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Software & Connectivity options for Powerware UPS

Getting the most out of your power protection solution

Power protection
as easy as 3-5-9

There are nine common types of power problems, shown in the middle column on this spread. The 3-5-9 concept clarifies what types of problems can be avoided with which solutions, and in which environment each solution is the most useful.

Different monitoring needs for different protection classes

The more protection you have in place, the more accurately you need to keep tabs on what is happening with the UPSs. Powerware software options let you choose just the right level of monitoring.

Series 3 for non-critical applications
A basic solution that protects non-critical hardware and data against three out of the nine power problems. These UPSs operate in standby mode.

**Series 5 for higher protection level**
An intermediate solution for office environment and servers featuring good communication options. Operating in line-interactive mode, these UPSs provide protection from the five most common power problems.

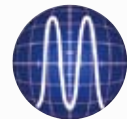**Series 9 for full power protection of critical applications, day and night**

These double-conversion UPSs with excellent connectivity and communication features provide full protection against all nine types of power problems. Most of them can run in parallel, thus providing 100 % uptime in the most critical of applications.
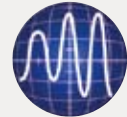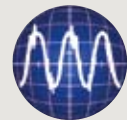
1. POWER FAILURE
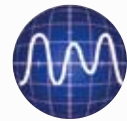
2. POWER SAG

3. POWER SURGE

4. UNDERVOLTAGE

5. OVERVOLTAGE

6. SWITCHING TRANSIENT

7. LINE NOISE

8. FREQUENCY VARIATION

9. HARMONIC DISTORTION

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Is it working or isn't it?

Series 3 UPSs are typically used to protect individual computers at home or in the office. The main need for intervention in their operation is caused by power outages when the UPSs must be able to gracefully shut down the computers they protect. LanSafe software performs graceful shutdown if necessary and is capable of sending alarms and notifications to IT managers.

Management and monitoring

With Series 5 UPSs, you typically want to get deeper into management and monitoring, as the devices protected by the UPSs may be critical to your business or operation.

LanSafe software performs graceful network shutdown for individual UPSs. LanSafe also provides integration to network management systems at no extra cost with its SNMP proxy agent capability.

High-end networked solutions call for Powerware 5125 UPS and the ConnectUPS Web/SNMP card which provides centralised SNMP for enterprise-level monitoring, flexible web-based management, and e-mail notification of UPS events.

LanSafe or Netwatch are used for network shutdown.

Protecting the protection solution

With highly critical applications, it is essential to be 100 per cent certain that everything is working.

With individual Series 9 UPSs you can use LanSafe for shutdown. For monitoring networked Series 9 UPSs with network management systems such as HP OpenView software, you can use Web cards. LanSafe or NetWatch are used for network shutdown.

The PowerVision software detects, alarms and reports any problems at an early stage. It also produces trend analyses based on past performance. All this allows you to take preventative action at a time that suits your operation best.

Your life made as easy as possible

Because your job is to make sure your company's or organisation's assets are protected, we wanted to make selecting the right type of protection as easy for you as possible. Contact your Eaton representative—in most cases they can give you the first guidelines over the telephone!

When you have chosen the right type of protection, you will get all software you need on one CD-rom. An Installation Wizard walks you through the entire installation process by asking you only a few simple questions.

# Whether small or big
– Powerware UPS keeps you
covered

3

For networked servers, routers and hubs you need more power. The rack-mountable Powerware 5125 RM and Powerware 9125 RM models that are just 2U high fit the same 19" racks as your networked devices. The ConnectUPS Web/SNMP card provides central management and monitoring of the UPSs either through a web browser, PowerVision Network Edition or network management systems such as HP OpenView. LanSafe or NetWatch software shut down the entire network in the case of a power outage, securing all your vital data.

2b

For a larger server, a critical CAD or DTP workstation, or a similar system, choose a Powerware 5115 with a higher power rating, or a Powerware 5125. LanSafe software again ensures that all critical data is secure and provides controlled shutdown of individual devices if needed. For network shutdown, you can use LanSafe or NetWatch through ConnectUPS Web/SNMP cards.
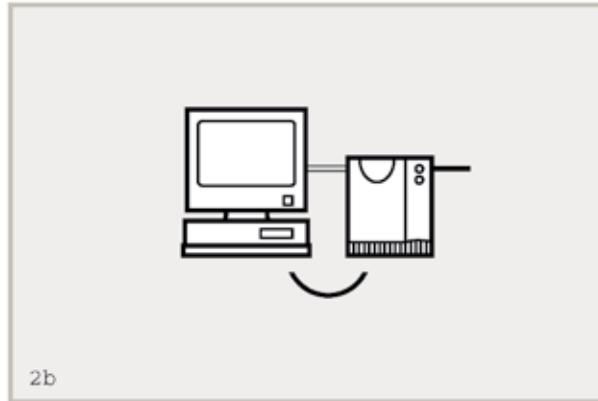
2a

