



Application Guide

Power Management Solution for SMB Server Rooms

Most companies are continually adding to their IT server inventory such that, for many, it becomes necessary to house them in a dedicated and secure server room environment.

Moreover many high-end types of supporting infrastructure equipment are also purchased to support the installed servers. Critical business data and tasks require 24/7*52 reliability; deploying a high-efficiency power management solution greatly benefits the servers, supporting equipment and the IT administrators. Lowering energy costs and supporting green measures is also an increasing trend in server room management. SMB server room administrators that can remotely monitor and control power can save energy cost and boost efficiencies of server room management.

Solutions

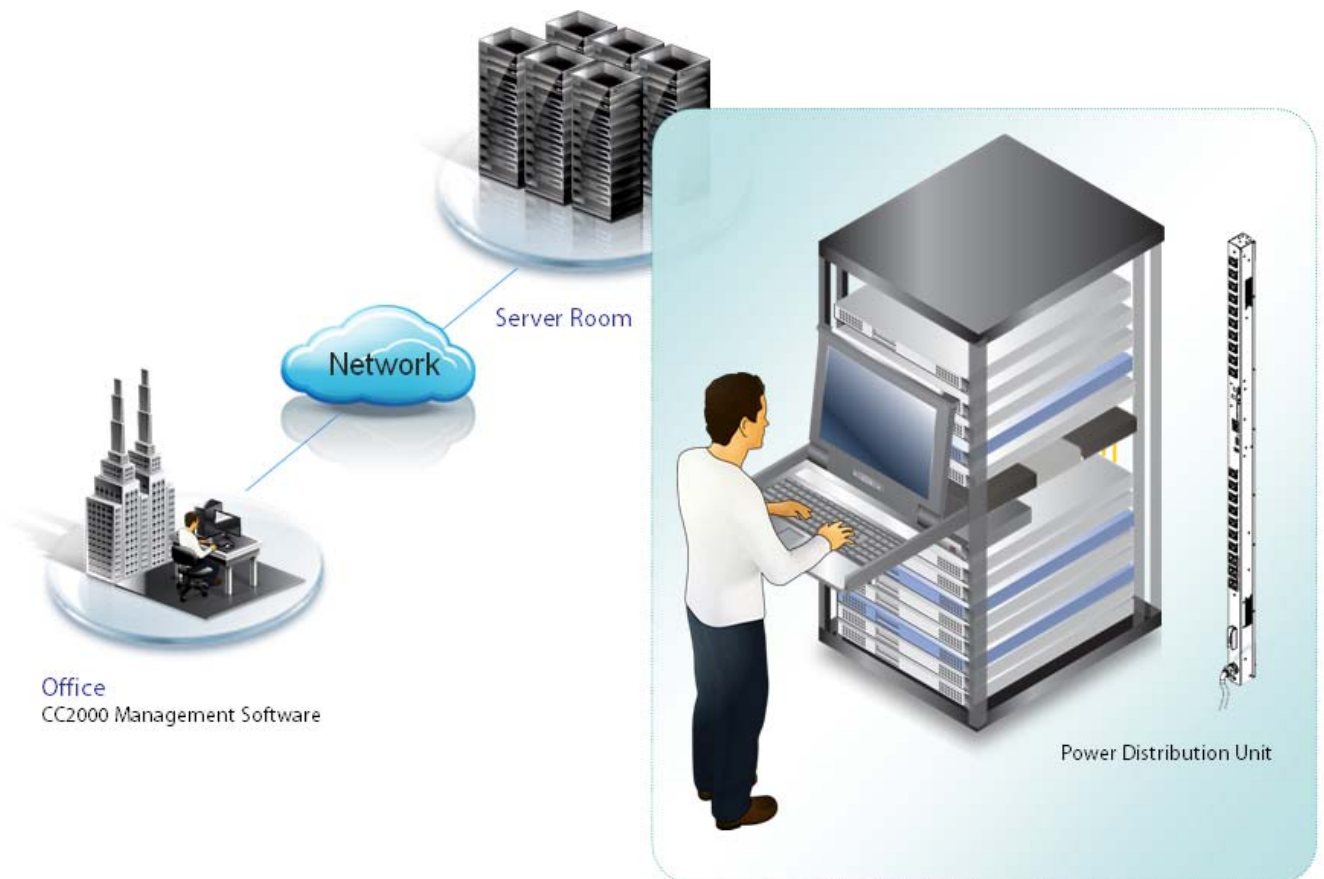
ALTUSEN Power Over the NET™ products are Power Distribution Units (PDUs) that offer outlet level control combined with remote access capability. These PDUs give IT administrators the ability, over TCP/IP, to power control devices attached to the unit from practically any location. With support for power status measurement, PDUs enable administrators to monitor the current, voltage and power consumption of their IT equipment. Administrators can monitor at either the PDU or outlet level helping them minimize their equipment power costs and ensuring a high level of system availability.

