

Solar power day and night

BPT-S 5 Hybrid The intelligent storage solution







No thanks, I think I'll use my power myself.

Keep the sun up after sunset.

If only I could use my solar power until late Storing solar power at night as well?

Photovoltaic systems are nowadays a good way of generating electricity on a private roof. Unfortunately, a lot of self-generated electricity is not used in the home, because as a rule solar power is produced at a time when no one can use it – no one is at home at midday. And then again in the evening when the demand for electricity is at its greatest, self-generated electricity is no longer available. The BPT-S 5 Hybrid is an intelligent and visionary solution. This world-first is the logical addition to a private photovoltaic system. The BPT-S 5 Hybrid stores the solar energy generated during the day so it can be used in the early morning and evening. This is clever energy management. The home owner notices nothing at all – except the change in their electricity bills.





BPT-S 5 Hybrid

Intelligent and visionary energy management with lithium-ion storage cells.



Independent

from daylight.

As wide as a fridge and 1.75 metres high, the highly efficient technology system, hidden in less than one cubic metre space, allows the photovoltaic energy to be used as and when needed. And not only when the sun is shining.

Highly efficient, high performance lithiumion batteries store and manage the solar energy, opening up unprecedented opportunities for own consumption at any time of the day and night. And: it is maintenancefree for 20 years.

The BPT-S 5 Hybrid stores the electricity generated by the photovoltaic system during the day and feeds it into the household network when it is needed - for example, in the evening when most power consuming devices are running. The storage unit effort-

Independent

the power grid.

from

lessly provides more than 75% of a household's total consumption – during bright summer months even 100%! The use of the BPT-S 5 Hybrid means real independence with self-produced solar energy.

Generation and consumption of solar energy



At the times of day when the greatest amount of solar energy is produced, only a small percentage can be used in the home. The excess is fed in to the public grid.

later time.



Solar power optimisation

With the BPT-S 5 Hybrid, solar power generated during the day is stored for self-consumption at a





My home uses clean electricity. I know. It's home-made.

Being able to produce clean energy is not quite good enough. Availability for use has to be optimal too.

Photovoltaic systems are already saving several million tons of carbon dioxide across Germany.

The largest saving is contributed by the sum total of all the many small, private photovoltaic systems. But until recently, solar energy could only be used during the day in the morning and evening electricity had

to be bought from the grid. The intelligent energy management system regulates the energy flow in a household. The BPT-S 5 Hybrid provides energy either directly from the photovoltaic system or from the storage cells. It is only when neither source can supply sufficient power that the BPT-S 5 Hybrid accesses power from the public grid.

Intelligent energy management.



Afternoon

Morning

----- Direct current, current

Solar module

4 Energy meter

2 Inverter

Battery

Direct current, no current

Alternating current, no current

Alternating current, current

Energy produced by the PV system is used to optimise self-consumption; excess energy is used to recharge the batteries.

When the batteries are fully charged and the system is already meeting self-consumption requirements; excess energy is fed into the public grid.









Evening

Once the sun has set, the system automatically switches to energy from the batteries.



Night

If the battery capacity is insufficient to meet own consumption requirements; electricity is then obtained from the public network.





Use-optimisation plus electricity savings – all in a minimal amount of space.



Dear power provider, we need to talk.

The BPT-S 5 Hybrid turns the game on its head. It is not the power generated by your own photovoltaic system which supplements the supply provided by the electricity provider; rather the electricity provider supplements your own production of electricity. With the BPT-S 5 Hybrid, a four-person household will use about 70 to 80% of the power they produce themselves. That equates to significant savings on electricity bought from the public grid and independence from steadily increasing electricity prices. In addition: when the photovoltaic system is producing more electricity than you can use at any one time and the batteries are fully charged, then the BPT-S 5 Hybrid feeds the extra electricity into the public grid (in accordance with the prevailing terms and conditions).



Add a little class to your boiler room.

Award-winning design and innovative technology.

The sophisticated technology of the BPT-S 5 Hybrid is concealed behind an exceptionally elegant design.

All components are integrated into a freestanding unit making wall mounting entirely superfluous. The BPT-S 5 Hybrid requires only two connections and one power

connection – complex additional cabling is not required. Data and status messages are controlled via the intuitive menu of the colour touch display.



The outstanding design and superior user interface have already won many awards in numerous international design competitions.



Attractive all round

Exceptional design for maximum comfort and top efficiency.

Control – everything and everywhere.

e.UserApp – keeps your system under constant surveillance.



The BPT-S 5 Hybrid has an integrated web server for easy monitoring of the storage unit at anytime of the day or night – no matter whether you are in the office, the garden or on holiday.

Using the free e.UserApp for iPhones and iPads, all your system data can be viewed and compared at any time. Simple clear graphs show, for example the performance of your photovoltaic system, the charge status of the batteries, energy flows generated for your own network or the public grid or the generated solar yield and CO_2 savings. The correlation between electricity consumption, financial return and use of solar electricity is seen at a glance and balanced via the app – making it easy to optimise your own consumption.





operation and optimisation of a private photovoltaic system and the BPT-S 5 Hybrid.

The service technicians monitor the storage system remotely, around the clock – seven days a week, 365 days a year: The BPT-S 5 Hybrid's integrated web server sends the

Remote monitoring is the key to the reliable system operating data to the e.Web internet portal. External monitoring of software, servicing and the installation of updates keep the BPT-S 5 Hybrid always up-to-date. If a problem does occur the service team can intervene – often before the system owner is aware of a problem and even in his absence.

Enjoy the freedom

The five year guarantee can be extended on request to the "all-inclusive package" for the worry-free, optimised operation of the entire photovoltaic system. Not only resources are precious. Time is too.





The BPT-S 5 Hybrid is the intelligent and logical supplement to your private photovoltaic system. More information can be found on our website

www.bosch-solar-storage.com

We are independent.

Robert Bosch (Australia) Pty Ltd

Locked Bag 66 Clayton Victoria 3169 Australia Ph 03-9541-7048 Fax 03-9541-7766 Info.BoschPowerTec@au.bosch.com **www.bosch-power-tec.com** www.bosch-solar-storage.com

100% chlorine free paper



*

* 2011 model