



Power IQ

Energy management via a single Web interface.

Platform Options

- ▶ VMware® Virtual Appliance
 - Our application software, database and hardened Linux® operating system are fully tested and ready to load on your VMware platform
 - Tested with ESX, ESXi and Player
- ▶ Raritan Hardware Appliance
 - Our application software, database and hardened Linux operating system are loaded onto our enterprise-class, rack-mountable 2U server with dual power supply and redundant fans

Data Center Energy Management A Solution That Helps You Be More Energy Efficient

For data center and lab managers who are concerned about the utilization and cost of power, Power IQ enables you to reduce capital and operating expenditures by providing the information and controls you need to be more energy efficient and fully utilize your existing power infrastructure.

Through one Web browser, the scalable Power IQ manages any SNMP-metered device. You have the ability to add new devices on your own. Support is preinstalled and tested for APC®, Avocent®, BayTech®, Cyber Switching®, Cyclades®, Eaton, Geist, HP®, Knurr®, Liebert, MRV®, NetBotz, Raritan, Rittal®, Server Technology®, Sinetica, Starline Track Busway, Tripp Lite and UNITE™ devices.

Efficiently Utilize Energy

Power IQ provides you with valuable information and automated control that can help you gain efficiencies in the data center right away, including:

- ▶ Baseline energy consumption and track changes by IT device, rack, zone, customer, department and data center
- ▶ Easily seeing if you are operating within industry-accepted – and server manufacturers' recommended – temperature and humidity ranges
- ▶ Estimated savings calculation from increasing temperature to upper limit of recommendations
- ▶ Temperature threshold alert monitoring and trending, to safely manage environmental conditions
- ▶ Energy cost billback reports with one click
- ▶ Remote power on/off outlet groups
- ▶ Agentless graceful shutdown of system operating systems

Make Informed Capacity Planning Decisions

Power IQ supplies actual load of IT devices under computing stress to provide you with better planning information.

- ▶ Collect short- and long-term data and compare to rated capacity to update design assumptions
- ▶ Monitor trends, alerts and threshold violations to understand future needs
- ▶ Power capacity meter will provide you forecasted "days of energy supply"

User-Configurable Energy Management Dashboard

- ▶ Display on large screen in slide show mode with real-time updates
- ▶ Configurable size, layout and charts
- ▶ Display power and environmental health, energy capacity and consumption, weather services, maps, video and much more



Winner of "Outstanding IT Product"
for Power IQ Energy Management
Software and PX® intelligent power
distribution units (iPDUs)

More informed capacity planning and energy efficiency in minutes

Vendor Agnostic Monitoring and Management

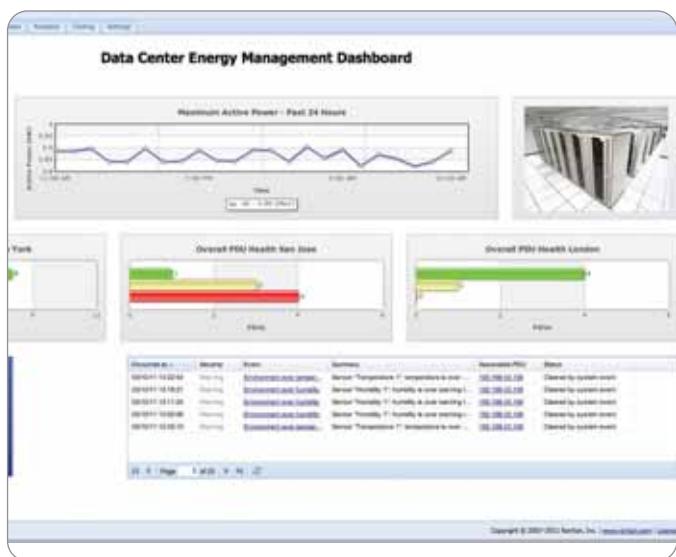
Through one Web browser, the scalable Power IQ manages devices by APC, Avocent, BayTech, Cyber Switching, Cyclades, Eaton, Geist, HP, Knurr, Liebert, MRV, NetBotz, Raritan, Rittal, Server Technology, Sinetica, Starline Track Busway, Tripp Lite and UNITE.

