PowerMan
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PM11-HF06RTS / PM11-HF10RTS
6KVA / 10KVA On-Line Double Conversion UPS

The PowerMan PM11-HF UPS range is manufactured using a double conversion design principal, and operates using a 220/240V 50Hz, single phase AC input and output. The use of state of the art high frequency, transformer-less technology keeps the UPS small and compact. The incoming mains is converted directly into DC which is used to charge the batteries and to drive the inverter, which in turn runs the load. **This means that your sensitive electronic equipment will be protected from any potentially damaging spikes, surges or dips.** Should the mains fail completely, the batteries will simply carry on driving the inverter, and start to discharge as opposed to charging. There is no break on the output on transfer to or from the mains. This design concept offers the best possible protection as your equipment is supplied clean power from the inverter at all times.

The UPS has a built in Static By-Pass feature which enables the machine to transfer the load to normal mains under certain emergency conditions, such as an overload. Once the condition causing the by-pass has been corrected the unit will automatically return to its normal operating mode.

Features	Benefits
On-Line, double conversion technology	Computer equipment is protected from typical commercial power problems such as spikes, surges, dips or failures due to the isolation of the input from the output. A double conversion is the only type of UPS that will be able to recreate a clean, steady voltage and frequency output.
Transformer-less	This technology has been tried and tested over the years and has proven itself to be reliable. The use of high frequency technology dramatically reduces the size of the equipment and improves efficiency which reduces the running cost.
Unity Power Factor and High Efficiency Rate	VA Rating = Watt Rating essentially delivering 10% to 30% more power than UPS's with a power factor correction. The unit runs at 95% efficiency reducing the day to day running cost.
3-Step Invertor Design	The unique 3-step inverter design ensures that the UPS can run all loads including laser printers.
Generator Compatible Input	The output power from the generator can vary as different loads come on and go off, the UPS will ensure that your equipment is not be damaged by the voltage fluctuations from the generator.
DC Start Capability	Units are able to start and run with no mains input. Essentially the units can be run as a straightforward inverter if necessary.
Unlimited Run Time	Due to the versatility of the design of the UPS's the battery run time can be adapted to suit any requirements, allowing the user to keep running and not just enough time to shut down.
Absorbant Glass Mat Battery	The AGM battery is specifically designed for use with UPS and inverter applications. The acid in the batteries (the electrolyte) is suspended in a thin fiberglass mat that is situated between the lead plates. These batteries are leak-proof and are designed for long discharges, they do not gas while charging making them an ideal choice for office or home environments.
Communication Ports (USB Standard, SNMP Optional)	Allows the UPS to connect to the computer system or network, and in conjunction with various software packages, can supply information on the status of the UPS and perform shut down.
LCD Display	Gives users accurate information on the input and output voltages on the UPS, frequency as well as load levels and available battery capacity.

Specifications

Model No.	PM11-HF06RTS	PM11-HF10RTS	PM11-HF10RTS-HR
Capacity VA (Watts)	6 000 (6 000)	10 000 (10 000)	10 000 (10 000)
Input Voltage	230V AC ± 25%		
Input Frequency	50 Hz ± 10%		
Transfer Time	Zero		
Output Voltage On Inverter	230V AC ± 3%		
Frequency on Inverter	50 Hz Crystal Controlled		
Inverter Wave Form	Sine		
Total Harmonic Distortion (THD)	≤ 1% (Linear Load)		
Efficiency At Full Load	> 95%		
Overload Capability	150% For 30 seconds, then by-pass		
Batteries	Internal battery pack, 16 x 12V 7Ah Sealed Lead Acid	Internal battery pack, 16 x 12V 9Ah Sealed Lead Acid	Internal battery pack, 32 x 12V 9Ah Sealed Lead Acid
Re-Charge to 90 %	± 8 Hours		
Backup Time With 50% Load (50% Load)	10 Minutes	8 Minutes	16 Minutes
Backup Time With 75% Load (75% Load)	6 Minutes	4 Minutes	8 Minutes
Ambient Operation	3000M Max Elevation, -10 to 40 C, 0 to 90% Humidity		
Audible Noise At 1 M	< 60% Load 52 dbA / > 60% Load 56 dbA		
Short Circuit Protection	Yes		
Low Battery Shut down	Yes		
Controls	Mains Fail Alarm (Slow intermittent beep), Low Battery Alarm (Continuous beep), Mains on indicator, Charging indicator, By-Pass Indicator, LCD Display (Full UPS Status reporting), Diagnostic software via USB port (SNMP and dry contact optional)		
Approvals	IEC 62040-1-2008 / IEC62040-2-2006 / IEC62040-3-2011 ISO9001-2005 Quality / ISO14001-2005 Environmental Management		
UPS Dimensions in tower format (w x d x h) mm Weight	172mm x 660mm x 440mm @ 59Kg	172mm x 660mm x 440mm @ 67Kg	260mm x 680mm x 440mm @ 107Kg

UPS Tower Configuration	UPS Rack Mount Configuration	UPS Tower Configuration – Dual Battery