

Store with salt!

Our partner will be happy to advise you!
For competent advice and an individual offer
please contact your sales partner:



**innov[®]
energy**
Store with salt!

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Creating a clean future together!

Ecological battery storage
for private users and commercial enterprises

**innov[®]
energy**
Store with salt!



Absolute safety



Robust longevity



Ecological sustainability



Value creation & quality

Salt batteries ...

- consist of **harmless materials**: 32 % common salt, 22 % nickel, 22 % iron and 20 % ceramic.
- have a **battery efficiency of 90 %** in the standard cycle.
- are **100 % recycled**. The process has been standardised for 15 years: The metals are melted down and returned to the metal industry.
- promote **Swiss and European value chains**.
- are **absolutely safe** – do not burn, do not explode and are non-toxic.
- run even under **extreme temperatures from -20° to +60° C**. The outside temperature affects neither storage capacity nor service life.
- require **no additional construction measures** – no fire protection, no fire warning devices, no temperature control, no ventilation.
- can be **installed almost anywhere** – must be dry (cellar, garage, shed, attic, etc.).
- can be **completely discharged without damage** or sent into hibernation.
- have a **lifetime of at least 15 years** and are **maintenance-free**.
- are **extremely robust** and have a **very high energy density**.

The salt battery is used by the thousands in the telecommunications industry. In industry, it is considered a cheap and safe electricity storage technology in the long term. With innovenergy®, this technology is now also available for domestic use and for businesses.

Salt battery storage systems will help you ...

- ... to store your energy safely, securely and innovatively.
- ... to make your contribution to the environment and climate change.
- ... to invest your money in a long-lasting resource-saving system.
- ... to use your electricity in a 100% sustainable and environmentally friendly way.
- ... to give your grandchildren a healthy future.

non-flammable



no explosion hazard



non-toxic



lifetime 15 years
10 years warranty



value added Europe
regional economy



quality product
Made in Switzerland



clean raw material mining
available worldwide



good CO2 footprint
short transport routes



full recycling



Common salt – a primary substance of life.



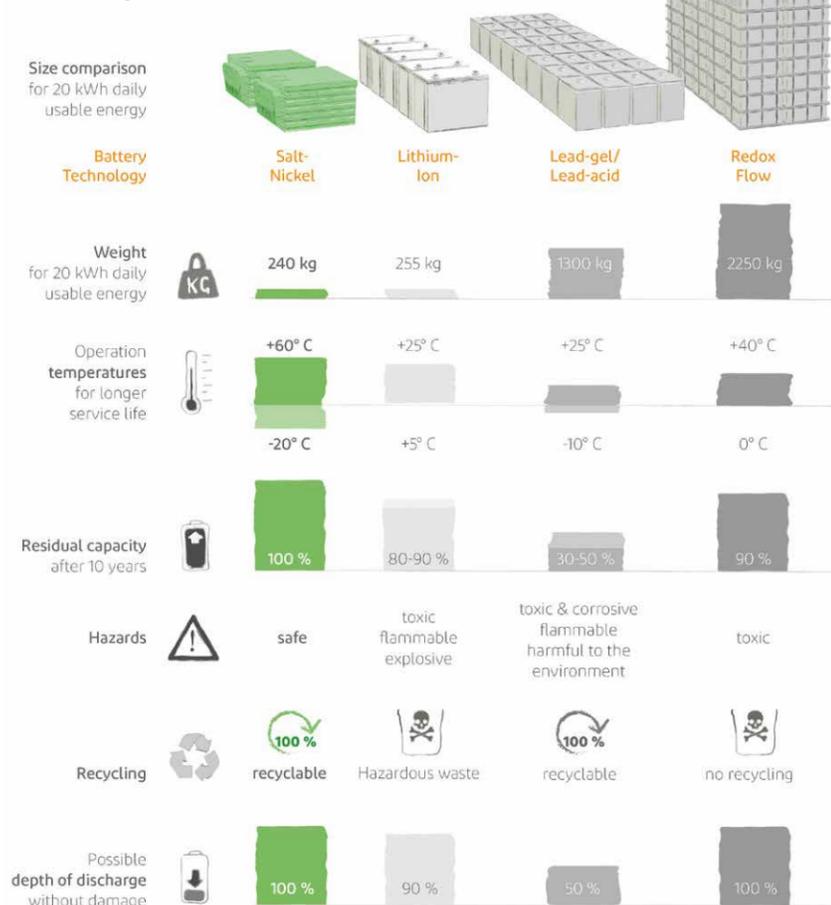
The salt in the soup. Put salt in the wound. Bread and salt, God forbid. Not for nothing are there many sayings about salt. It is an elementary substance, available everywhere, versatile and simply essential for life.

We at innovenergy® use pure table salt as energy storage for your clean green electricity from your photovoltaic system.

When it comes to the term sustainability, you can take a closer look, because it is not only recycling that is important, but also how raw materials are available and mined.