For a small office server, your protecting solution might be a Powerware 5115 UPS with LanSafe software. If the UPSs are networked, you can use OpenView for monitoring through LanSafe's SNMP proxy function.
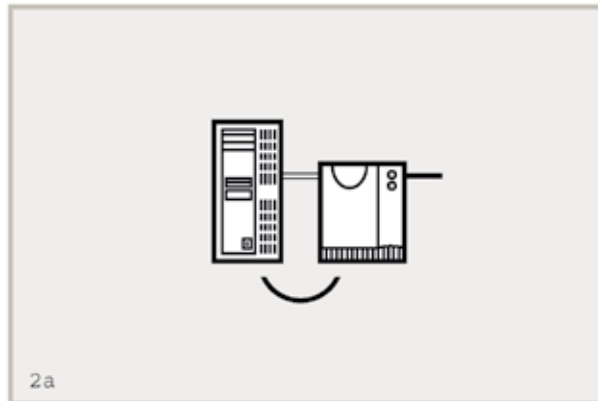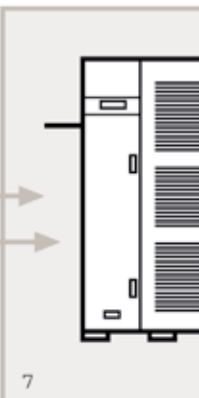
1

If you have a home or small office PC or a non-critical workstation, you can protect it with Powerware 5110 or 3105. The LanSafe software bundled with the 5110 or 3105 will save all your data and ensure controlled shutdown in case of a power failure.
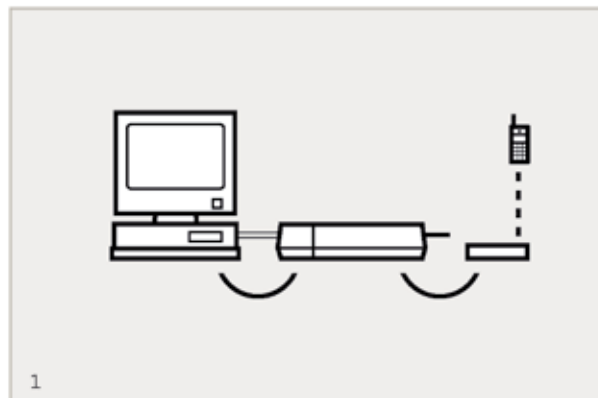
You can monitor y
remotely by comm
Management Syst
OpenView, IBM N
NetManager, or b
Vista.

PowerVision is mo
performance anal
up to 256 Powerw
distributed proces
application, Powe
past, present and
event analysis, va
views and alarms,
projections. With
shutdown never b

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4

The Powerware 9120 is a robust UPS for
IT systems. Moreover, its features make it
particularly suitable for industrial control systems.
It can be networked through a BD version of the
ConnectUPS Web/SNMP card or managed through
a customisable relay interface.

5

Protect your critical, heavy-duty special
applications server by a Powerware 9120 UPS
net-worked through a ConnectUPS card. LanSafe
software shuts it down gracefully through a serial
cable if a power outage occurs.
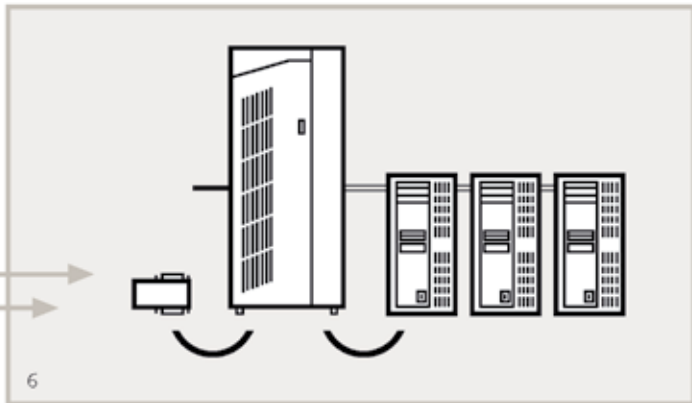
6

You can protect a server farm with a Powerware
9355 or 9390 and ConnectUPS network adapters
linking the UPS to a network management system
(HP OpenView) and PowerVision monitoring and
analysis software.
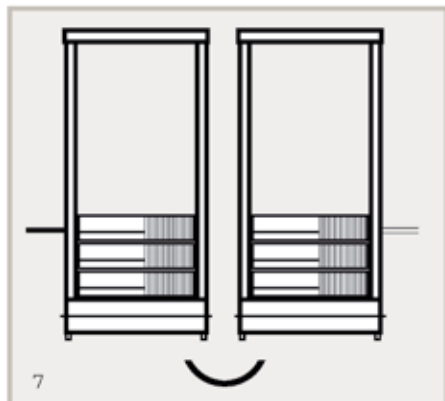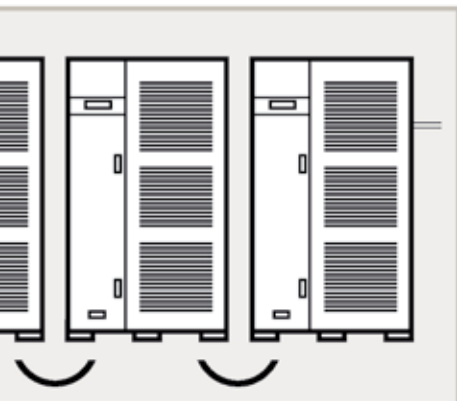
7

