibers (using LC) and up to 15 adapter plates.

Cable Management & Zero-U Solutions

8: High Capacity 8" Versi-Duct®

A vertical cable management system designed to optimize performance and protect network cabling infrastructure, this high-capacity system provides a simplified solution for the routing of copper and fiber cables. The 8" wide channel mounts onto any industry standard equipment rack and was built to maximize cable handling capacity while protecting cable integrity in an injected molded product.

Feature	CAT 6A Capacity	CAT 6 Capacity	CAT 5e Capacity
	(.330" Cable)	(.230" Cable)	(.185" Cable)
8" Channel Size	159	327	505

9: Zero-U Patch Panels

Leviton's VertiGO[®] Zero-U Patch Panels provide the ideal solution for copper and fiber connectivity in limited space. Ideally suited for data center server and equipment cabinets, the panel consumes zero horizontal rack units by mounting vertically in the back of the cabinet. The result is easy access to connectivity, improved airflow, reduced patch cable routing complexity, and more space to manage active equipment.

10: Floor Mounted Pathway Support

In many facilities, access to the ceiling in the data center is limited due to blockage by utility ducting and pipe or because the height requires substantial labor. Also, the roof structure may not allow the added weight from cables and ladder trays. Floor Mounted Pathway Supports can carry the load and avoid obstructions while freeing up rack space by adding patching separate from cabinets or racks. This allows for rapid cabinet swapping.

For more information, go to Leviton.com/highdensity.



Resource:

http://www.leviton.com/OA_HTML/SectionDisplay.jsp?section=53214&minisite=10251.