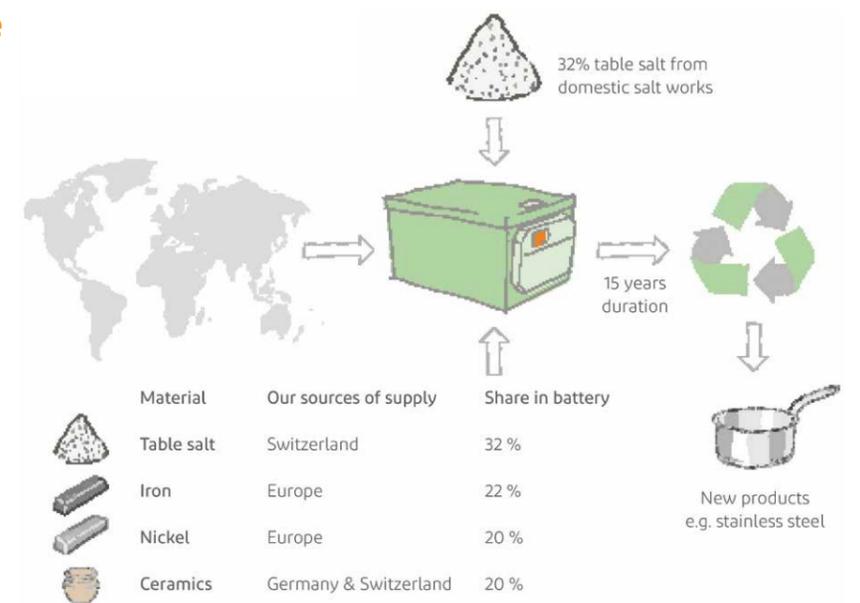
Battery comparison

Not all batteries are the same. There are big differences in efficiency, ecology, economy and safety. See below for a graphical comparison of the current storage technologies.



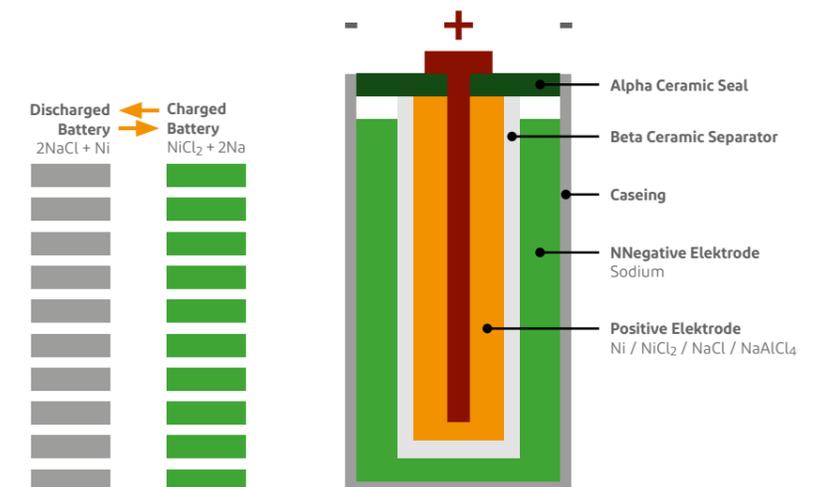
Closed raw materials cycle

The individual cells as well as the entire salt battery consist of materials that can be recycled after 10 years of use in stationary electricity storage. The recycling of the salt battery has been standardised and industrialised for 15 years. The metals are melted down and returned to the metal industry. Your pan on the cooker could have been a salt battery in the past. The salt and ceramics are further processed in road construction. Thus the material cycle of the salt battery is almost perfectly solved.



The chemistry has to be right

The principle of the salt battery is molten salt at 250° C and the charge results from the conversion of $2\text{NaCl} + \text{Ni}$ into $\text{NiCl}_2 + 2\text{Na}$. A solid-state electrolyte, a β -ceramic, is the separator.



The future needs energy – green energy!



«Clean renewable energy stored in clean battery storage» ...



... is the focus of innovenergy®. Every single employee runs 100 percent for sustainability. The dynamic and committed team is actively working on the energy transition and is fully on course for success.

innovenergy AG is a fast-growing Swiss young company in the field of renewable energies. It develops and distributes ecologically sustainable and innovative salt-based battery storage systems for private users, commercial enterprises and industry. With unique salt battery storage products the company captures the spirit of the times for an energy-efficient integration of renewable energies into our future power supply.

innovenergy® is currently expanding strongly in the DACH market and is constantly expanding its product range.

... for private users and commercial enterprises



Private

Whether it's an apartment building or your own home, you can look forward to more energy self-sufficiency and self-consumption optimisation – and it's completely clean and ecological.

