

Nominee: Geist

Nomination title: Geist Patented Locking Receptacles for Upgradeable PDUs

Geist launched brand new, patented U-Lock receptacles. Available as C19 and C13, they not only offer complete peace of mind that server and other rack device cables will remain firmly locked in place, but make it quick and easy to identify associated circuits, due to a range of differentiating color options. Users simply plug the cord into the receptacle to lock it in place, and then gently depress the unique bezel design to release.

Geist U-Locks are now offered as standard on the Upgradeable Rack PDU range that features:

- a. fault-tolerant daisy chaining,
- b. 1% billing grade accuracy power monitoring – independently tested in the field
- c. hot-swappable intelligence, allowing PDUs to be upgraded to the latest technology while there is absolutely no interruption to power availability.

The Geist locking system is:

- a. Simple to lock – just plug in; the self-contained locking mechanism works with any standard IEC plug.
- b. Intuitive to release – press the clearly identified colored bezel

Color choices give users:

- a. Clear primary circuit identification, up to three individual primary circuits
- b. Clear sub circuit identification, up to six individual sub-circuits
- c. They work well for almost all individuals with color vision deficiency

2. What tangible impact has your product/solution had on the market and your customers?

- a. Decreased downtime – Downtime costs vary between organizations, but can be significant and detrimental to bottom line and reputation. Geist U-Lock ensures equipment remains online with no threat of unintentional power loss due to an accidentally unplugged power cord. Critical

applications on the equipment will stay running. The protection from downtime provides peace of mind to data center personnel.

b. Lower cost for secure plugs – customers can deploy Geist PDUs with locking receptacles at a lower cost as the U-Lock feature is standard. Also, customers can eliminate the purchase of special cords to support the locking feature; all standard cord sets work with U-Lock.

c. The identification of circuits on the PDU help data center personnel to avoid overloading circuits and PDUs.

3. What are the major differentiators between your product/solution and those of your primary competitors?

Geist's Patented Locking Receptacles provide a smarter locking mechanism, clear identification via color-coded bezels and better user experience than other locking solutions on the market. They are also included as a standard on all Upgradeable Rack PDUs—there is no extra cost to the end user.

Over the years there has been several solutions developed to address the retention problem that work to a varying degree of acceptability, but all add cost and often require special mechanisms and/or cords. Geist Locking receptacles are superior in quality, function and price-point to the below listed models:

Proprietary Cords and Receptacles

A solution that needs a dedicated cable set. It works extremely well, but carries the costs of proprietary cords and requires the disposal of the cords provided with the server. These proprietary cords carry a premium to the end user of up to \$10 per cord.

Lacing Bars

A solution where the plugs are secured in place by binding the cords to a lacing bar fixed perpendicular to the receptacle face. This works well, but means the installer has to be diligent and secure the cord. They require wire ties or the like on hand and changing out cords means cutting the wire ties with the associated risk of nicking the cable, which may create a shock hazard. The lacing bars are large and often protrude into the cabinet pace such that they cannot be deployed without compromising access within the cabinet. End user cost, circa \$35 - \$40 per bar, averaging around \$1.50 per receptacle plus costs of wire ties.

Wire Clip

Another common industry solution involving small pre-formed wire bails that are hinged at the chassis of the PDU and pull over the back of the inserted C14/C20 plug. They need specific designs of PDU and are generally awkward to deal with in large PDUs. They are highly variable in their success due to the wide differences in C14/C20 plug design. End user cost, circa \$0.80 per wire clip.

Plug Clamps

Less common, this solution uses a clamp that is fixed to the chassis to bind to the plug, a bit like a pipe clamp. It's generally successful in achieving a good clamp to the plug, but it takes up a great deal of room, is and often awkward to operate they generally need a screwdriver to turn the clamp operating screw and depending on a cabinet mounting and density, access to the screw can be difficult, or even impossible. End user cost, circa \$2.00 per clamp.

Why nominee should win

- The Geist culture has revolved around the customer for more than 60 years. Every day, we come to work to accomplish one goal: offer our customers industry-leading products and technology for data center management.
- This patented locking technology was designed with data center managers in mind. It ensures they will have two less things to worry about when using our PDUs.
- We stand by our product and our customers—providing premium technology and superior customer service.
- We can manufacture via our US or Taunton facilities making global shipments easy and fast.
- We have an in-house UL lab for conformance/quality testing.