



POWER BACK PB2000S

INVERTER / CHARGER



Description

This is a DC-to-AC inverter with integrated solar battery charger, which can be used as a long run-time UPS (Uninterruptible Power Supply) during outage of mains, or an energy-saving solution.

The inverter accepts input power source from AC mains, battery, and solar modules and switches between various operation modes automatically depending on the operational conditions.

When used as an energy-saving device, the solar input can be set as priority to supply the loads without consuming the power from AC mains, as long as sufficient sunlight is present.

Features

- The battery can be charged by both AC mains and PV (solar) with intelligent charging control.
- Automatic line-to-battery switchover
- Built-in enhanced AC charger
- Built-in solar charger controller
- Configurable output source priority, charger source priority, charger current and so on
- High efficient DC-to-AC conversion with minimized energy loss
- Rack design & wall-mounted design for flexible installation
- Intelligent 3-stage charger control for efficient charging and preventing overcharge
- Auto restart upon AC recovery
- User-friendly LCD and LED indications with setting function
- Smart temperature compensation technology to extend battery life
- Multiple protections: low battery alarm, low battery shutdown, over charge
- Protection, overload protection, over temperature protection, short circuit protection

Protection against:



Power Cuts



High Voltage



Low Voltage



Spikes/Surges



Power-Back Surges

Protection for:



depending on model



FRIDGES



MULTIMEDIA



SATELLITE & VSAT



COMPUTERS



LCD TV

Specifications

MODEL		POWERBACK PB1000S	POWERBACK PB2000S
CAPACITY	VA/W	1200VA/900W	2000VA/1600W
NOMINAL BATTERY VOLTAGE		12V _{DC}	24V _{DC}
LINE MODE			
INPUT	Nominal Voltage	230V _{AC}	
	Voltage Range	170-280V _{AC} (Narrow Range)	
		90-280V _{AC} (Wide Range)	
	Normal Frequency	50Hz or 60Hz	
OUTPUT	Voltage	230V _{AC}	
	Frequency	Following the Utility	
	Output Waveform	Following the Utility	
EFFICIENCY		>95% (full R load, battery full charged)	
TRANSFER TIME		23ms Typical	
BACKUP MODE			
OUTPUT	Voltage	230VAC (+10% / -18%)	
	Frequency	50Hz or 60Hz (Auto detection)	
	Output Waveform	Modified Sine-wave	
EFFICIENCY		>80%	
OVERLOAD PROTECTION		1min@>110%, 20s@>120%, 0s@>150%	
PROTECTION		Discharge, over-charged, over-loading, over-temperature, short-circuit protection	
BATTERY CHARGER (powered by AC)			
CHARGING ALGORITHM		3-step charging	
AC CHARGING MODE		0A/5A/10A/20A selectable	0A/5A/10A/15A selectable
FLOATING CHARGING VOLTAGE		13.7V	27.4V
OVERCHARGING VOLTAGE		16V	32V
SOLAR BATTERY CHARGER			
MAX. PV PANEL ARRAY POWER		1050W	1750W
MAX PV MODE POWER RATING TO SUPPORT LOAD		600W	1200W
MAX CHARGING CURRENT		60Amp	60Amp
NOMINAL BATTERY VOLTAGE		12V	24V
OPTIMAL WORK VOLTAGE RANGE		16V~18V	30V~32V
MAX. PV INPUT VOLTAGE		55V	
MAX. PV INPUT CURRENT		65 Amp	
GENERAL			
PHYSICAL	Dimension (DxWxH)	308*244*95mm	
	Net Weight (kg)	2.44	2.35
ENVIRONMENT	Operating Environment	0°C to 50°C, 5% to 90 % relative humidity (non-condensing)	
	Storage Environment	-15°C to 55°C, 5% to 95% humidity (non-condensing)	
	Noise Level	Less than 50dB	



Rear panel

ITEM	PRODUCT CODE
For more information on the Sollatek's VOLTSURE Range refer to the POWERBACK brochure or visit www.sollatek.com	

