

# POWERWARE® 9305

## 3-phase UPS for Servers and Industrial Applications



9305	
TECHNOLOGY:	Series 9 (double conversion online)
RATING:	7.5-60 kVA
VOLTAGE:	230/240 VAC
BACKUP TIME:	Typical 7-18 min, extendable up to several hours
MODELS:	Cabinet

Powerware 9305, a Series 9 UPS, is specifically designed to protect computers and other critical equipment in today's centralised server rooms and industrial automation applications from the nine most common power problems. Powerware 9305 can protect a variety of servers and communication devices located in a single room or limited area, which results in cost savings in power protection.

### INFORMATION TECHNOLOGY SOLUTIONS

Computers and communication equipment are often installed in centralised computer rooms and server farms, where they handle complex

tasks of internal and external networking. One single unprotected device could cause the whole network to crash. Powerware 9305, which comes bundled with LanSafe III shutdown software, protects all network devices, and provides an automatic network shutdown in the correct order. If needed Powerware 9305 can be integrated to any SNMP or other management system.

### CRITICAL ELECTRICAL ENGINEERING

A wide range of models and options makes the double conversion online Powerware 9305 the ideal UPS system for electrical applications.

Powerware 9305 features a very wide input voltage window with full load, making it capable of operating from the mains when most UPSs would be discharging their batteries. The unique Advanced Battery Management (ABM™) function prolongs the service life of Powerware 9305's batteries by up to 50%. The parallel redundancy system, Powerware Hot Sync® gives extremely high reliability for any critical application.

## SOLUTIONS FOR INFORMATION TECHNOLOGY

### TYPICAL APPLICATIONS

- Networks
- Server rooms

### PRODUCT HIGHLIGHTS

- LanSafe III shutdown software included
- SNMP monitoring capability
- Monitoring through network with PowerVision 24 h, automatic remote monitoring
- Two RS232 connection ports available

**Options:** ConnectUPS SNMP adapter, OnliNet, PowerVision, LanQuattro, Alarm Extension Unit, ViewUPS – external LCD display



## INFORMATION TECHNOLOGY FEATURES

The Powerware 9305 is specifically designed for use in server rooms or server farms for centralised power protection. This heavy duty UPS offers the highest levels of power protection to critical IT equipment such as servers, bridges, routers, modems, hubs or digital switchboards installed in one room.

### LANSAFE III SOFTWARE FOR TRUE NETWORK SHUTDOWN

The LanSafe III network shutdown software, delivered with your Powerware 9305 UPS, ensures controlled sequential shutdown of the whole network across platforms in case of a prolonged power failure. Programmable to first shut down individual workstations, LanSafe III saves all work-in-progress allowing sufficient time for critical data to flow to the server. LanSafe III software upgrades can be downloaded free of charge from our website: [www.emea.powerware.com/software/](http://www.emea.powerware.com/software/)

### CONNECTUPS PPP FOR SNMP CONNECTIVITY

When the Powerware 9305 is located far from the equipment it protects, connectivity devices have to be used in order to ensure communication with computers and monitoring/management platforms. Connectivity is done using the network and external ConnectUPS PPP adapters directly plugged on the Powerware

9305. The ConnectUPS adapters integrate easily with SNMP-compatible network management.



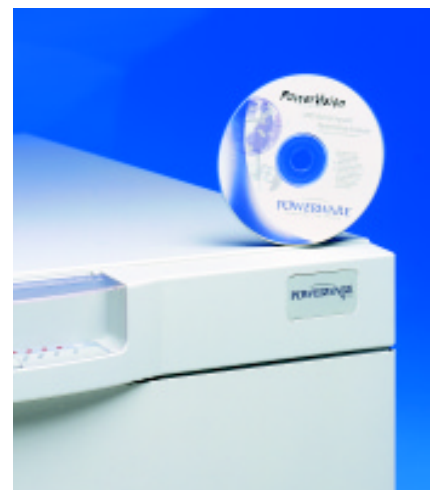
ConnectUPS SNMP adapter for communication with Powerware 9305 UPS.

