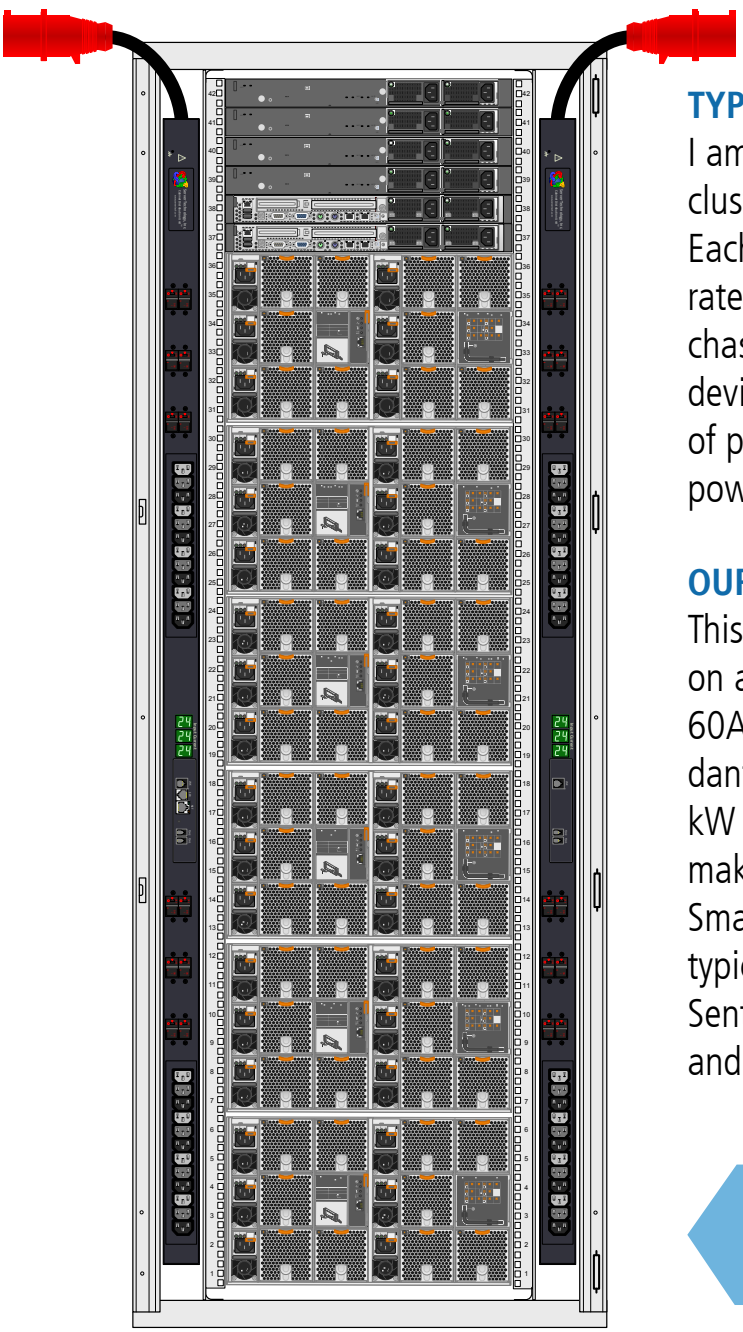
YOUR POWER STRATEGY EXPERTS

# How do I provide up to 34kW in a rack with only one pair of PDUs?

**APPLICATION NOTE HDOT-005 | DECEMBER 2016**

## Learn how to power high-density IBM/Lenovo NeXtScale System* devices.



### TYPICAL APPLICATION

I am designing cabinets for high-density Hadoop clusters running on IBM/Lenovo NeXtScale chassis. Each cabinet has six chassis with 80 Plus Titanium rated 1300 watt power supplies - six supplies per chassis running N+N - and some miscellaneous 1U devices. I need a solution to distribute up to 27 kW of power in these cabinets and provide for system power usage and temperature monitoring.

