

PowerWAVE 3000/TP

Single-phase UPS for mid-size server rooms, networks, telecommunications systems and industrial processes



PowerWAVE 3000/TP

Compact, single-phase critical power protection up to 80 kVA.

For more information call 01256 386700 or visit www.upspower.co.uk

The new PowerWAVE 3000/TP UPS delivers reliable power, low running costs, long battery life, easy maintenance and high levels of flexibility.

Featuring double-conversion, voltage and frequency independent (VFI) topology, the PowerWAVE 3000/TP is available in both 10 and 20 kVA versions, with the option to configure up to four units in parallel to boost power capability or provide redundancy.

Three-phase or single-phase inputs can also be accommodated, as well as single or dual supply inputs – allowing the customer to manage two independent power sources.

Simple to install and with a small footprint, the PowerWAVE 3000/TP provides stable, regulated, transient-free, pure sine wave AC power with extremely tight output voltage regulation.

PowerWAVE 3000/TP

Energy savings up to 93% efficiency.

97% efficiency in ECO mode.

Low harmonic distortions (< 5% THDi) and active power factor correction (0.99 input PF) eliminate interference from other equipment in the network.

Paralleling up to 4 units allows for increase of capacity and introduction of redundancy to system to enhance availability.

Integrated manual bypass switch simplifies maintenance and reduces need for external switchgears.

Can operate as frequency converter (50 Hz to/from 60 Hz).

Power factor 0.9

Same model supports different wiring schemes: three-phase and single-phase input as well as single and dual input feed.





Reliable

Key benefits

Online double conversion topology delivers constant and stable power to the load even in the presence of severe disturbances in the utility.

Parallellable up to four units to provide system redundancy.

Programmed and automated battery tests ensure an optimized battery management, operation and lifetime.

Communication Options

Key benefits

Through monitoring devices, any abnormal situation (events/alarms) can be detected immediately.

Dry-contact card – relay interface card enables advanced communication between the UPS systems.

Network interface cards – control and monitoring of the UPS via a web browser.

Sensors – combined with the network interface card, humidity and temperature sensors can be integrated into the system and monitored remotely via a web browser.

Flexible

Key benefits

Single or three-phase input is field configurable – adaptable to installation requirements.

Single or dual input power source compatible (field configurable).

Battery Options

Key benefits

Additional battery cabinets that match perfectly with the UPS for scaling autonomy time.

Scalable

Key benefits

Different autonomy variations with inbuilt batteries or additional battery cabinets.

Simple power increase (pay-as-you-grow) by parallelling up to four units.

Reduced Costs

Key benefits

High efficiency reduces the quantity of power consumed by your installation.

Reduced heat losses maintain a lower operating temperature, prolonging the lifetime of components and batteries.

The small footprint saves space and makes installation simpler.



Battery Runtime

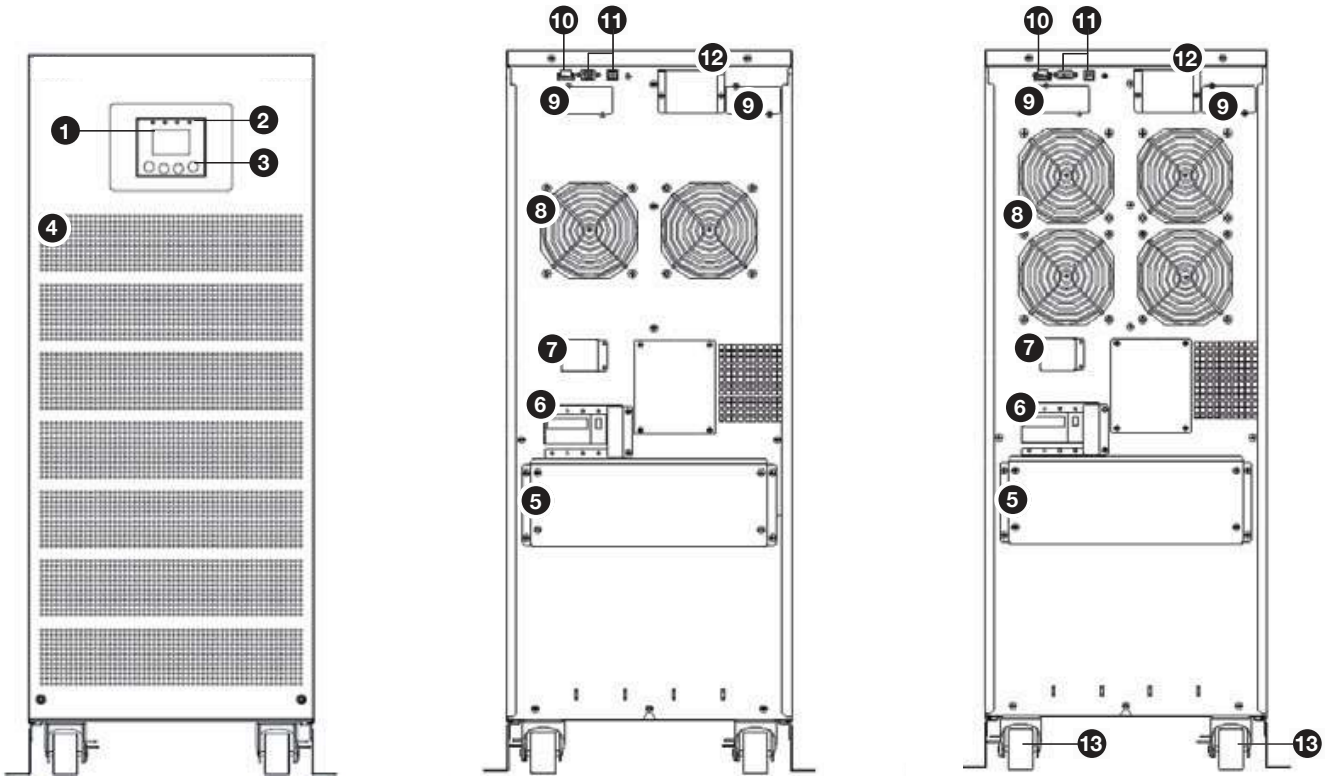
	10 kVA	10 kVA (5 min)	10 kVA (16) min	20 kVA	20 kVA (5 min)
UPS Internal Batteries	–	16 / 5	41 / 16	–	16 / 5
UPS +1 Battery Cabinet	41 / 16	59 / 28	92 / 42	16 / 5	42 / 16
UPS +2 Battery Cabinet	92 / 42	118 / 49	150 / 60	42 / 16	60 / 27
UPS +3 Battery Cabinet	150 / 60	180 / 80	213 / 90	60 / 27	90 / 42
UPS +4 Battery Cabinet	213 / 90	245 / 103	246 / 132	90 / 42	118 / 53