	PN5212	PN5320	PN7212	PN7320
Max. Current	20 A	30 A	20 A	30 A
# of Outlets	12	20	12	20
Rack Space Req'd	0U	0U	0U	0U
LAN Port	V	V	V	V
Daisy-chain	V	V	V	V
Switching Capability	Per Outlet	Per Outlet	Per Outlet	Per Outlet
Metering Capability	PDU Level	PDU Level	Outlet & PDU Level	Outlet & PDU Level
Thresholds & Alarms	V	V	V	V
Environment Monitoring			V	V
Digital Output Port			V	V
Modem Support			V	V

*Please see www.aten.com for more details

Application

The ATEN Power Over NET™ - Power Distribution Units offer a flexible and highly efficient solution for server room management. Just install it in a 0U configuration on the side of a rack; connect the power cords of each device to the outlet on the PDUs; then connect the PDU to the LAN and to an AC power source. You can remotely monitor the power status of the connected devices and switch their power on and off through a convenient browser-based interface. Additional units can be easily daisy chained as your business grows and with ATEN's CC (Control Center Over the NET™) management software you can centralize control of all the PDUs via a single portal.



Benefits

◆ Power Management

ALTUSEN's Power Over the NET™ / Power Distribute Unit products are designed with up to 20 outlets. Outlets can be individually controlled so that you can separately set each outlets power on/off sequence and delay time. On/off scheduling allows you to configure start, shutdown, and restart times on a daily, weekly, or monthly basis.

◆ Outlet Switching

By simply clicking a button on the browser-based user interface (UI), you can easily switch the power, on or off, to the connected devices. There is no longer any need to walk around the server room turning equipment on and off. Having remote switching capability of the power at the outlet level ensures that the server room operates smoothly.

◆ Remote Monitoring

With PDU/Outlet level metering you can, via a browser-based UI, easily monitor the current, voltage, and power consumption status of all connected IT equipment. With the addition of temperature and humidity sensors, even the status of the server room environment can be monitored from just about anywhere in the world.

◆ High Amperage Capacity

Utilizing ATEN PDUs enables you to replace older types of power bars. With a high amperage capacity (20 or 30 A), and IEC320-C19 outlet support, the PDUs deliver plenty of power to any typical server rack. You can safely connect a larger number of devices than you generally could with older ordinary power bars.

◆ OU Design

The ATEN PDUs feature a space-saving 0U design that allows it to be mounted vertically on the outside of the rack. Vertical mounting results in a more efficient use of server room space and helps to eliminate the usual cable clutter.

◆ Early Warning Notification

The PDU permits you to set custom thresholds for current, voltage, power consumption, humidity, and temperature. When levels exceed the defined thresholds, designated recipients can receive alarm notifications via SMTP email, SNMP traps, or SMS sender (connected to the Digital Output port). Necessary steps can be taken to avoid equipment damage due to abnormalities such as circuit overload thereby reducing the mean time of recovery and minimizing loss.

◆ Centralized Management*

ATEN's CC (Control Center Over the NET™) management software can be integrated with a Power Over the NET™ installation such that you can centralize the control of all system PDUs. You can easily control all the multi-located PDU stations through a single centralized web portal. Combining PDUs with ALTUSEN's CC management software gives IT administrators the advantages of centralized control over not only their entire Power Over the NET™ installation, but also all other ALTUSEN Over the NET™ products from a single user interface.

◆ API Support

With API support the ALTUSEN PDU solutions provide you with the highest possible system integration. You are free to integrate third-party management software in any installation with centralized control.

◆ **Redundant Power Management**

For high availability, the ALTUSEN PDU supports daisy-chaining and outlet grouping to provide redundant power management. Equipment with dual power supplies can be assigned to outlet groups for convenient control of their redundant power sources. Since up to 15 additional units can be daisy chained from the master unit, IT administrators can connect a device's power cords to different units - each of which is connected to a separate power source - for failsafe operation. Moreover the power status of both outlets can be monitored and controlled from the same portal ultimately resulting in an improvement of management efficiency.

◆ **ALTUSEN Product Integration**

The ALTUSEN PDU can be integrated with multiple ALTUSEN devices which can be controlled from a single interface point – the switch's interface – allowing IT administrators to simultaneously control servers and serial devices alongside their power management.

For KVM switches that support ATEN's Power Association function, a KVM port can be associated with a power outlet. Further, should the connected server have dual power supplies, the KVM port can be associated with two outlet ports and the operation of both power supplies can be synchronized.

◆ **Environment Monitoring**

The PDUs support external environmental sensors that allow you to monitor temperature and humidity remotely.

You can set environmental thresholds to identify critical values and take preventive actions before a system failure occurs – thereby helping to obtain the highest degree of availability for all mission-critical equipment.

About Control Center Over the NET™

Control Center Over the NET™ Management Software offers the convenient, economical centralized access and management of your IT devices located in remote data centers and branch offices anywhere in the world. When used in conjunction with any Over the NET™ product (KVM Over the NET™, Serial Over the NET™, Power Over the NET™), the CC2000 management software allows IT administrators to remotely monitor and control all installed devices. A strong centralized management solution provides benefits in many ways:

- *It lets you quickly and smoothly take control of your installation through a single portal that is accessible at any time from anywhere in the world.*
- *It enables a faster response to mission-critical data center emergencies.*
- *It eliminates the distance restrictions of traditional server room management.*