The screenshot shows a 'Event Listing' table with columns: Occurred at, Severity, Event, and Summary. The data includes:

Occurred at	Severity	Event	Summary
07/01/10 11:32:27	Warning	Outlet under current	Outlet "5": current is un
07/01/10 10:47:08	Warning	Outlet under current	Outlet "13": current is u
07/01/10 10:47:07	Warning	Outlet under current	Outlet "9": current is un
07/01/10 10:25:35	Warning	Environment under temperature	Sensor 'Temperature 3'
07/01/10 10:22:02	Critical	Environment under temperature	Sensor 'Temperature 3'
07/01/10 10:16:49	Warning	Environment under temperature	Sensor 'Temperature 3'
07/01/10 10:03:57	Warning	Environment under temperature	Sensor 'Temperature 3'
07/01/10 09:53:47	Critical	Environment under temperature	Sensor 'Temperature 3'

User-Configurable Dashboard

The user-configurable dashboard provides a large screen, centralized view of power and environmental health, energy capacity and consumption, weather services and maps.



Power Control of Device Groups

Easily perform remote power control of outlets, IT devices and groups of IT devices with power sources spanning multiple rack PDUs.

The interface shows a tree view of locations like Chicago Lab, Room A, and various racks. On the right, a 'Device Groups' configuration panel is open for 'MS Exchange' with fields for Name, Customer, Device type, Power rating, and Decommissioned? checkboxes. It also lists 'Device Groups' and 'Outlets connected to' with a PDU IP Address dropdown and checkboxes for outlets 66.214.208.91 and 66.214.208.91.

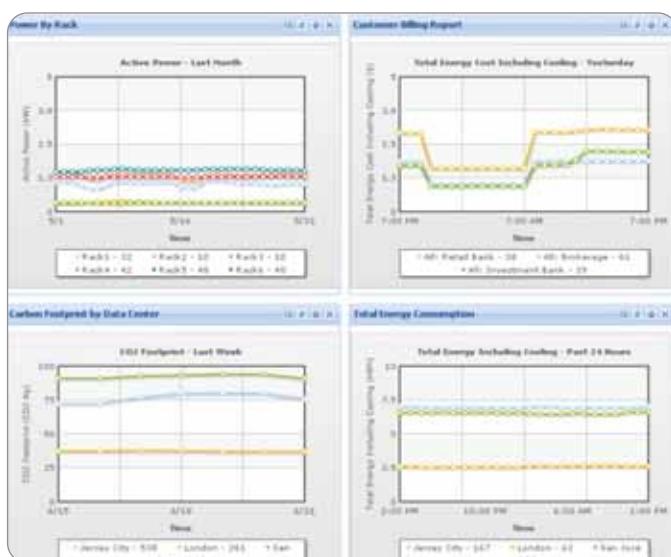
Power Capacity Gauge

Real-time power capacity utilization at any level in your data center or lab (PDU, rack, row, busway, room, etc.). See current, maximum and minimum load over selected time period.



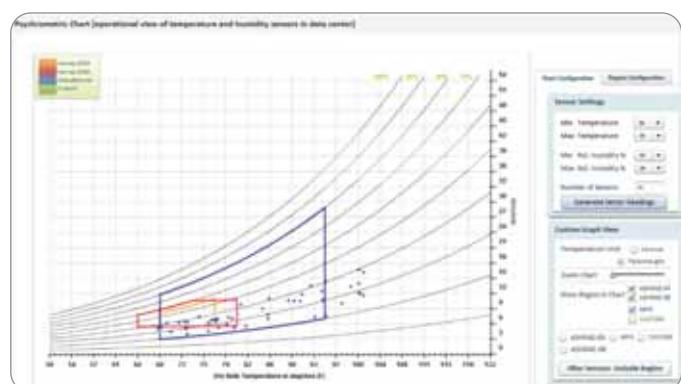
Power and Energy Analytics

Create an unlimited number of charts, such as active power by rack, carbon footprint by building, department billback and total energy consumption.



Cooling Chart

Understand if you are compliant with manufacturers' and industry-accepted recommendations, and project how much you can save by increasing room ambient temperatures.



