

5000W Solar Wiz Backup Home Power System



Product Code: FSW5000SBI
Barcode: 6002844067526



Produces up to 16.5kWh/Day

48V BATTERY SYSTEM

Solar Wiz ON and OFF Grid Home Power System

The system provides 230Vac mains power for places where utility power is unavailable. Its the ideal solution to power most homes ON/OFF the national grid. Reduce your energy bill with an ON grid solar PV panel installation.

- Can be used as a grid-connected backup inverter without PV panels.
- Off-grid with PV installed can supply up to 16.5kWh/day.
- Grid connected with PV installed can reduce electricity bills up to 16.5kWh/day.
- 5000W / 5000VA pure sine wave 48V to 230V inverter.
- 4000W/80A, 60 to 115VDC MPPT, Max. 145V solar charge controller.
- 2A - 60A selectable mains input battery charger.
- Simultaneous mains and PV battery charging.
- Overload / Over temperature / Short circuit protected.
- Compatible with generator power.
- Dry contact controls additional loads based on battery state of charge for optimised PV energy use.
- Multiple inverters can be installed in parallel to increase output power or provide 3 phase power.
- Mains bypass switch, earth leakage, circuit breaker and indicators. Battery and PV fuse disconnectors.
- Smart charger to optimise battery life and performance.
- USB port for power monitoring devices (optional).
- Usable with up to a maximum of 4000W (15 x 275W) PV panels.

Solar Wiz Home Power System



DIY	48V to 230V	1 YEAR WARRANTY	PURE SINE WAVE INVERTER	>90% EFFICIENT	ON-GRID	OFF-GRID
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RENEWABLE ENERGY	BACKUP	ENERGY SAVING	IMPORTANT NOTE A qualified and registered electrician holding a wireman's license is required to wire the system to your home.
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The 5000VA / 5000W AC output allows you to power;

- Laptop, desktop PC, printer and fan.
- TV, DVD player and decoder.
- Energy saver lights, or equivalent.

Note:

- At least 4 x 12V batteries are required to run the system (min. 200Ah).
- This system is not intended for use with heat generating products.
- PV mounting hardware required.
- 4000W total of PV using 60 cell panels
- Recommended compatible batteries to be used with this product is as follows:

Minimum: 200Ah @ 48V, 100Ah - 250Ah batteries

Not included:

48V battery bank.
PV panels, cables and mounting hardware.

Specifications

- 1) Choose devices that you want to back up from the ***table below** this script and add up the Watts of those devices.
- 2) Choose this wattage on the left hand side of the graph and follow from left to right until you get to one of the coloured lines.
- 3) Once you hit one of the coloured lines then follow straight down to read the number of hours that the inverter will back up for.
- 4) If the run time is not long enough then follow from left to right until you hit the second coloured line (4 batteries) and follow straight down to get the number of hours, if this is still not enough then follow until you hit the third coloured line (6 batteries)
- 5) For Example: the grey shaded equipment in the table to the right add up to 1020 Watts (1 TV + 1 PVR + 2 PC's + 1 Fridge + 5 Floodlights + 10 CFL's) and using four 102Ah batteries will allow more than 3 hours of backup and using eight batteries will allow 8 hours of backup time.
- 6) This calculator tool assumes that the batteries will be completely emptied which will severely shorten the batteries lifespan if used often. It is strongly recommended to double the number of batteries used if backup is needed regularly and triple the number of batteries if backup is needed daily to achieve longest battery lifespan.
- 7) This tool is a guide only and run times will vary depending on the actual appliances used, type, age and condition of the batteries.
- 8) Batteries should be kept cool but never frozen and should be kept fully charged and discharged deeply as little as possible for longest lifespan..

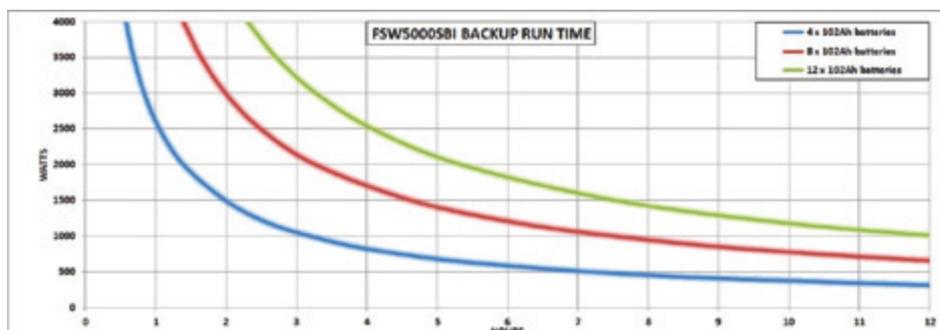
Inverter Specifications	
Rated Power	5000W
Parallel Capability	Yes, 9 Units
Input	
Voltage	230VAC
Selectable Voltage Range	170-280VAC (for personal PCs) 90-280VAC (for home appliances)
Frequency Range	50Hz/60Hz (Auto Sensing)
Output	
AC Voltage Regulation (Batt. Mode)	230VAC ±5%
Surge Power	10 000VA
Efficiency (Peak)	90%
Transfer Time	10ms (for personal PCs) 20ms (for home appliances)
Waveform	Pure Sine Wave
Battery	
Battery Voltage	48VDC
Floating Charge Voltage	54VDC Max. 58VDC (optional 64VDC)
Overcharge Protection	60VDC Max. 66VDC (optional 64VDC)
Solar Charger & AC Charger	
Maximum PV Array Power	4000W
MPPT Range @ Operating Voltage	60VDC ~ 115VDC
Maximum PV Array Open Circuit Voltage	145VDC
Maximum Solar Charge Current	80A
Maximum AC Charge Current	60A
Maximum Charge Current	140A
Maximum Efficiency	98%
Standby Power Consumption	2W
Physical	
Dimension DxWxH	120mm x 295mm x 468mm
Nett Weight	13.5kg
Environment	
Humidity	5% to 95% Relative humidity (Non-condensing)
Operating Temperature	0°C - 55°C
Storage Temperature	-15°C - 60°C

* Typical transfer time for parallel operation is 30ms.
Product specifications are subject to change without prior notice.

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Devices Table

CRT "Box" TV	150 Watts
55 inch Flat Screen LCD TV	200 W
32 inch Flat Screen LCD TV	70 W
19 inch Flat Screen LCD TV	40 W
TV "Decoder"	15 W
TV "PVR Decoder"	40 W
Laptop PC	90 W
Small PC	150 W
Office PC	250 W
Big or Server or Gaming PC	400 W
Fridge or Freezer (cooling for 50% of the time)	80 W
Fan	50 W
Household Gate/Garage Motor	400 W
Swimming Pool Pump	1000 W
LED Flood light	20 W
Cell Phone Charger	15 W
CFL Energy Saver Light	10 W
LED Energy Saver Light	5 W
Radio	20 W
Microwave	1500 W
Microwave with Heater/Convection	2500 W
Oven/Kettle/Toaster/Coffee machine/Hair Dryer	2000 W



KIT CONTENTS



- 1 x FSW5000SBI Home Power Station.
- 1 x 35mm² 340mm long battery link cable.
- 1 x User Manual.



PACKAGE DIMENSIONS

	Height (mm)	Depth (mm)	Width (mm)	Weight (kg)	QTY
Power system	920	170	545	26.9	1