For the highest priority 24/7 protection you're
probably using Powerware 9390 or Powerware
9395 UPSs which can be paralleled by Eaton's
Hot Sync. The UPSs are interconnected through
ConnectUPS network adapters, which also provide
the link to centralised management, monitoring
and analysis through PowerVision software.

...our UPS system
...non Network
...tems such as HP
...etView and Sun
...y Eaton's OnliNet

...onitoring and
...ysis software for
...re UPSs. A true
...ssing Client/Server
...rVision provides
...future overviews:
...riable system
..., and future trend
...PowerVision,
...ecomes an option.

Software Suite

Eaton offers a full line of shutdown and monitoring software products to enhance the protection provided by its Powerware UPSs. The Software Suite, conveniently packed on one CD-ROM, follows every UPS free of charge. It includes an Installation Wizard which makes it point-and-click easy to install the appropriate UPS software.

Software Suite contents: LanSafe, PowerVision (30-day trial period), NetWatch, demos, brochures, documentation, videos

Shutdown software

LanSafe is a network shutdown software product that currently supports up to 20 operating systems. It ensures controlled sequential shutdown of the whole network across platforms in case of a prolonged power failure. LanSafe allows the shutdown of up to 64 computers protected by a single UPS.

NetWatch is a shutdown agent for the ConnectUPS Web/SNMP card. It is a very compact piece of software, but still features powerful configuration options for shutdown actions, timings and user notification. NetWatch is available for Windows, Novell, MacOS X, and most Unix platforms including Linux.

Monitoring software

PowerVision® is performance monitoring and trend analysis software for critical UPSs and multiple UPSs in a network. It calculates trends and stores information about the operation of the UPS device in its database. PowerVision's alert and notification behaviour is highly configurable, which makes it a great tool for system administrators. Integrated shutdown controller module can host hundreds of shutdown clients and it can also be used in case of paralleled UPSs.

PowerVision 4 comes in three packages:
Network Edition monitors multiple UPSs in the network
Facility Edition which provides support for other equipment and more view options
Enterprise Manager which adds a data view client and support for multiple PowerVision Facility or Network Edtions

Options:
Data Acquisition Terminal for PowerVision Facility Edition provides an interface to other equipment with contact closures.

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Connectivity options

The most reliable and convenient way of expanding the UPS communication capabilities is to use a slot and swappable cards. This eliminates the hassle of wiring external devices and the adapters are powered directly from the UPS.

ConnectUPS Web/SNMP card is a complete UPS monitoring, control and shutdown solution in a networked IT environment. In case of alert the Web/SNMP card can notify users and administrators through email and SNMP traps. In case of a prolonged power failure the protected computer systems can be shut down in a graceful manner with NetWatch and LanSafe 5 software. The unique 3 port switching hub on the XSlot model provides additional network connections.

P/N 116750221-001; for Powerware 5115 RM, 5125, 5125 RM, 9125, 9155, 9355, 9340, 9370, 9390, 9395

P/N 116750222-001; for Powerware 9120, 9170+

P/N 116750223-001; External for Powerware 5115, 9305

Environmental Monitoring Probe for ConnectUPS Web/SNMP adapters
The Environmental Monitoring Probe adds temperature, humidity and two contact closure monitoring capability to ConnectUPS Web/SNMP card. It is especially well suited for monitoring rack temperature and door status. Operating system shutdown can be triggered if user defined thresholds are exceeded or contact closure status changes.

P/N 116750224-001 for all UPSs with a Web/SNMP card installed

Relay/AS400 cards
provide and easy connection to IBM AS/400 series computers as well as industrial and building management systems.

P/N 1018460 for Powerware 5115 RM, 5125, 5125 RM, 9125, 9155, 9355, 9340, 9370, 9390, 9395

P/N 1014018; for Powerware 9120

XSlot ModBus card
provides a connection to industrial and building management systems using ModBus/JBUS.

P/N 103002510-5501 for Powerware 5115 RM, 5125, 5125 RM, 9125, 9155, 9340, 9370, 9390

XSlot MultiServer card
provides 2-5 serial connections for use when several servers are attached to the same UPS but cannot use the network to transmit UPS data. This card is very useful in case of several standalone computers, firewall and DMZ setups and separate networks.

P/N 05146447-5502 for Powerware 5115 RM, 5125 RM, 5125, 9125, 9155, 9355, 9340, 9370, 9390

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