OnliNet Centro SNMP shutdown software collects the relevant data from the UPS, via network using the ConnectUPS in order to perform the shutdown of the computers protected by the Powerware 9305.

### POWERSHIELD FOR ADVANCED MONITORING

PowerVision® is performance monitoring and trend analysis software designed for critical environments. PowerVision monitors the

Powerware 9305, used to protect entire data centres, clustered servers, and other centralised applications. PowerVision calculates trends and stores information about the operation of the UPS device in its database. Historical data is projected into the future in order to plan for growth or anticipate problems.



PowerVision for UPS performance analysis and monitoring.

# CRITICAL ELECTRICAL ENGINEERING

## TYPICAL APPLICATIONS

- Computers
- Process automation, control equipment
- Off-shore, military, special projects

## PRODUCT HIGHLIGHTS

- Wide input voltage range
- High input power factor
- High efficiency
- ABM™ – up to 50 % longer battery life
- DC Expert – online battery monitoring
- Hot Sync™ capability – reliable paralleling system

Options: Transformers, Input filters, external battery cabinets, 10 year battery solutions, monitoring options, ViewUPS – external LCD display



# INDUSTRIAL FEATURES

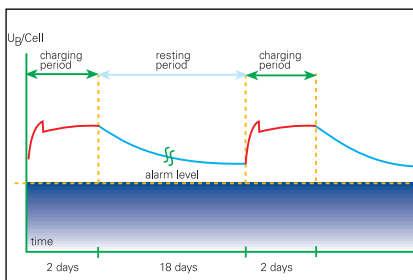
The Powerware 9305 is designed to guarantee trouble-free operation of protected equipment even in critical applications. Due to excellent input/output properties 9305 is the solution for all power protections in industrial environment. Using standard options, the Powerware 9305 can easily be tailored for special environments, such as offshore use.

## ABM™ INTERMITTENT CHARGING — OPTIMISING BATTERY LIFE

Powerware's unique Advanced Battery Management software-controlled intermittent charging system ensures that the UPS charges the battery only when needed, improving battery life by up to 50% because the corrosion of batteries is substantially lower than in traditional trickle-charged UPSes.

The lead-acid batteries typically used in a UPS are considered viable as long as they can maintain backup times of at least half that of

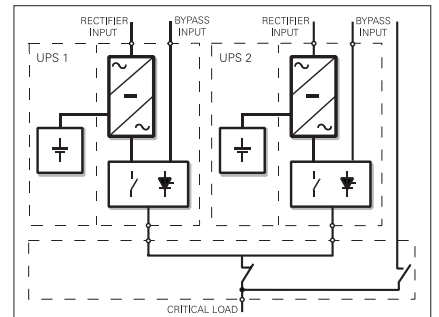
new batteries. The constantly trickle charged batteries (as are virtually all other UPS batteries on the market today) reach the end of their useful life in less than half the time of batteries charged using intermittent charging, shown in the figure below, controlled by the ABM system. Added to this is the DC Expert program which offers online battery testing and backup time calculation.



ABM™ intermittent charging function monitors battery charge levels and tops them up only when necessary.

## HOT SYNC REDUNDANT – COMPLETE COVERAGE

The Powerware 9305 features the Powerware Hot Sync® paralleling technology that provides complete coverage to your critical loads. Maximum reliability is reached by eliminating a single point failure of the system level in all situations. Hot Sync Redundant allows parallel installation of two Powerware 9305 UPSs. The two modules share the critical load between them.



Parallel for redundancy one line diagram.

Should a failure of any kind occur with either one of the modules, the critical load remains 100% UPS protected. The faulty UPS module is immediately isolated from the critical bus thanks to internal diagnostics while the other UPS assumes the full load.

