



POWERVERIO™ TECHNICAL SEPCIFICATIONS

PowerVario highlights at a glance

- Tower or Rack Version
- VFI, Voltage Frequency Independent
- Hot-Swap able battery exchange
- N+1 Redundancy

**Intelligent True On-Line Uninterruptible Power Supply (UPS)
For Corporate & IT User Installation Guide**

Power range: 4500-6000VA per rack

Specifications are subject to change without notice

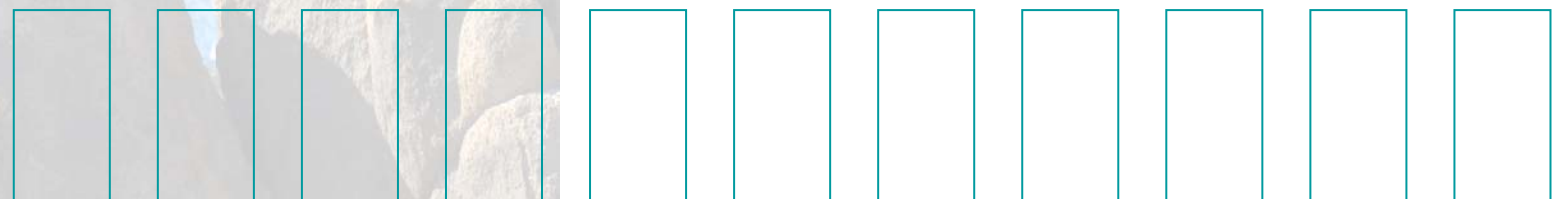




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1 Specifications

1.1 VA RATING

Model	PVO11/4.5k	PVO11/6k
Apparent Output Power	4500 VA	6000 VA
Active Output Power	3250Watts	4200Watts
Power Factor	0.7	
Topology	Double conversion On-Line	
Type	Rack/Tower	
Agency Approvals	230V Models: CE	

1.2 INPUT

Model	PVO11/4.5k	PVO11/6k	
	230V	160 - 288Vac	
Voltage Range	Low Line Transfer	230V	168Vac
	Low Line Comeback	230V	170Vac
	High Line Transfer	230V	288Vac
	High Line Comeback	230V	278Vac
Frequency	50/60 Hz auto-select, ± 5 Hz		
Phase	Single phase with ground		
PF	>0.99 at full rated linear load		
Typical Transfer Time	0 ms.		
AC Leakage current	230V	≤ 3.5 mA	
Surge Protection	230V	300 joules	

1.3 OUTPUT

Model	PVO11/4.5k	PVO11/6k	
Output (INV. mode)	Voltage	230V	230V,adjustable to 200/208/220/230/240 via display
	Voltage Regulation	$\leq \pm 1\%$ until low battery warning	
	Frequency(Synchronized Range)	3Hz or 1Hz (setting by software)	
	Frequency(Battery Mode)	$\pm 0.1\%$ (0.05~0.06Hz) unless synchronized to line	
	Current Crest Factor	3:1	
	Harmonic Distortion	$\leq 3\%$ THD(Linear Load) $\leq 7\%$ THD(Non-Linear Load)	
	Transient Response(ms)	60ms/5%	
	Waveform	Pure Sine wave	
Efficiency	To AC Mode (Full load)	90%	91%
	To Battery Mode (Full load)	89%	89%

1.4 BATTERY SYSTEM

Model	PVO11/4.5k	PVO11/6k
Type	12V/7.2Ah	12V/7.2Ah
Numbers of Batteries	20	20
Backup Time(Full Load)	>10min.	>7min.
Recharging Time	4 Hours to 90%	
Charging Current (Max.)	5 A	
Charging Voltage	240.0Vdc±0.5V	
Hot Swappable Battery	Yes	
Internal battery	Yes	
DC leakage current	≤ 30uA (±10uA) with no AC applied and the unit in the off position	
Battery type	Sealed, non-spillage, maintenance-free, lead acid	

1.5 TRANSFER TIME

Model	PVO11/4.5k	PVO11/6k
AC to DC	Zero	
Inverter to Bypass	Zero	
DC Start	Yes	
Self Diagnostics	Upon Power-on and Software Control	

1.6 FRONT PANEL

Model	PVO11/4.5k	PVO11/6k
LCD	Load Level/Battery Level/ Battery Mode/ Normal Mode/Bypass Mode/ Self-Test/ Weak/Bad Battery/Site Wiring Fault/ Fault/ Overload/Programmable Outlet1//Programmable Outlet2	
Key	ON Button/ OFF Button/ (Test/Alarm Reset Button) Function Button	

1.7 PROTECTION

Model	PVO11/4.5k	PVO11/6k
Overload	(AC Mode) 105 – 150 % for 160 seconds before transfer to bypass	
	(Bypass Mode) 105 – 200 % for 500 seconds shuts down Buzzer continuously alarms.	
Short Circuit	Bypass mode : Input Fuse/Input Breaker Normal Mode: Electronic Circuit – switch off Battery Mode: Electronic Circuit– switch off	
Battery	ABDM	
EPO	UPS shuts down immediately	
Over Temperature	Transfer to Bypass Mode	Transfer to Bypass Mode
	UPS shuts down immediately	UPS shuts down immediately

1.8 AUDIBLE ALARM

Model	PVO11/4.5k	PVO11/6k
Battery Mode	Sounding once every 1.5 seconds	
Low Battery	Sounding once every 0.2 seconds	
Overload	Sounding once every 3 second	
Fault	Continuously Sounding (or Sounding once every 3 second)	

1.9 PHYSICAL

Model	PVO11/4.5k	PVO11/6k
Dimensions(HxWxD in mm)	88.8(2U)x440(17")x650 + Battery Cabinet 132.(3U)x440(17")x650	
Weights	95kg	
Input Connection	230V	Fix or Connector Fix or Connector 16A, IEC 320-C20
Output Connection	230V	Fix or Connector

1.10 ENVIRONMENTAL

Model	PVO11/4.5k	PVO11/6k
Operation Temperature	0-40 degrees	
Noise Level	50dBA	
Relative Humidity	0 to 90% (Without condensation)	

1.11 INTERFACE

Model	PVO11/4.5k	PVO11/6k
Interface Type	1 *USB port+ 1*RS-232 port + SNMP Slot	
SNMP(option)	Power management from SNMP manager and Web browser	
Compatible platforms	Windows 95/98/NT/2000/XP Novell NetWare, Linux, etc.	

1.12 STANDARDS AND CERTIFICATION

Model	PVO11/4.5k	PVO11/6k
Safety	IEC/EN 62040-1-1,IEC 60950-1	
Performance	IEC/EN 62040-3	
EMC	EN50091-2/IEC 62040-2 class A IEC 61000-4-2/-3/-4/-6-8/-11,IEC 61000-3-2/-3	
Markings	CE	



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Newave Certifications & Recognitions

