

# POWERWARE 9120

For Critical power protection

## Benefits

- Series 9 double conversion online
- Superior electrical performance
- Extended backup time
- User friendly, informative LCD display
- ABM™, prolongs battery service life by 50%
- Software Suite bundled
- Versatile customisation options



### Product Snapshot

<b>Technology:</b>	Double conversion online, 1ph (Series 9)
<b>Power Rating:</b>	700-6000 VA
<b>Voltage:</b>	208/220/230/240 VAC
<b>Backup time:</b>	Typical 10 min, extendable to several hours

As business becomes increasingly dependent on technology for their fundamental operation, the need for system availability is of paramount importance. The Powerware 9120 UPS is designed for applications that require maximum protection. With its double conversion design, the PW 9120 provides uninterruptible clean sine wave power to the critical loads and with its advanced communication, the Powerware 9120 is the ideal solution for networks, web servers as well as industrial application protection.

The PW 9120 has been developed for critical computer and communication equipment, where losses may accumulate at frightening speed in case of power failure. In industrial environments PW9120 will protect small industrial control and automation applications as well as security solutions.

The double conversion online PW9120 with its wide input voltage window is capable of working with mains power in most conditions without discharging batteries, thus saving battery capacity for when it is really needed. The exceptional electrical performance of the PW9120 ensures that these UPS can be used in almost any application. Equipped with the

optional relay card you can easily integrate your UPS into existing company management systems. In addition, the wide range of options such as external battery cabinets, and transformer cabinets enable customisation for a wide range of applications.

The unique Advanced Battery Management (ABM) function prolongs the service life of batteries by 50%. And when ABM informs the user that the batteries should be changed this can easily be done without running down the load (hot swappable batteries).

The Powerware 9120 is supplied bundled with the Powerware Software Suite that includes everything required for trouble free operation. LanSafe included on the software package monitors all network devices and provides an orderly shutdown in the event of extended power outage. The PW9120 also caters for advanced users who may require an additional interface to work with a slot for COM options like SNMP/WEB card and an AS/400 card. These options give the opportunity to build up a management system that well integrates to other management systems in a company.

# Advanced features that give you business benefits

## Extended runtimes

Each PW9120 model can be equipped with External Battery Cabinets, this can extend the runtimes to hours.

## Advanced Battery Management

UPS systems traditionally have maintenance free lead-acid battery solution that is both critical and expensive for the user. The expected lifetime of batteries is shorter compared to the rest of the UPS. Therefore, one should pay attention to the right battery solution. Today virtually all competitive UPS products use traditional float charging technology. The unique Powerware ABM technology provides additional benefits by providing a three-stage charging technique that constantly monitors the battery charging status, and as a result only recharges when necessary, so ultimately the battery experiences less corrosion and battery service life is prolonged by up to 50%.

## Hot swappable batteries

All PW9120 models (700-6000VA) have been developed with hot-swappable batteries, therefore internal batteries can be changed without powering down the load.



## Load Segments on 700-3000VA models

Load Segments are groups of outlets that can be independently controlled. To preserve battery power for more critical equipment connected to the UPS it is possible to shut down one load segment that supports less critical load and thereby preserve battery capacity for the load segment where the most critical equipment is connected.

## Dual input on 5000-6000VA models

PW9120 5000 and 6000VA models can be installed using a separate input cable for the internal bypass. This feature not only provides redundancy for the input, but it also enables system with two UPSs to increase power availability. The critical load is powered by the first UPS and in the case of a failure the load is transferred to the bypass source which is supplied by another UPS. This configuration enables redundant operation with standard UPS units.

## External Bypass options

All PW9120 units can be installed with an External Bypass option which enables "swap" or service without powering down the critical load.

## User interface

Informative user interface with LCD, and four LED and audible alarms. This enables easy configuration of your UPS by changing UPS settings using the LCD panel.



# User interface, Connectivity and software for better protection

## Connectivity

### USB and RS 232 ports as standard

The standard serial connection has two interfaces; RS 232 and USB.

### Connectivity slot works parallel to either RS 232 or USB-port

- SNMP/WEB card (optional): Enables remote UPS monitoring through a web browser as well as SNMP connection to network management systems.
- Relay/AS 400 card (optional): IBM AS/400 shutdown  
Integration to industrial environment and building management systems.
- REPO as standard: Enables shutdown of the connected equipment from a remote location in an emergency.
- Remote control panel, ViewUPS: LCD display that allows monitoring the UPS within 50 m radius of the unit.



