

**Getting the most out of your  
power protection solution**

SOFTWARE & CONNECTIVITY OPTIONS FOR POWERWARE UPS

# 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's 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

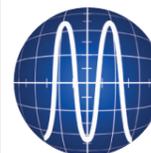
These double-conversion UPSs with excellent connectivity and communication features provide full protection against all nine types of power problems. Most of them can run in parallel, thus providing 100-% uptime in the most critical of applications.



1. POWER FAILURE



2. POWER SAG



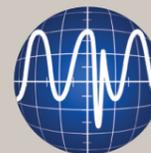
3. POWER SURGE



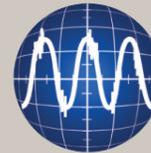
4. UNDERVOLTAGE



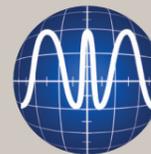
5. OVERVOLTAGE



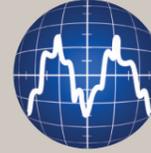
6. SWITCHING TRANSIENT



7. LINE NOISE



8. FREQUENCY VARIATION



9. HARMONIC DISTORTION

## 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. Powerware's 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 PW 5125 UPS and the ConnectUPS SNMP/Web card which provides centralised SNMP for enterprise-level monitoring, flexible web-based management, and e-mail notification of UPS events.

Powerware's OnliNet software 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. Powerware's OnliNet software 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 Powerware 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 keeps you covered

3

For networked servers, routers and hubs you need more power. The rack-mountable Powerware 5125 RM and PW9125 RM models that are just 2U high fit the same 19" racks as your networked devices. The ConnectUPS SNMP/Web card provides central management and monitoring of the UPSs either through a web browser or network management systems such as HP OpenView, OnliNet or NetWatch software shut down the entire network in the case of a power outage, securing all your vital data.

2b

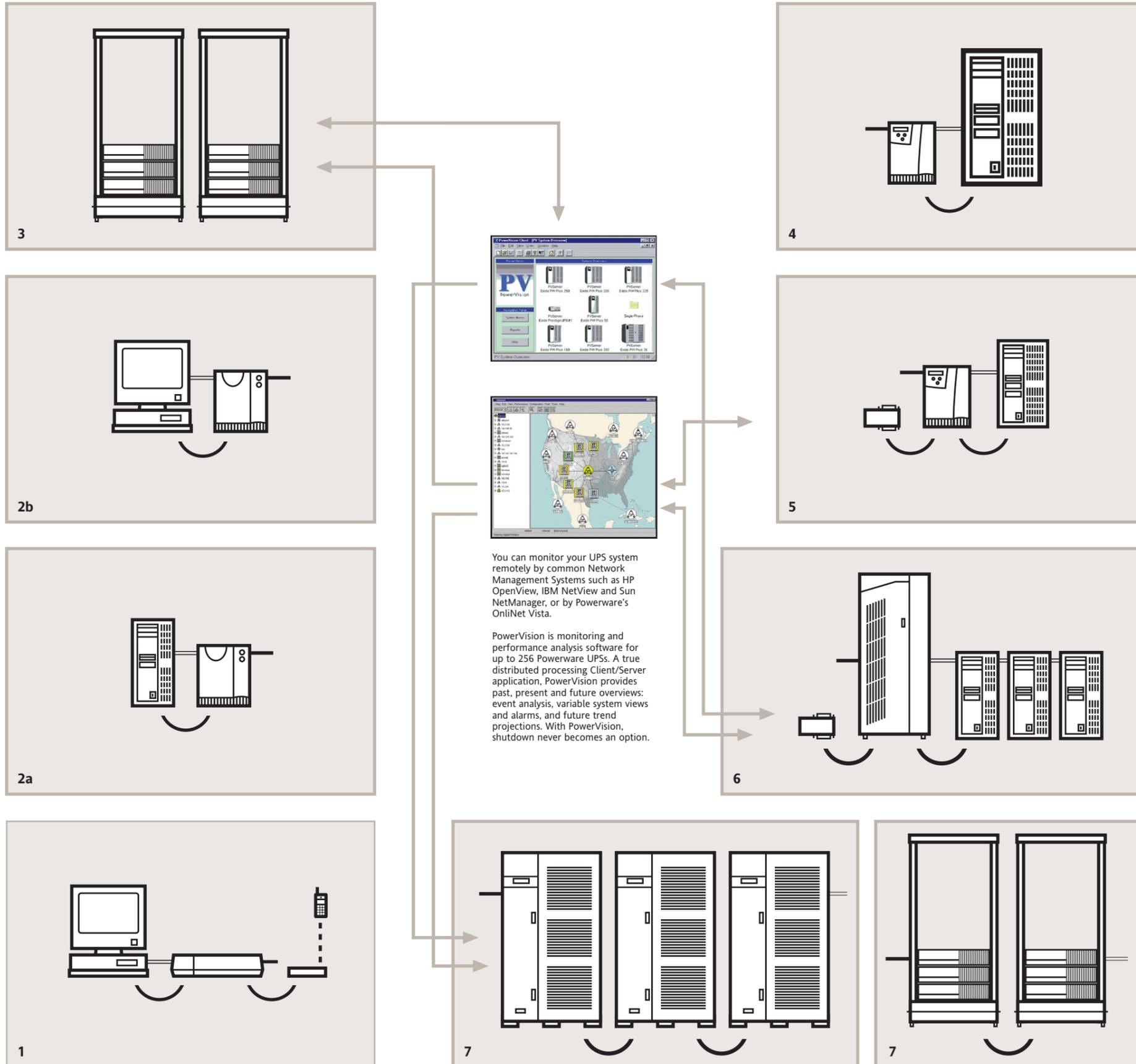
For a larger server, a critical CAD or DTP workstation, or a similar system, choose a PW 5115 with a higher power rating, or a PW 5125. LanSafe software again ensures that all critical data is secure and provides controlled shutdown of individual devices if needed. For network shutdown, you can use OnliNet or NetWatch through ConnectUPS SNMP/Web 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 3110. The LanSafe software bundled with the PW3110 will save all your data and ensure controlled shutdown in case of a power failure.



