Server Technology CDU Integration with RF Code

Server Technology, Inc. and RF Code, Inc. have developed a rack level wire-free power monitoring solution designed for data center energy optimization. This jointly-developed solution integrates Server Technology's Smart and Switched cabinet power distribution units (CDUs) with patented Per Inlet Power Sensing (PIPSTM) -- with or without Per Outlet Power Sensing (POPSTM) functionality -- with RF Code's active RFID hardware and management software.

Server Technology Overview

Server Technology Quality Rack Power Solutions

Server Technology's experts produce the highest quality rack mount power distribution and monitoring solutions that help manage power capacity, reduce downtime and improve energy efficiency. The leading innovator since 1984, Server Technology created the intelligent cabinet PDU market and holds the largest number of patents in that industry. Serving the Data Center and Carrier markets, Server Technology offers the most extensive selection of cabinet PDUs to manage power usage for servers, storage and network equipment. Based on the innovative Server Tech Quality Power Architecture (QPA), Sentry CDUs and Sentry Power Manager provide the industry's most accurate information to maximize rack density, reduce overloading and monitor energy efficiency. All Sentry CDUs are engineered and manufactured to meet the highest quality standards and are100% performance tested for reliability and accuracy. Server Tech QPA eliminates single points of failure, reducing downtime and costs. The modular architecture is flexible and enables quick delivery of solutions that meet customer-specific requirements. Server Technology gives IT and Infrastructure Professionals the control to make accurate capacity planning decisions, reduce risks, and meet energy efficiency goals.

Integration Details:

This solution allows RF Code sensor tags to capture and then transmit power monitoring in-feed and device level data (with POPSTM) from the Server Technology CDUs, to the RF Code wire-free active reader infrastructure. Readers then send the information to RF Code's Sensor Manager software, which manages the power monitoring information. The new RF Code R170 PDU Tag for Server Technology plugs into the serial port on Server Technology's Smart or Switched CDUs. The sensor collects power information from the CDU and transmits that data to RF Code readers installed in the data center via a patented radio frequency protocol.

Power monitoring data provided by the solution includes amperage, voltage, apparent power, active power kW, outlet status changes (on, off and reboot), capacity and breaker status. The data is sent from the readers to RF Code's Sensor Manager software, which manages the captured information and makes additional computations about power utilization.



The available power information from the joint solution includes:

Main PDU Data:

- PDU Model
- PDU Disconnected
- PDU Serial Number
- PDU Active Power
- PDU Apparent Power
- PDU Total Active Power Used
- PDU Total Apparent Power Used
- PDU Total Power Start Time

PDU Phase Data:

- Phase Active Power
- Phase Amperage
- Phase Apparent Power
- Phase Power Factor
- Phase Total Active Power Used
- Phase Total Apparent Power Used
- Phase Total Power Start Time
- Phase Voltage (L-L)
- Phase Voltage (L-N)

PDU Outlet Data:

- Outlet Active Power
- Outlet Amperage
- Outlet Apparent Power
- Outlet Total Active Power Used
- Outlet Total Apparent Power Used
- Outlet Total Power Start Time
- Outlet Voltage
- Outlet On/Off/Reboot Reporting (for switched CDUs only)

PDU Breaker Data:

- Breaker Amperage
- Breaker Tripped
- Breaker Phase Source for Breaker
- Tower Identifier [master/slave]

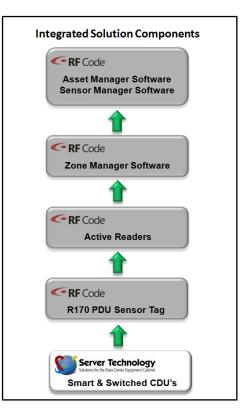
PDU Line Feed Data:

- Feed Line ID
- Line Amperage
- Line Overload
- Line Warning

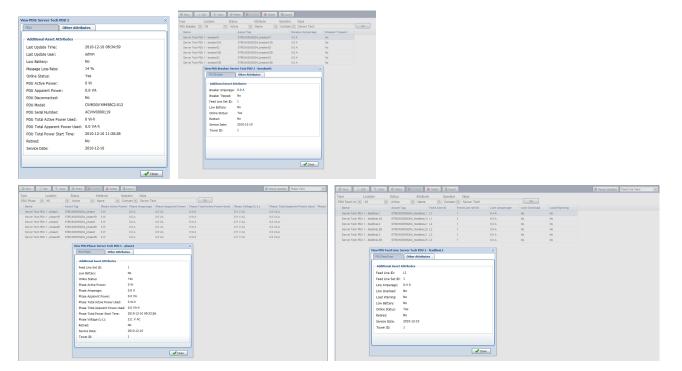
Customers can manage and access the power usage data using the following features in RF Code's Sensor Manager software:

- Live table views
- Map views
- Interactive graphing and reporting
- Scheduled graphing and reporting
- Alerting and thresholding

This joint solution provides the customer with a complete picture of overall power utilization or individual device power utilization or both due to the capability of the Server Technology's patented Per Inlet Power Sensing (PIPSTM) and Per Outlet Power Sensing (POPSTM). Through the use Sensor Manager, the data can be managed using live table views, map views, interactive graphing and reporting, scheduled graphing and reporting, alerting and thresholding.



Product Screenshots



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