### OUR SOLUTION

This HDOT® PDU is configured with 24 C13 outlets on an alternating-phase layout and an IEC 60309 60A North American rated plug. In an N+N redundant deployment, available power is about 34.5 kW when balanced. This alternating-phase design makes balancing easy with color-coded outlets. The Smart PIPS® metrics provide +/- 1% accuracy on typical power measurements and can be rolled into Sentry Power Manager (SPM) for capacity planning and efficiency analysis.

Pictured left is a C1S24CB-5QAE2700 Smart Master PDU with a C1L24CB-5QAE2700 Link PDU. Choose from six highlight colors and a variety of outlet and plug combinations. Add up to four EMTH-1-1 for monitoring of temperature and humidity.

*IBM is a trademark of International Business Machines Corporation. Lenovo is a trademark of Lenovo (Beijing) Limited Corporation. NeXtScale is a trademark of Lenovo Enterprise Solutions (Singapore) Pte. Ltd.

YOUR POWER STRATEGY EXPERTS

# High Density Outlet Technology

## HDOT SMART PDUS MAXIMIZE DENSITY

Server Technology's High-Density Outlet Technology (HDOT®) PDUs meet the needs of a wide range of data center equipment cabinets. High power densities and reduced cabinet space require new and innovative products like Server Technology's own patented outlet technology that provides industry standard C13 and C19 outlets in a drastically reduced footprint. Additional features include high native cord retention that eliminates the need for custom and costly ancillary locking cord devices. Manufactured with robust high temperature materials carrying a UL94 V-0 flame rating makes these outlets ideally suited for harsh data center environments.

## KEY HDOT® BENEFITS:

- Industry standard C13 and C19 with minimized footprint
- Maximum possible outlet density in an Intelligent PDU
- High native cord retention, reducing the need for additional locking devices
- Color-coded alternating-phase outputs for easy cabling
- Certified for at least 60°C (140°F)

## KEY SMART PDU BENEFITS:

- PIPS® (Per Inlet Power Sensing) high-accuracy measurements of current, voltage, power, and other key power metrics
- Environmental measurements through plug-and-play probes
- SNMP traps and email alerts
- Master-Expansion linking allows single-IP access to the cabinet full of PDUs

Interested in learning more about or building your own custom HDOT PDU?
Visit us online at: www.servertech.com/products/build-your-own-pdu

Interested in learning more about how Server Technology can help you manage and distribute power in your datacenter?
Visit us online at: **www.servertech.com/products/**


**North America Headquarters**
1040 Sandhill Road
Reno, Nevada 89521
1-775-284-2000 Tel
1-800-835-1515 Toll Free
1-775-284-2065 Fax
sales@servertech.com
www.servertech.com
www.servertechblog.com

**U.K. Western Europe, Israel & Africa**
Fountain Court
2 Victoria Square
Victoria Street
St. Albans
AL1 3TF
United Kingdom
+44 (0) 1727 884676 Tel
+44 (0) 1727 220815 Fax
salesint@servertech.com

**Germany Central Europe, Eastern Europe & Russia**
10th + 11th Floor
Westhafen Tower
Westhafenplatz 1
60327 Frankfurt
Germany
+49 697 1045 6205 Tel
+49 697 1045 6450 Fax
salesint@servertech.com

**Hong Kong APAC**
Level 43, AIA Tower
183 Electric Road, North Point, Hong Kong
+852 3975 1828 Tel
+852 3975 1800 Fax
salesint@servertech.com

**India & Middle-East**
Regus Municipal No. 3, Old Madras Road, Benniganahalli village,
Krishnarajpuram Hobli, RMZ Infinity, 1st floor,
Tower D, Bengaluru,
Karnataka 560016
India
+91 99022 44534 Tel
salesint@servertech.com


Server Technology®

Stay Powered | Be Supported | Get Ahead


©2016 Server Technology, Inc. Version 12/05/16. Sentry and Server Technology are registered trademarks of Server Technology Incorporated. Information is subject to change without notice. Printed in USA. Server Technology offers a wide range of products for North America and Global markets; for more information visit our website at www.servertech.com