# POWERWARE® 9305 7.5-60 kVA

POWER		CONTROL FEATURES	
<b>Ratings</b>	7.5, 10, 15, 20, 30, 40, 50, 60 kVA pf 0.7	<b>User interface</b>	Monitoring panel with LEDs ( 7.5-15 kVA) Monitoring panel with LCD display (20-60 kVA)
<b>Technology</b>	Online, double-conversion topology with static bypass switch and maintenance bypass switch. Frequency independent operation.	<b>Serial communication port</b>	Two RS232 ports as standard one with modem interface
INPUT		<b>Alarm relays</b>	Voltage free relay contact from Line failure, Low battery voltage, Bypassed and UPS OK/alarm.
<b>Rated voltage</b>	380/220 V; 400/230 V; 415/240 V	<b>Inputs</b>	Emergency power off - input, Four signal inputs: Generator, Remote on/off, External bypass and Environmental alarm
<b>Voltage range</b>	170/294 - 279/484 VAC <sup>1)</sup>	ENVIRONMENTAL	
<b>Frequency range</b>	45 - 65 Hz	<b>Operating temperature</b>	+ 0 °C ... + 40 °C +15 °C ... +25 °C (recommended)
<b>Power factor</b>	0.96 typical	<b>Humidity</b>	15-90% RH Non-condensing
OUTPUT		<b>Audible noise</b>	< 50 dB (A) 7.5-15 kVA < 55 dB (A) 20-30 kVA < 60 dB (A) 40-60 kVA
<b>Voltage</b>	380/220 V; 400/230 V; 415/240 V selectable	<b>Safety</b>	EN50091-1
<b>Frequency</b>	50/60 Hz <sup>2)</sup> ; ±0.5, ±1 or ±2 Hz selectable synchronisation to mains ±0,005 Hz free-running	<b>EMC</b>	EN50091-2 class A
<b>Voltage regulation</b>	±1 % static	<sup>1)</sup> 60 kVA 180/312 - 279/484 VAC	
<b>Dynamic response</b>	±5 % at 100 % load change, response time 1ms	<sup>2)</sup> Hot Sync available for 50 Hz	
<b>Voltage distortion</b>	< 2 % THD on linear load < 5 % THD on nonlinear load		
<b>Overload capacity</b>	150 % 30 seconds on inverter 1000 % 20 ms on bypass		
BATTERY			
<b>Type</b>	Sealed lead-acid batteries Standard and long life types		
<b>Battery charging</b>	Advanced Battery Management (ABM™)		
<b>Recharge time</b>	10-14 times the discharge time		

Specifications subject to change without notice.

PW9305-	POWER	BACKUP TIME	DIMENSIONS (W.D.H)	WEIGHT
7.5I-N-10/18	7.5 kVA/5.25 kW	10/18 min	400 x 750 x 700 mm	180/220 kg
10I-N-7/14	10 kVA/7 kW	7/14 min	400 x 750 x 700 mm	180/220 kg
15I-N-7	15 kVA/10.5 kW	7 min	400 x 750 x 700 mm	220 kg
BATI-A		18 min (15 kVA)*	400 x 750 x 710 mm	180 kg
BATI-B		30 min (15 kVA)*	400 x 750 x 710 mm	315 kg
20I-N-7/12	20 kVA/14 kW	7/12 min	520 x 788 x 1530 mm	400/490 kg
30I-N-7	30 kVA/21 kW	7 min	520 x 788 x 1530 mm	490 kg
40I-N-0	40 kVA/28 kW	0 min	520 x 788 x 1530 mm	260 kg
50I-N-0	50 kVA/35 kW	0 min	520 x 788 x 1530 mm	260 kg
60I-N-0	60 kVA/42 kW	0 min	520 x 788 x 1530 mm	260 kg
BATI-D		7 min (50 kVA)**	382 x 788 x 1530 mm	550 kg
BATI-E		10 min (60 kVA)**	520 x 788 x 1530 mm	815 kg
BATI-F		20 min (60 kVA)**	1034 x 788 x 1530 mm	1390 kg



\*BATI+UPS with internal battery

\*\*BATI+UPS with no internal battery

Battery type: sealed lead-acid batteries

Powerware solutions available from small offices to data centers, including UPSs (300 VA–625 kVA), power management software and service.



Powerware EMEA  
 221 Dover Road, Slough • Berkshire, England SL1 4RS  
 Tel. +44 1753 608 700, Fax +44 1753 608 995  
 E-mail: info@emea.powerware.com • http://www.emea.powerware.com

