

R175-0010 Rack PDU Sensor for Vertiv™ Geist™ rPDU



Features & Benefits

- Geist™ Power Information via RF Code Wireless Infrastructure at 433 MHz
- Real-Time Monitoring for rPDU Power Metrics, Alerts, Alarms and Warnings
- Per Phase Status & Metrics, including:
 - Phase Voltage
 - Phase Amperage
 - Phase Power
 - Phase Energy Use
- Plug and Play into Ethernet port of networked capable rPDUs for “Wire-free” Power Monitoring
- Compatible with Vertiv™ Geist™ GU-Series Monitored or Switched rPDUs
- Auto-Configuration up to 3 Link rPDUs Daisy Chained through an Array Manager rPDU
- Integrates with RF Code’s CenterScape Platform
- AC Powered via DC Adapter with Battery Back-Up

Designed for deployment with Vertiv™ Geist™ Upgradeable switched or monitored rack PDUs, R175 sensor enables “wire-free” power monitoring over the RF Code radio frequency infrastructure.

Integrated power information for Geist Upgradeable switched or monitored rPDU utilizing the RF Code R175 rPDU sensor. The R175 offers wireless communication for use in data centers, equipment room racks and cabinets that provides continuous, automated monitoring of each rPDU to provide measurement at the rack level.

Power metrics and rPDU information is transmitted utilizing RF Code’s “wire-free” radio frequency infrastructure via the rPDU sensor. This results in a comprehensive power monitoring solution made available in RF Code’s CenterScape platform.

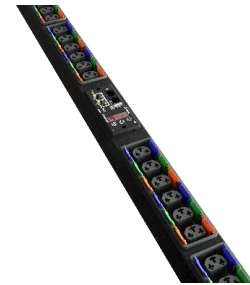
The R175 rPDU sensor plugs into the Ethernet port of the rPDU identifies the Geist™ model and capabilities, then relays that information to CenterScape. The R175 sensor auto-configures rPDUs as an Array Manager unit or implemented as Array Manager/Device units with one sensor required per Array Manager rPDU and up to three (3) Array Devices. This solution enables customers to monitor power metrics from each rPDU at a dramatically reduced cost of ownership by eliminating wires/cables, IP address allocation and network administration.

Designed for use with rack-mounted rPDUs, the R175 433 MHz RF transmitter features simple plug and play for quick and easy installation. Simply plug the sensor’s locking RJ45 connector into the Ethernet port on the rPDU and attach the sensor to the top of the rack (this ensures clear signal transmission in metal-dense data center environments).

Each sensor broadcasts its unique ID and a portion of the rPDU data once every 10 seconds using RF Code’s patented communication protocol.



R175 rPDU Sensor



Vertiv™ Geist™ Upgradeable rPDU

The power metrics are transmitted to the RF Code readers that includes rPDU product information rPDU phase and power usage information such as amperage, voltage, apparent power, active power, and breaker status if applicable. All power data collected from the rPDU flows via the RF Code readers to the RF Code CenterScape platform as well as other third-party applications for power monitoring and display. The software presents all of the collected power parameters and computes additional attributes from this data to provide a complete picture of power utilization, power efficiency and power status. Power attributes can be utilized by existing CenterScape features such as:

- Live table and map views
- Interactive graphing
- Scheduled reports and graphs
- Alarms, Alerts and thresholds

The R175 is DC powered via an AC/DC adapter or USB with battery backup power to provide alarms, alerts and notifications if a power outage occurs. The R175 will continue to operate for up to 30 minutes on battery backup. A low battery alert is provided to indicate when the battery needs to be replaced.

In operational mode the R175 rPDU Sensors only receive information from the rPDUs, hence no outlet control or other actions are possible through the sensor. This means the RF Code wireless solution does not compromise power security.

Technical Specifications

Available rPDU Information SA Power Metrics

General Information	rPDU Model Number
	rPDU Serial Number
	rPDU Manufacturing Date
	rPDU Firmware Revision
	rPDU Daisy-Chain Configuration
	rPDU Message Loss
Power Information	Per Phase Voltage (V)
	Per Phase Current Flow (A)
	Per Phase Energy (kVA-Hours) - ±1% metering accuracy
	Per Line Current Flow (A)
	Per Outlet Average RMS Current (A)
	Per Outlet Energy (VA-Hours) - ±1% metering accuracy
Alarm Information	Unit Disconnect Status
	Unit Communication Status
	Phase Voltage and Current Alarms
	Phase Load Balance Alarm
	Rack Power Redundancy Alarms
	Sensor Low Battery Notification
Computed Attributes in RF Code Centerscape	rPDU Capacity Rating
	Available Capacity per Line
	Phase Power in Watt-Hours
	Phase Power in V-A-Hours
	Phase Load Balance
Compliance	FCC Title 47 CFR Part 15; FCC ID: P6FX
	RED 2014/53/EU Article 3.1(a): Health and Safety
	RED 2014/53/EU Article 3.1(b): Electromagnetic Compatibility
	RED 2014/53/EU Article 3.2: Radio Spectrum
	RoHS Compliant
Software	Requires CenterScope Revision 1.4 and above
	Requires Vertiv Geist Upgradeable (GU) and R-Series rack PDUs Firmware Revision 5.5.1 or later

For more information about RF Code's R175 Sensor or CenterScope software, visit the **RF Code website or see RF Code contact information below.**



North American Headquarters

Austin, TX 78758
 Tel: 512-439.2200
 Fax: 512.439.2199
sales@rfcode.com
<http://www.rfcode.com>

Vertiv.com | Vertiv Headquarters, 1050 Dearborn Drive, Columbus, OH, 43085, USA

© 2021 Vertiv Group Corp. All rights reserved. Vertiv™ and the Vertiv logo are trademarks or registered trademarks of Vertiv Group Corp. All other names and logos referred to are trade names, trademarks or registered trademarks of their respective owners. While every precaution has been taken to ensure accuracy and completeness here, Vertiv Group Corp. assumes no responsibility, and disclaims all liability, for damages resulting from use of this information or for any errors or omissions. Specifications, rebates and other promotional offers are subject to change at Vertiv's sole discretion upon notice.