Power Capacity "Days of Supply" Forecast

Understand your real-time power load, rate of change and forecasted trends at all levels of your infrastructure with our capacity forecast charts.



Smart Rack View Page

Our smart rack view page with quick charts provides "one click access" to rack power, cooling, airflow and events. This new view makes three-phase load balancing easy.



Monitoring and Management

- ▶ A central management console consolidates names, polling status, location, model and firmware onto one screen, saving valuable management time
- ▶ Bulk configuration and firmware distribution for PX PDUs
- ▶ Power and environmental events and notifications

Automated Power Control

- ▶ Remote power control of outlets, IT devices, device groups and racks
- ▶ Agentless graceful operating system shutdown

Power and Environmental Data Aggregation

- ▶ User-configurable collection intervals ensure desired accuracy while minimizing network traffic
- ▶ Aggregate active power, current, temperature and humidity data

Reporting and Charts

- ▶ Energy, cost and carbon consumption reports keep customers and/or internal departments informed
- ▶ Chargeback reports
- ▶ Exception reports help you find stranded power capacity
- ▶ Trending and status reports help you easily see future capacity needs
- ▶ Thermal analysis – temperature and humidity compliance reports
- ▶ Power capacity meter will provide you with forecasted “days of energy supply”

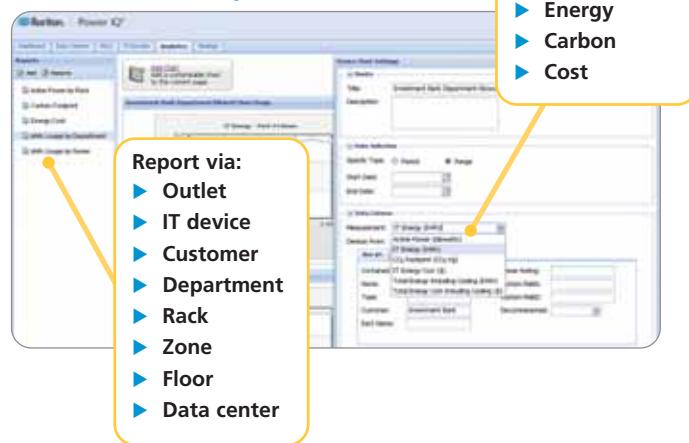
Open Data Model

- ▶ Automatically shares information about racks, PDUs and outlets with dcTrack®. dcTrack displays rack PDU and sensor data collected by Power IQ
- ▶ Web Service API – for easy integration with your systems and custom programs
- ▶ Open database connectivity capabilities let you use your existing data warehouse and reporting system to generate custom reports
- ▶ Import and export data via CSV file

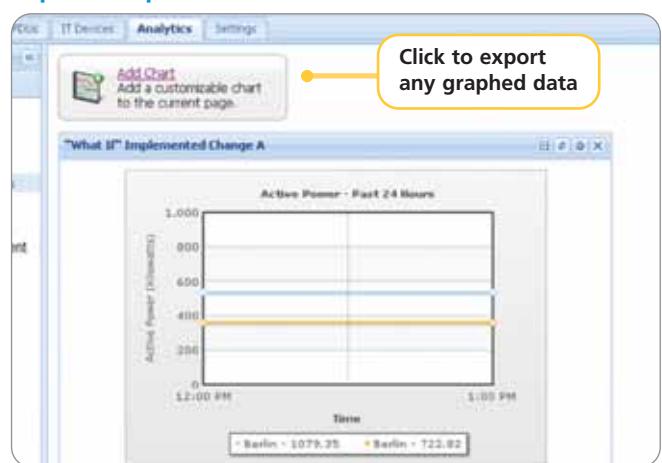
“Power IQ easily allows me to manage and forecast my power needs in the data center. The centralized aggregation of my power consumption will be invaluable in planning future data centers and analyzing future power needs.”

– Matt Pusateri
Systems Administrator
WebAssign

Create Custom Reports



Export Graphed Data to CSV



Ready to learn more about Raritan's Power IQ?
Call +31 (0)10 284 4040 or visit www.raritan.eu/poweriq today.