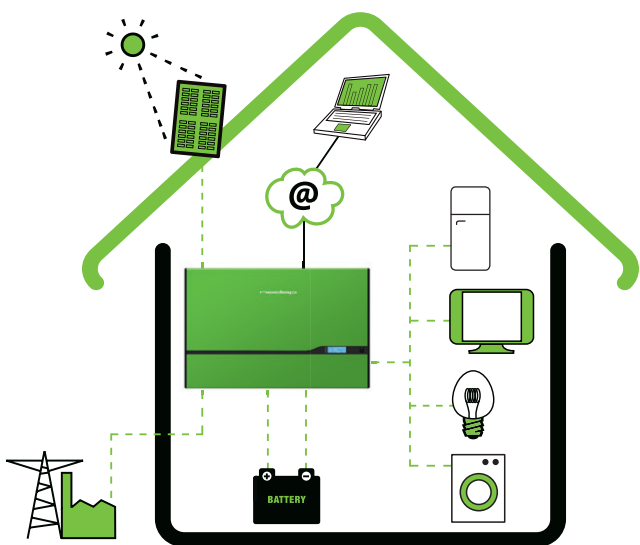

PowerRouter Solar Battery

Optimum use of self-generated solar energy

The PowerRouter Solar Battery allows you to get the most out of your PV system and make optimum use of the self-generated solar energy. With its unique technology, the PowerRouter controls whether to use the energy instantly, store it in batteries or feed it back to the grid. No extra inverters or cables are required: just connect the solar panels, batteries, loads and grid to the PowerRouter.



- available in 5.0 kW, 3.7 kW and 3.0 kW versions
- integrated 24 Vdc lead-acid battery manager
- compact, easy to install, all-in-one system
- compatible with all modern PV technologies, including thin film
- 2 fully independent MPP trackers*
- monitoring and management via integrated internet connection

optimize self-use

This PowerRouter is the ideal self-use solution. The consumption in most households occurs in the evening, while most solar energy is generated during the day. 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 use yourself (optimization of up to 70%), the less dependent you are on the grid and rising energy prices.

load management

Switch on additional loads when there is a surplus of solar energy and the batteries are fully charged. This allows the self-use percentage to be increased even more instead of feeding it back to grid.

monitor & manage

By connecting the PowerRouter to the internet via the integrated internet connection, you can access detailed system information (e.g. performance, consumption, solar yield and battery status). The PowerRouter can even be remotely updated with new software and functions, so changes can be made to the system easily and it always remains up to date.

*Except 3.0 kW version

Specifications **PowerRouter Solar Battery Lead-acid**

AC output	PR50SB-BS/S24	PR37SB-BS/S24	PR30SB-BS/S24
Continuous output power at 40 °C (P nom)	5000 W (DE: 4600 W)	3700 W (DE/UK/PT: 3680 W)	3000 W
AC output current	25 A (DE: 22 A)	16 A	13 A
Cos Phi	1 (DE: 0.9 ind. ... 0.9 cap. adjustable)		
Nominal output voltage	230 Vac, 50 Hz		
AC output range	180-264 Vac 45-55 Hz (limited by local anti-islanding regulations)		
AC output voltage (local out)	230 Vac \pm 2%, 50 Hz \pm 0.2%, true sine wave <3% THD, single phase		
Peak power (local out)	2 x Pnom., 10 sec.		
Protection	electronic, fused		
Standby losses	\leq 11W		
User interface	display with 4-button operation		
Connectivity	ethernet RJ45, TCP/IP		
1-phase sensor (p/n PRA1 SENSE)	included: for feed-in control and energy consumption monitoring		
3-phase sensor (p/n PRA3 SENSE)	optional: for energy consumption monitoring		
Load management relays	2 provided, NO/NC, 250 Vac, 1 A, 24 Vdc, 5 A		
Solar	PR50SB-BS/S24	PR37SB-BS/S24	PR30SB-BS/S24
Max. Input	5.5 kWp and 15 A per string	4 kWp and 15 A per string	3.3 kWp and 15 A
No. of inputs	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	100 – 600 Vdc per string		
MPP Voltage	180 – 480 Vdc per string		
Solar Connections	MC4		
Max. Efficiency	94% (93% EU)		
Max. MPP Efficiency	99.9%		
Lead-acid (wet/gel) and AGM	PR50SB-BS/S24	PR37SB-BS/S24	PR30SB-BS/S24
Battery voltage range (Vout)	21 - 31 Vdc		
Charge current	25 - 200 A continuous, programmable	25 - 155 A continuous, programmable	25 - 125 A continuous, programmable
Battery capacity	min. 100 Ah, at 25A charge current		
Charging curve	3-stage adaptive with maintenance		
Short circuit protection	electronic, at max. charge current, switch off <1 sec		
Battery temperature compensation	included		
Battery voltage sense	integrated		
Current shunt	integrated		
Environmental	PR50SB-BS/S24	PR37SB-BS/S24	PR30SB-BS/S24
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, VDE-AR-N 4105:2011-08, EEG 2012, C-Tick		
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, CEI 0-21 pending (IT), AS4777 (check www.PowerRouter.com for complete overview)		
Warranty	five years (optional: extension to ten years)		
General	PR50SB-BS/S24	PR37SB-BS/S24	PR30SB-BS/S24
Device Dimensions (WxHxD)	765 x 502 x 149 mm		
Protection Category	indoor use (IP20)		
Weight	20.5 kg		
Topology	galvanic isolated transformer		
Cooling	forced airflow		