4

The PW9120 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 SNMP/Web card or managed through a customisable relay interface.

5

Protect your critical, heavy-duty special applications server by a PW9120 UPS networked 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 PW9305 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 PW9305 or PW9340 UPSs which can be paralleled by Powerware's Hot Sync. The UPSs are interconnected through ConnectUPS network adapters, which also provide the link to centralised management, monitoring and analysis through Powerware's PowerVision software.

## Software Suite

Powerware offers a full line of shutdown and monitoring software products to enhance the protection provided by its UPSs. The Software Suite, conveniently packed on one CD-ROM, follows every UPS free of charge (except PW 3110/300 VA). It includes an Installation Wizard which makes it point-and-click easy to install the appropriate UPS software.



*Software Suite contents: LanSafe, OnliNet Centro/Vista, PowerVision (30-day trial period), CheckUPS, 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 saves all data and allows the shutdown of up to 64 computers protected by a single UPS.

**OnliNet® Centro** is SNMP shutdown software. It is ideal for situations where the load and the UPS are not located closely together and thereby not connected via a serial cable.

Powerware's shutdown software supports load segmenting as well as scheduled shutdowns and power ups.

### MONITORING SOFTWARE

**OnliNet® Vista** provides basic monitoring of large numbers of networked UPSs. An "at a glance" view shows all the UPSs located on the network on the computer screen.

**PowerVision®** is performance monitoring and trend analysis software for critical UPSs. It calculates trends and stores information about the operation of the UPS device in its database. Its simple traffic light colour scheme makes PowerVision very easy to follow.

## 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 direct from the UPS. Powerware uses two form factors: the X-Slot (PW 9340, 9125, 5125) and BD-Slot (9120, 9170).

The most widely used connectivity options are serial interface cards, SNMP/Web network cards and relay interfaces.

ConnectUPS SNMP/Web cards are available for both X-Slot and BD form factors. These devices have identical functionality. These adapters allow remote UPS monitoring through a web browser with no dedicated computer or special software, SNMP interfacing to network management systems such as HP OpenView, and operating system shutdown with the help of NetWatch agent software.

Relay cards are used for industrial applications, building management and AS/400 connections. Their functions can be tailored to suit customers' needs.

### ConnectUPS SNMP adapter

- Monitoring through PowerVision, Network Management Systems (HP OpenView, IBM NetView, Sun NetManager) and Vista
- Internal (slot) and external models
- Remote shutdown

### Relay/AS400 cards

- Connections to automation and monitoring systems
- Integration to building management systems
- IBM AS/400 shutdown
- 9340 has programmable relay output X-Slots
- Isolated true relays
- Available for X-Slot and 9120

### Single port RS232 adapter

- One RS-232 serial connection
- Simulated transistor relays

### XSlot ModBus card

- Connections to automation and monitoring systems
- DB-9 RS-232 Configuration Port & Modbus Port
- Isolated DB-9 RS-485 Port
- Selectable 2-wire or 4-wire communications topology support
- Selectable half-duplex or full-duplex communications
- Selectable Termination Resistance & Polarity Resistance

### Xslot USB module

- Provides USB (universal serial bus) interface
- Compatible with LanSafe for Windows

### Multiport adapter

- 2–5 direct serial connections
- For systems with no network for UPS data transfer
- High security requirements (separate networks, firewalls etc.)



## Powerware at your service:

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