

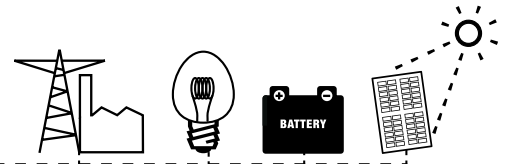
PowerRouter Solar Battery

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 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 | | |