

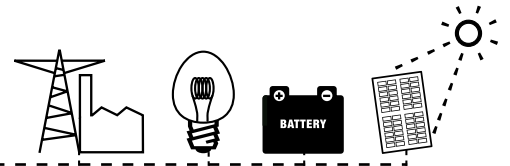
# PowerRouter Solar Battery

optimize your use of self-generated solar energy

The PowerRouter Solar Battery makes the most of self-generated solar power. Why sell your surplus energy to the grid at a low price, when you can store it for later use and receive a higher incentive for generating and using your own solar energy? The PowerRouter stores your solar energy in batteries for use at times when there is not enough sunlight for your panels to generate energy. With this technology, up to 70% of the power you generate can be for your own use (optimum self-use). No extra inverters or cables are necessary. Simply connect solar panels, batteries and loads to the PowerRouter and start saving.



- available in 5.0kW, 3.7kW and 3.0kW versions
- integrated battery manager
- compact, easy to install, all-in-one system
- compatible with all modern PV technologies, including thin film
- 2 fully independent inputs and MPP trackers for maximum yield and system configuration flexibility
- optional back-up power supply ("Local Out")
- easy installation with built-in wizard
- integrated web-based monitoring & management



## optimize self-use

In some countries, it is more lucrative to use the energy generated by your own solar system than to feed it into the grid. However, most energy is consumed after peak energy production hours. Most solar energy is generated during the day, while demand is highest in the evening when consumers cook and watch TV. The PowerRouter gets more out of self-generated solar energy by storing excess power in batteries for later use. The more self-generated energy you consume, the less dependent you are on the grid and rising energy prices. The PowerRouter's revolutionary technology creates the best scenario at all times for direct energy use, storage, or export to the grid.

## backup power supply

The PowerRouter Solar Battery is also available with a unique feature that enables it to supply backup power in the event of a grid failure. Unlike other inverters, a PowerRouter with a "Local Out" connection can switch to "island mode" when the grid fails. After a short delay it resumes operation, enabling its unique "Local Out" connection to supply a stable 230Vac power signal to the connected loads.

## monitor & manage

When the PowerRouter is connected to the internet, the web portal [myPowerRouter.com](http://myPowerRouter.com) gives detailed system information (e.g. performance, profit, solar yield) on each PowerRouter unit. The PowerRouter can even be remotely updated with new firmware containing the latest features, so your system is always up to date.

Grid	PR50SB-SU / SB-BS	PR37SB-SU / SB-BS	PR30SB-SU / SB-BS
Continuous output power at 40 °C (P nom)	5000 Wac (4600 Wac DE)	3700 Wac	3000 Wac
AC output current	22A	16A	13A
AC output voltage (nominal)	230 Vac ± 2%, 50 Hz ± 0.2%, true sine wave <3% THD, single phase		
AC output range	180-264 Vac 45-55 Hz (limited by local anti-islanding regulations)		
Protection	electronic, fused		
Standby losses	≤ 6W		
User interface	interactive display with 4-button operation		
Connectivity	ethernet RJ45, TCP/IP		
Backup switch over time	<1 second		

Solar	PR50SB-SU / SB-BS	PR37SB-SU / SB-BS	PR30SB-SU / SB-BS
Max. Input	5.5 kWp and 15 A per string	4 kWp and 15 A per string	3.3 kWp 15 A
No. of strings	2	2	1
No. of MPP trackers	2, fully independent	2, fully independent	1
DC Disconnection switch	4-pole, 600V, 15A	4-pole, 600V, 15A	2-pole, 600V, 15A
Solar Voltage	150 – 600 Vdc per string		
MPP Voltage	100 – 480 Vdc per string		
Solar Connections	MC4		
Max. Efficiency	94.5%		
Max. MPP Efficiency	99.9%		

Battery	PR50SB-SU / SB-BS	PR37SB-SU / SB-BS	PR30SB-SU / SB-BS
Output charge current	25 - 200 A continuous, programmable	25 - 155 A continuous, programmable	25 - 125 A continuous, programmable
Battery types	Gel, AGM, NiCd, Li-ion		
Battery voltage output range (Vout)	18 – 32 Vdc		
Battery capacity	min. 100 Ah, at 25A charge current		
Charging curve	float or 3-stage adaptive with maintenance		
Short circuit protection	electronic, at max. charge current, switch off <1 sec		
Multipurpose relay	2 (NO/NC, 250 Vac, 1 A, 24 Vdc, 5 A)		
Battery temperature compensation	included		
Battery voltage sense	included		
Current shunt	included		

Environmental	PR50SB-SU / SB-BS	PR37SB-SU / SB-BS	PR30SB-SU / SB-BS
Operating Temperature Range (full power)	-10 °C to +50 °C (derating from 40 °C)		
Storage Temperature	-40 °C to +70 °C		
Humidity	maximum 95%, non-condensing		
Regulatory Approvals and Standards	CE		
Safety	EN 60950-1, EN 62109-1, EN 60335-2-29		
Emission	EN 55014-1, EN 61000-3-2, EN 61000-3-3, EN 61000-6-3		
Immunity	EN 55014-2, EN 61000-6-2		
Anti Islanding Protection	VDE 0126.1.1, G83/1(UK), RD1663/2000(ESP), DK5940 E.d. 2.2 (IT), AS4777(AUS) (check www.PowerRouter.com for other country certifications)		
Warranty	five years (optional: extension to ten years)		

General	PR50SB-SU / SB-BS	PR37SB-SU / SB-BS	PR30SB-SU / SB-BS
Dimensions (WxHxD)	765 x 502 x 149 mm		
Protection Category	IP 21		
Weight	20.5 kg		
Topology	galvanic isolated transformer		
Cooling	forced airflow		

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