

The Affordable Home Solar Solution



**PS11-5000G 5KW
Solar Inverter**



**PE051-100L-WM 5KWh
LiFePo4 Battery Pack**

Features	Benefits
Complete Solution	Ready to install 5KW Inverter with 5KWh battery pack, easily beats stage 4 load shedding.
Transformer-less	This technology has been tried and tested in our successful on-line UPS range, and over the years has proven itself to be supremely reliable.
Sine Wave Output	The inverter produces a pure sine wave output similar to normal mains so can be used to power any equipment.
Multiple Supply Inputs	The Inverter has multiple supply inputs, ESKOM / Generator, Solar Panels or battery supply. The inverter can be set to have Solar or Eskom as the priority supply. If Solar is selected as the primary supply the inverter will use ESKOM to top up the requirement.
Fast Charge Capability	The inverter has a built in MPPT Charger that can charge at a maximum rate of 100 Amps, in addition to the MPPT charger the unit also has an 80 Amp charger from the mains. The unit is designed to limit the charge to a maximum of 100 Amps, even if the chargers are being used simultaneously.
Parallel Function	The 5KW inverter can be run with up to 9 units in parallel, the system can be expanded up to 45KW
Automatic Switch Over	The inverter will monitor the incoming mains and automatically switch the inverter on once the ESKOM power fails. The output is switched in less than 20 milliseconds.
Lithium-Iron Battery Pack	The LiFePo4 (Lithium-Iron Phosphate) battery offers many advantages over the traditional lead acid batteries. Fast recharge time (1 to 2 hours), ability to cycle ten times more than a traditional battery, smaller and lighter than a traditional battery

Inverter Specifications					
Model No.		PS11-5000G			
Capacity (Peak)	5 000 W (10 000 W)				
Input Voltage	230V AC				
Voltage Range (Selectable)	170 to 280 VAC 90 to 280 VAC				
Input Frequency	50 Hz / 60 Hz Auto sensing				
Transfer Time (Selectable)	10 milliseconds for computer equipment 20 milliseconds for home appliances				
Output Voltage On Inverter	230V AC \pm 5%				
Frequency on Inverter	50 Hz Crystal Controlled				
Inverter Wave Form	Sine Wave				
Efficiency At Full Load	\geq 93%				
Ambient Operation	3000M Max Elevation, 0 to 40 C, 20 to 90% Humidity				
Audible Noise At 1 M	< 45 dbA				
Short Circuit Protection	Yes				
Low Battery Shutdown	Yes				
Display	Full LCD Display with easy toggle options				
Maximum PV Array Open Circuit Voltage	500VDC				
Maximum PV Array Power	5000 Watts				
MPPT Range at Operating Voltage	120 to 450 VDC				
Maximum charge Current	Solar Only – 100 Amps	AC Grid Only – 80 Amps	Combined – 100 Amps		
Dimensions (w x d x h) mm & Weight	330 x 120 x 480 @ 10Kg				
Warranty	12-Months				
Battery Pack Specifications					
Model No.		PE051-100L-WM			
Description	51,2V100Ah LiFePo4 Battery (10 year / 6000 cycle design @ 80% DOD)				
Rated Voltage	51,2VDC				
Rated Capacity	100 Ah				
Energy Storage	51,2KWh				
Cycle Life	> 6000 Cycles to 80% DOD				
Self Discharge	< 2% Per month				
Efficiency of Charge	100% @ 0,2C				
Efficiency of Discharge	96% to 99% @ 1C				
Charge Voltage	58,4VDC				
Maximum Charge Current (Recommended)	100 Amps (25 Amps to 30 Amps)				
Maximum Discharge Current (Recommended)	100 Amps (50 Amps)				
Discharge Cut Off Voltage	44,8 VDC				
Dimensions (W x L x H)	250mm x 560mm x 175mm @ 28Kg				
Battery Pack Warranty	5 Years or 4000 Cycles @ 80% depth of discharge (DOD)				
Backup Time to 80% DOD	Load	1,25KW (25%)	2,5KW (50%)	3,75KW (75%)	5KW (100%)
	Time	3,2 Hours	1,6 Hours	1 Hour	45 Minutes

Specifications are subject to change without notification