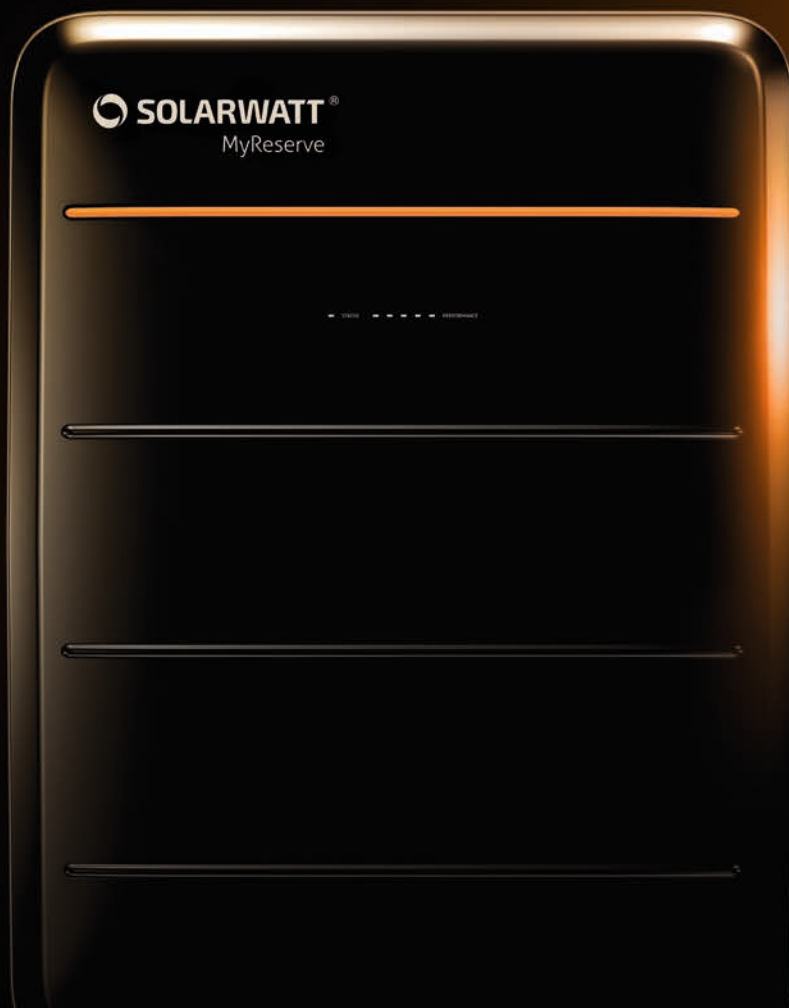


THE WORLD CHAMPION FROM GERMANY



MyReserve. THE BENCHMARK FOR THE FUTURE OF BATTERY STORAGE.

 **SOLARWATT®**
power to the people

MYRESERVE – THE REVOLUTIONARY BATTERY STORAGE SOLUTION

Welcome to the future of energy. MyReserve provides you with solar energy from your photovoltaic system even when the sun is not shining. And now it financially pays.

Have you ever considered how great it would be to store the free power from your photovoltaic system at times when you don't need it?

Now it can really pay off for you with SOLARWATT. Many people previously found that the technology was too expensive, too complicated, and therefore unprofitable – but now there is MyReserve, the next generation of solar energy batteries. State-of-the-art technology and a sensational price change everything: For the first time, it now pays off when you use your own solar energy.

A FAMILY OF HIGH PERFORMERS

MyReserve 500

SOLARWATT's MyReserve 500 offers you the most economical lithium-ion battery in the world. Combined with a new photovoltaic system, the whole installation incl. electricity battery will pay for itself after just 11 years. MyReserve 500 is optimized for photovoltaic systems with 10 to 13 panels.

- Dimensions (H x W x D): 98.4 x 73.4 x 31 cm
- Usable battery: 4.4 kWh
- Expandable battery: up to 11 kWh
- Depth of discharge (DoD): 100%
- Battery efficiency: 99.2%
- System efficiency: 96% at best point (93% in full cycle)
- Technology: lithium-ion storage system
- Cluster formation: Power increase by at least 1.5 kW per MyReserve connected
- Assembly: space-saving wall mounting
- Safety: certified according to the German Safety guidelines for lithium home battery systems and UN38.3 (battery module transport test)

MyReserve 800

The MyReserve 800 is the extension of the MyReserve 500: it provides higher flexibility as more modules can be connected. The MyReserve 800 is ideally suited to systems with 14 to 18 modules. In addition, the MyReserve 800 enables clusters to be formed for the first time. This means you can connect a MyReserve to each PV module string and therefore integrate several MyReserves into a house installation by forming parallel clusters. Benefit from multiplying the output and capacity to maximize your autonomy.

