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PDU with Integrated Cable Management Support

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Abstract:

Cable management within a datacenter rack has become critical as rack densities continue to increase, and additional quantities of Power Distribution Units (PDU) are being installed in a rack thus resulting in less area to route and secure cables. A standard 1075mm deep rack has one PDU mounting bracket per side to mount vertical PDUs which often also gets utilized for cable management, and in some circumstances cables are even secured to the rack frame members.

A PDU with integrated cable management is a streamline idea to support cable management within datacenter racks. Incorporating the integrated cutouts along the PDU chassis, is a cost effective way to secure and route cables without the need for additional hardware which results in added cost. Along with being cost efficient a PDU with integrated cable management is also time efficient. Cables can be secured without having to install other hardware saving time to complete a configuration.

The integrated cut outs on the PDU should be placed approximately every six to eight inches along the sides and back of the PDU chassis allows for installation of the PDU to meet all the supported mounting options with outlets facing front of rack, back of rack, or center of rack. Once the PDU is mounted and cables installed, a group of cables from the same or different load segment can be gathered together using a cable tie and secured to one location along the PDU.

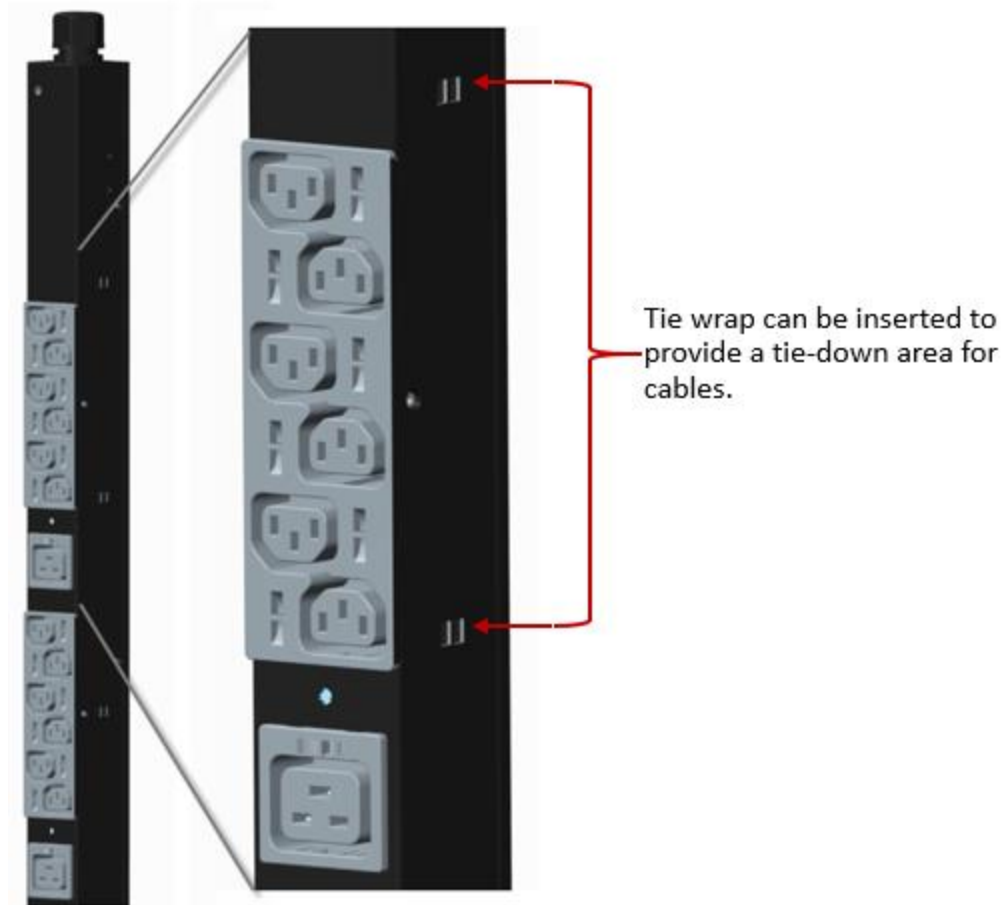Tie wrap can be inserted to provide a tie-down area for cables.

Figure 1 – PDU with Integrated Cable Management

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