In minutes at half/full load

Technical Specifications

General Data	10 kVA	10 kVA (5 min)	10 kVA (16 min)	20 kVA	20 kVA (5 min)
Output rated power [W]	9 kW			18 kW	
Output power factor	0.9			0.9	
Topology	True online double conversion			True online double conversion	
Parallel configuration	Up to 4 units			Up to 4 units	
Inbuilt batteries	No	Yes	Yes	No	Yes
Input					
Nominal input voltage	1ph + N: 220 / 230 / 240 VAC 3ph + N: 380 / 400 / 415 VAC				
Input voltage tolerance	1ph + N: 110 - 276 VAC 3ph + N: 190 - 486 VAC				
Input current THD	< 5% linear load, < 7% non-linear load				
Frequency range	45 - 55 Hz for 50 Hz systems / 55 - 65 Hz for 60 Hz system				
Power factor	≥ 0.99				
Output					
Rated output voltage	220 / 230 / 240 VAC				
Voltage tolerance	± 2%				
Voltage distortion	≤ 2% linear load, ≤ 5% non-linear load				
Overload capability (linear load)	5 min: 105 % ~ 110 %, 1 min: 110% ~ 130 %, 10 s: 130 % ~ 150 %, 100 ms: > 150 %				
Nominal frequency	50 or 60 Hz ± 0.1 Hz				
Crest factor	3:1				
Efficiency					
AC-AC	Up to 93 %				
In eco-mode	Up to 97 %				
Environment					
Protection rating	IP 20				
Storage temperature	-15 – +60°C for UPS, 0~35°C for battery				
Operating temperature	0 - 40°C				
Relative humidity	0 - 95 % (Non-condensing)				
Altitude (above sea level)	1000m without de-rating				
Batteries					
Type	VRLA, vented lead-acid				
Inbuilt batteries	-	1x24	2x 24	-	2 x24
Battery capacity	-	9Ah	9Ah	-	9Ah
Charging current	4 A	4 A	4 A	4 A	4 A
Recharge time	-	3h to 90 %	up to 8h to 90 %	-	8 h to 90 %
Communications					
User interface	LCD display				
Communication cards (option)	Network interface (SNMP card), dry- contact card (AS400)				
Standards					
Safety	IEC / EN 62040-1				
EMC	IEC / EN 62040-2				
Performance	IEC / EN 62040-3				
Manufacturing	ISO 9001:2008, ISO 14001:2004				
Weight, Dimensions					
Weight	56 kg	117 kg	177 kg	66 kg	187 kg
Dimensions W × H × D (mm)	350*890*712	350*890*712	350*890*712	350*890*712	350*890*712

Block diagram



10/20 kVA

10 kVA

20 kVA

#	Device	Benefits
1	LCD Display	Quick access to all important information
2	LEDs	Immediate identification of system status
3	Control Keys	Simple UPS control and service
4	Ventilation inlets	High efficiencies with low losses from heating
5	Connection terminals	Three phase or single phase
6	Input supply breaker and bypass supply breaker	Simple maintenance and serviceability
7	Backfeed protection terminals	High level of protection (optional)
8	Fans	High-efficiency internal cooling
9	Network interface / AS 400 slot	Several possibilities for monitoring
10	EPO contact	Emergency protection
11	RS232 port / USB port	Easy serviceability
12	Parallell Port	Parallelable up to 4 units
13	Wheels / support and brakes	Simple to position and move

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