Consolidating server and network equipment in legacy computer rooms

Challenge

"My IT equipment is all in one place and I need to ensure that my servers and networking gear are organized and protected."

Solution

Choose the right rack for the job

Most IT racks have the same look, but rarely have the same feel. We have developed racks specifically for servers and networking which account for important details like cable management and power distribution.
This solution pairs our optimized rack solutions with a high availability UPS for protecting all of your critical equipment as simply as possible.
This solution has been optimized to operate in typical server room conditions where some building cooling already exists.
Many of the components can also be customized to fit even the most obscure needs.
Protecting a solution of this importance doesn't stop with power and cooling, so we have included a surveillance camera and environmental monitoring device making sure the space is manageable and secure, even from a remote location.

Benefits

> Remotely manageable power outlets

> Security and remote management

> Networking rack for neat and clean cable organizing

> 3 rack solution that can be assembled easily

> Redundant UPS solution for the most availability

> Outlets in each rack powered by central UPS make managing power easy

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Target Segments and Applications

> Server Rooms

> Enterprise branch offices

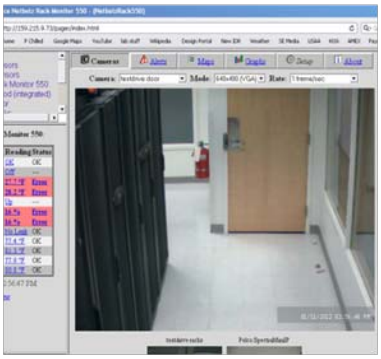
> Retail stores

> Recently Consolidated Equipment

> Virtualized Servers

A Symmetra LX UPS system can provide N+1 redundant power protection and offer scalability you need for future growth. The system grows in power increments of 4kVA and is a modular design, making servicing the unit easy for a non-technical person.
A centralized UPS can provide power to multiple racks, and in this solution we provide power to all 3 racks using one UPS.

Netbotz Camera provides remote video surveillance over the network



Bill of Materials	
NetShelter SX Server Rack (600mm width)	(2) AR3100
NetShelter SX Networking Rack (750mm width)	(1) AR3140
Symmetra LX Rack mount UPS System	(1) SYA16K16RMI
Rack Roof Ventilation Fans	(2) ACF502, (1) ACF504
Switched Rack Power Distribution Unit	(3) AP8959
Cable Management Accessory	(3) AR8442
Netbotz Monitoring & Surveillance	(1) NBRK0551
Netbotz Camera Pod	(1) NBPD0160
Optional Battery Pack	SYARMXR9B9I (+26 minutes)

Solution Attributes	
Rack Equipment Capacity	106U (3 racks)
Power Capacity	16kVA (12.8kW)
Power Output Voltage	230V 50Hz
Total Available Power Outlet Types *(this attribute includes all outlets in the solution, and accounts for outlets used by powered solution components)*	HW 3 wire (1PH+N+G) (71) IEC C320 C13 (16) IEC C320 C19
Connection Type for UPS	HW 3 wire (1PH+N+G) HW 5-wire (3PH + N + G)
Runtime as Configured at Full Load	6 minutes

Additional Details & Options

If you only need 1 camera, consider a lower cost alternative to the recommendation above.

The NBWL0356, is a camera pod with environmental monitoring capabilities. It is not scalable like the 550, but can offer basic functions at the right price.

For applications that do not require N+1 power redundancy, there are options for UPS systems. The Smart-UPS Online can deliver up to 20kVA in only 12U.

15kVA - SURT15KRMXLI
20kVA - SURT20KRMXLI

Server rooms often are equipped with basic in room air conditioning systems. If you need supplemental cooling, our InRow SC self contained cooling system can be installed to provide additional cooling. Shown above, our InRow cooling system installs between racks and provides up to 5.25kW of cooling capacity.
P/N: ACSC101

Remote management of this solution requires the use of one network port and IP address. This solution allows control of outlets, monitoring of internal and external temperature & proactive notifications and warnings for power issues, outages, and even battery life. Explore the user interface and options at http://testdrive.apc.com