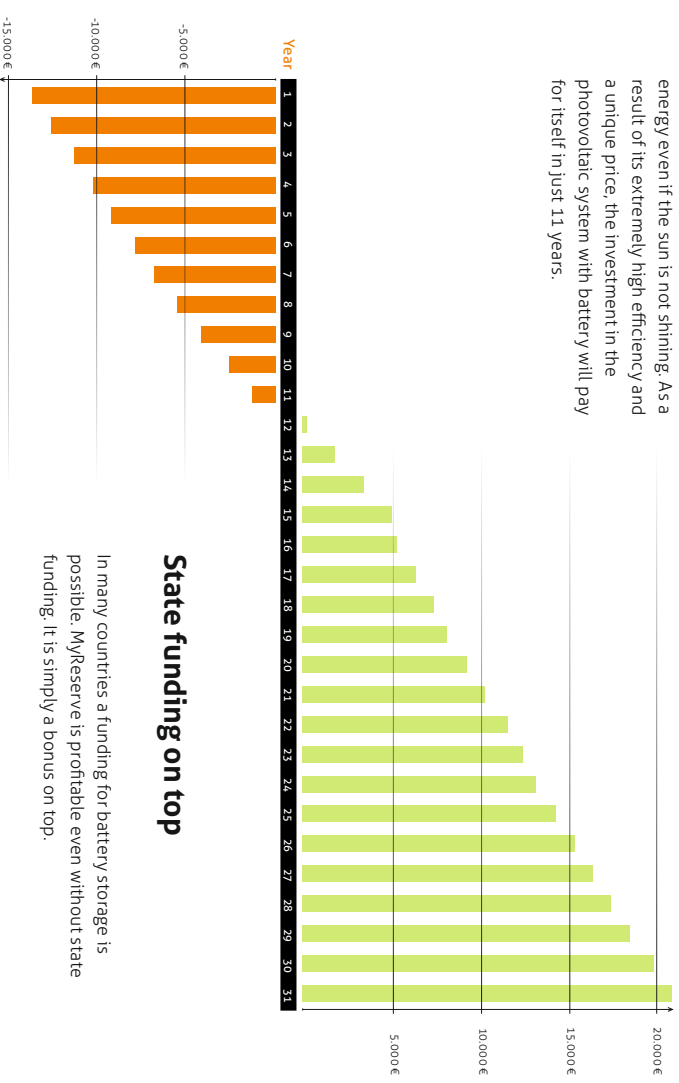
- Optimized for systems with 14 to 18 modules
- Extension: Capacity can be increased to 8.8 kWh
- Cluster formation: Power increase by at least 1.5 kW per MyReserve connected



THE NEW GERMAN ECONOMIC MIRACLE

With the MyReserve you receive the most economical battery for single and two-family homes at a sensationally low price.

With MyReserve you can use free solar energy even if the sun is not shining. As a result of its extremely high efficiency and a unique price, the investment in the photovoltaic system with battery will pay for itself in just 11 years.



State funding on top

In many countries a funding for battery storage is possible. MyReserve is profitable even without state funding. It is simply a bonus on top.



YOUR DECLARATION OF INDEPENDENCE

With the MyReserve, up to 80% independence is possible; on good days this can be as much as 99%. This is achieved through optimal self consumption. The more free solar energy you use from your photovoltaic system, the less grid power you need from your energy supplier. The numerous technical features of MyReserve make high degrees of independence possible.

Lowest consumption

When in operating mode, i.e. when providing electricity, MyReserve only consumes between 5 and 15 watts and leads the competitors. In standby mode its electricity consumption is even less than 5 watts.

Highest efficiency

MyReserve offers a superior battery efficiency level of 99.2 %. System efficiency level is 96 % at best point and 93 % in full cycle. That's world record.

Fastest response time

Many household devices have electricity requirements that vary strongly, e.g. modern freezer, microwaves, induction hobs, coffee machines. They demand peak current for a few seconds.

MyReserve registers the demand for electricity in the home immediately and supplies the stored energy. Within less than a second, the electricity is provided completely from the battery. Traditional batteries respond too slowly so additional mains electricity must be purchased.

Lowest heat losses

As a result of the extremely high electrical conversion, MyReserve does convert virtually no energy into heat. Therefore battery cooling is not required.

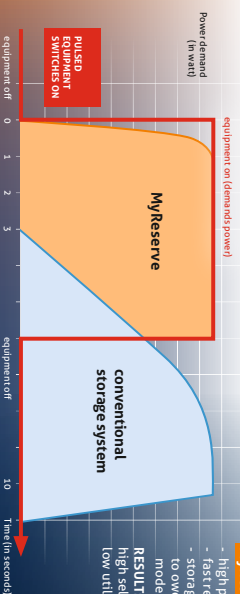
Battery management system

The MyReserve battery management system is monitoring all the system parameters all the time. With its intelligent charging and discharging algorithms it ensures the highest security and maximizes the system lifespan.

Weather report to optimize self consumption.

MyReserve is equipped with self-learning software to forecast weather. Using yield and consumption data (electricity taken from the battery), MyReserve independently develops an optimal operating strategy to maximize self consumption and the independence level whilst at the same time minimizing battery aging.

