



Redback SH5000 / LG Chem / energy package PK14



**Redback SH5000
Solar/Battery
Hybrid Inverter
(5KW)**

**LG Chem RESU
Lithium-Ion Battery
(48V) 6.5/10/13KWh**

The ideal Hybrid solar inverter & battery combination: the Australian Redback and LG Chem RESU Lithium battery. Comes plug in, with integrated energy management and web apps, with automation to program electrical loads around home like hot water, pumps and air conditioning. 5 year Warranties, made for Australian conditions. Ready for your electrician to install, or ecoCool can organise installation for you. (See Brighte Finance offers)

Solar residence 6/10/13KWh Battery/Hybrid Inverter Package

Package:	PK14.05	PK14.06	PK14.07
Battery (Lithium-Ion)	LG Chem RESU 6.5 KWh	LG Chem RESU 10KWh	LG Chem RESU 13KWh
Usable Energy	5.9KWh	8.8KWh	12.4KWh
Solar/Hybrid Inverter	Redback SH5000 (Gen2)	Redback SH5000 (Gen2)	Redback SH5000 (Gen2)
Solar Panel Capacity	5000W	5000W	5000W
AC Output	5000W	5000W	5000W
Battery Charging Current	85A	85A	85A
Max Charge/discharge	4600W	4600W	4600W
Relays/Energy Mangement	2 (4 Max) Meter/Web I/face	2 (4 Max) Meter/Web I/face	2 (4 Max) Meter/Web I/face

Solar residences battery / inverter / packages PK14

LG Chem RESU 6.5 / 10 / 13KWh Lithium Ion Battery Specifications

Models	RESU6.5	RESU10	RESU13
Total Energy [kWh]	6.5	9.8	13.1
Usable Energy [kWh]	5.9	8.8	12.4
Capacity [Ah]	126	189	252
Nominal Voltage [V]	51.8		
Voltage Range [V]	42.0~58.8		
Max Power [kW]	4.2	5	5
Peak Power [kW] (for 3 sec.)	4.6	7	7*
Dimension [W x H x D, mm]	452 x 656 x 120	452 x 484 x 227	452 x 626 x 227
Weight [kg]	52	75	99
Enclosure Protection Rating	IP55		
Communication	CAN2.0B		

*11 B/UP Mode

SH5000 Hybrid Solar/battery Inverter Specifications

Solar array	SH5000
Number of solar array inputs	2 (indiv. MPPT)
Maximum DC open circuit V	580V DC
MPPT operating range	125 – 550V
Starting voltage	125V DC
Maximum DC input current	11A DC (for each array input)
Solar array switch rating	1000V DC
Input connectors	H4
Residual A and insul. mon.	Integrated

Utility Interface	
Nominal AC volt/frequency	230V AC, 50Hz, single ph
Continuous AC power rating	5000W AC
Maximum AC Power to grid	5000W AC (derated over 45C)
Maximum AC current to grid	21.7A AC
Maximum AC A from grid	40A AC
Nominal AC output range	180 to 270V AC, 45 to 55Hz
Current THD	Less than 0.015
Power factor	0.8 leading to 0.8 lagging
AC overvoltage category	Category III
Anti-islanding/overcurrent	Integrated
Inverter topology	Transformerless

Battery interface	
Nominal DC voltage	48V DC
Battery compatibility	Refer to Battery datasheet
Max. charge/discharge W	4600W DC
Maximum charging current	85A DC
Max. discharging current	100A DC
Battery charging method	BMS controlled
Typical charging voltage	57.0V DC
Battery disconnect	4P DC breaker 63A/pole

Back up loads output	
Nom. AC voltage/frequency	230V AC, 50Hz, single phase
Cont. AC power rating	4600W AC (derate over 45°C)
Max. AC power rating	6900W AC (10 seconds max)
Max. AC current	21.7A continuous, 30A for 10 sec
Voltage THD	Less than 0.045 (linear loads)
B/up loads AC disconnect	25A MCB
Man. b/up load AC bypass Sw	Integrated

Efficiency	
Maximum efficiency (to grid)	0.976
European ave. efficiency	0.97
MPPT efficiency	0.999
Efficiency (from battery)	0.9 typical
Standby losses	Less than 8W AC

General data	
Dimensions (W x H x D)	516 mm x 832 mm x 290 mm
Mounting and weight	Inverter 32kg, BoS 12kg, (44kg)
Ambient temperature range	-25 to 60°C derate above 45°C
Relative humidity	0 to 0.95
DC overcurrent category	Category II
Moisture location category	4K4H
Environ. protection rating	IP65
Cooling	Natural convection
Noise emissions	Less than 25dB
Warranty	5 years

User Interface	
Front panel display	Multi-coloured LED indicators
Communications	WiFi + ethernet, App & web
Remote access	Web and android/iOS Apps
Power/energy monitoring	3 x utility grade meters