## Powerware Software Suite, bundled with PW9120

The Powerware Software Suite offers a full line of shutdown and monitoring software to enhance the protection provided by the UPS and includes an installation wizard which makes it point-and-click easy to install the appropriate software.

### Shutdown software

**LanSafe** is a network shutdown software package. It ensures controlled sequential shutdown of the whole network across platforms in the case of prolonged power failure. LanSafe saves all data and allows the shutdown of up to 64 computers protected by the UPS.

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

Powerware shutdown software supports PW9120 load segments (700-3000VA) as well as scheduled shutdowns and power UPS.

### Monitoring software

**OnliNet Vista** provides basic monitoring of large numbers of networked UPSs.

**PowerVision** is a performance monitoring and trend analysis software package for critical UPSs. It calculates trends and stores information detailing the operation of the UPS device. Recent developments include the additional advantage of providing emergency shutdown of servers.

## TECHNICAL SPECIFICATIONS

Rating	700 VA	1000 VA	1500 VA	2000 VA	3000 VA	5000 VA	6000 VA
Part number	05147361-5501	05147362-5501	05147363-5501	05147364-5501	05147365-5501	1018289	1018290
Capacity (VA/watts)	700/490	1000/700	1500/1050	2000/1400	3000/2100	5000/3500	6000/4200
Dimensions WxDxH (mm)	155x410x240	155x410x240	170x445x275	225x470x365	225x470x365	280x580x570	280x580x570
Weight (kg)	13	15	20	37	38	91	91
Input connection	IEC320/10A	IEC320/10A	IEC320/10A	IEC320/10A	IEC320/16A	Hardwired	Hardwired
Output connection	4xIEC320/10A	4xIEC320/10A	4xIEC320/10A	1xIEC320/16A 4xIEC320/10A	1xIEC320/16A 4xIEC320/10A	Hadwired	Hardwired
Typical runtime (full load) (half load)	8 min 20 min	8 min 21 min	7 min 20 min	14 min 30 min	8 min 20 min	10 min 22 min	8 min 20 min

### Operational

Nominal input voltage (Vac)	220/230/240 Vac
Input voltage range	120/140/160-276 Vac (700-3000 VA) 120/140/184-276 Vac (5000-6000 VA)
Operating frequency	50/60 Hz auto sensing ( $\pm$ 3 Hz, adjustable)
Input power factor	>0.97 (700-3000 VA) >0.99 (5000-6000 VA)
Nominal output voltage	208/220/230/240 Vac
Output voltage regulation	$\pm$ 2% online; $\pm$ 3% on battery mode
Overload capacity	Up to 125 % for minute, 125-150% for 10 sec
Efficiency	>86% (700 VA); >88% 1000-3000 VA; >90% 5000-6000 VA (Online mode) >90% (700 VA); >93% 1000-3000 VA; >95% 5000-6000 VA (High efficiency mode)

### User interface

LCD display	LCD display showing both UPS meters and UPS settings
LED	Four LEDs; UPS on, UPS on battery, UPS on bypass, alarm
Standard communication ports	RS232 and USB as standard on all models
Optional	Connectivity slot for SNMP/Web card and relay card

### Environmental

Operating temperature	0°C - +40°C
Storage temperature	-15°C - +40°C
Altitude	<3000 m
Audible noise at 1 metre	<45 dB (700-1500 VA) <50 dB (2000-3000 VA) <55 dB (5000-6000 VA)

### Certification

Markings	CE/GS/UL (700-2000 VA) CE/GS (3000-6000 VA)
Safety	EN 50091-1-1 & UL 1778 (700-2000 VA) EN 50091-1-1 (3000-6000 VA)
EMC	EN 50091-2, EN 6100-3-2 (700-3000 VA) EN 50091-2 (5000-6000 VA)

Specifications subject to change without notice.

## External battery cabinets

PW9120	Backup time*	Dimensions	Weight
BAT 700	Approx 30min	155x410x240 mm	15 kg
BAT 1000	Approx 30 min	155x410x240 mm	20 kg
BAT 1500	Approx 30 min	170x445x275 mm	25 kg
BAT 2000/3000	Approx 50/30 min	225x470x365 mm	50 kg
BAT 5000/6000	Approx 45/30 min	280x580x570 mm	125 kg

\* Backup time internal + one battery cabinet

Mailing address:  
Powerware EMEA marketing,  
Po Box 54, 02921 Espoo, FINLAND  
Tel. +358 9 452 661, Fax +358 9 452 66396  
E-mail: info@emea.powerware.com  
http://www.emea.powerware.com

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