MYRESERVE REACTS ALMOST 10-TIMES FASTER THAN CONVENTIONAL SYSTEMS



MyReserve

- high pulse frequency (<1 ms)
- fast response time (0.7 s)
- storage responds immediately to over demand with discharge mode

RESULT:

high self consumption/ low utility invoice

Conventional storage

- low pulse frequency (3 – 5 s)
- slow switching response (0.5 s)

EFFECT:

- slow switching to discharge mode - storage supplies only shortly before the planned demand is stopped - until then supply from the grid - after that supply to the grid

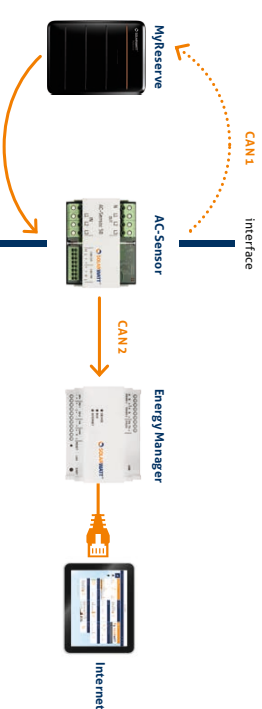
RESULT:

low self consumption/ high utility invoice

SECURITY



MYRESERVE DATA CONFIGURATION



Technical security

MyReserve is the first storage system that completely fulfills the safety guidelines for lithium-ion home batteries. It also has various security devices that safeguard the operation and security during assembly and commissioning.

100% hacking protection

Many traditional batteries rely on an internet connection. Therefore a digital break-in is always possible.

Not so for MyReserve: Solarwatt have consciously removed the internet connection and classical LAN access to the battery, so that it cannot be reached externally by digital means. Due to the system intelligence maintaining complete control of the system, all security gaps are eliminated.

Instead only one-way data communication is possible. Internally the physical interface provides 100% protection to ensure unauthorized data is not transmitted.

In order to exclude manipulations by third parties, an internal and an external CAN data bus are used and these are physically separated from each other.

Relays in high vacuum

In order to ensure that MyReserve can be switched off at all times and in any operating mode, 4 sequentially switches ultra high vacuum relays are used giving quadruple redundancy in the security concept for switched on and off. The vacuum prevents light arcs at high voltages that could cause the relay to fail – it would no longer be possible to switch the device on and off. The spatial separation of the individual relays prevents the mutual influencing of the relays during faults.

Ceramic coated separators

The ceramic separators in the battery cells prevent short-circuits so no fire can start. The ceramic coating ensures that the separators do not melt when overheated - excluding chain reactions.

Aluminum block

The battery modules are sealed in the factory in a single-part cast aluminum casing that is up to 1.4 cm thick and can only be opened again with special tools. This provides the highest transport and penetration security. Penetration of the battery module, which could result in a fire, is virtually excluded.



ENERGY MANAGER – YOUR COMMAND CENTER

**The perfect team
MyReserve and Energy Manager together ensure
that your solar power is profitable.**

The benefits of a photovoltaic system are no longer calculated from the feed-in energy but rather from using as little mains power as possible. If free solar energy is produced and not needed immediately, the Energy Manager decides what to do: Household loads with a flexible energy requirement can either be switched on – such as such as cooling and charging equipment, hot water pumps, air conditioning units, etc. Or MyReserve can store the excess power for times where there is no sunlight.

At the same time Energy Manager gives you full transparency on the power consumed by your devices. This knowledge alone can already reduce your energy consumption by 10%.

Everything at a glance. In full control.

The Energy Manager – installed in the fuse box – monitors all energy flows in the house. The data is transmitted online to the Energy Portal, which can be controlled from your PC, tablet, or smart phone.

Your data is stored on German servers and is encrypted in the same way as for online banking.

Ready for the future.

The SOLARWATT Energy Manager can already work in combination with devices from various manufacturers. Thanks to its flexible interface, you can integrate new apps very easily into the Energy Portal. The Energy Manager is therefore already prepared for Smart Home applications and is Smart Grid ready.

100 % MADE IN GERMANY

**SOLARWATT is German-made in every aspect. Ever since
SOLARWATT was founded in 1993, all components have been
manufactured in Germany.**

Cost-effective solutions and technical innovation is our emphasis.

Our past, pioneering developments range from the first ever glass-glass-modules in 1998 to the first economic solar storage system in 2015.

With two locations in Germany and subsidiaries in France and the Netherlands, the SOLARWATT group employs more than 250 people.

SOLARWATT INNOVATION

In 2016, SOLARWATT acquired e-Wolf, an offspring of the Toyota Racing Formula 1 team. Experts in battery technology, e-Wolf developed the highly complex K.E.R.S. hybrid technology and its associated innovative control and battery management systems. This acquisition enables SOLARWATT to reduce the cost of battery storage systems and assume cost leadership.

Premium Strategy

Our focus is on decentralized residential energy solutions. We produce German-made premium products, offering optimum purchase conditions and more independence from the public grid.

We specialize in complete system solutions to ensure benefit from all-inclusive package and reduce consumer's reliance on the public grid.



**HIGHEST EFFICIENCY.
CERTIFIED SECURITY.
GUARANTEED PERFORMANCE.**

www.solarwatt.net