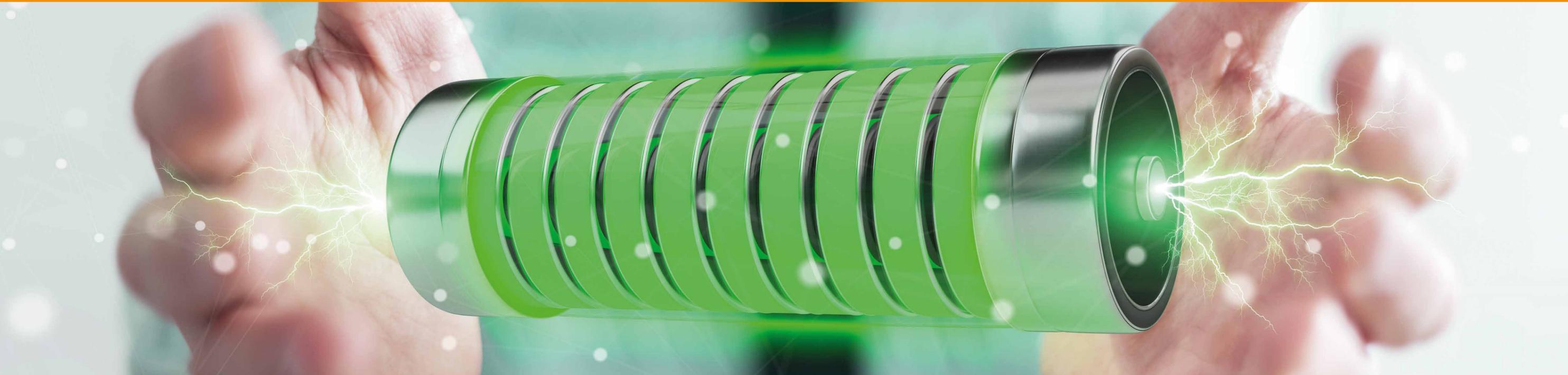
salidomo ®	9 or 18 kWh 3 x 3 kVA
salidomo ® EXT	18, 27 or 36 kWh 3 x 5 kVA



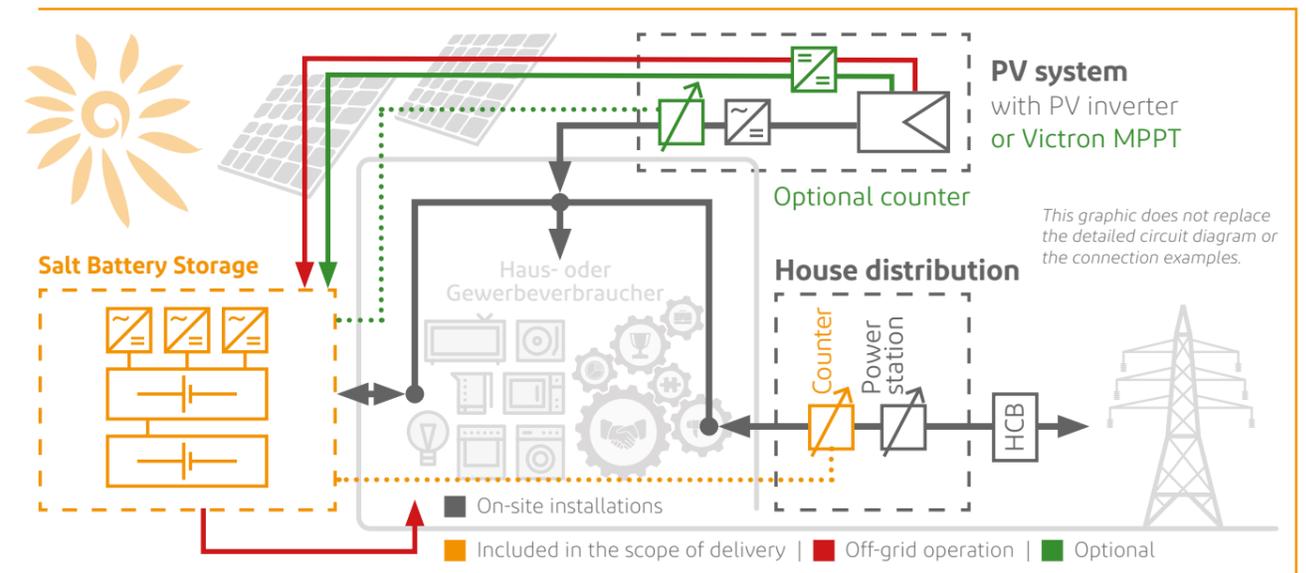
Commerce

Enterprises need power security – at all times! Emergency power-capable and off-grid battery storage systems are therefore mandatory. innovenergy® has the right solution for you.

salidomo ® EXT	18, 27 or 36 kWh 3 x 5 kVA
salipro ®	45 or 90 kWh 3 x 10 kVA



System characteristics Type of system AC phases Extension of battery capacity	All-in-one system 3-phase system (asymmetrical operation) at any time, old + new batteries can be combined
Battery storage Battery type Chemical name Expected life at 80 % DoD Maximum C rate (charge / discharge) Nominal battery voltage Battery efficiency (standard cycle)	Salt battery (molten salt or ZEBRA cell) NaNiCl_2 (sodium nickel chloride) 15 years / > 8500 shallow cycles 0.25 C / 0.5 C 48 V 90 %
Inverter Galvanic isolation (DC from AC) Inverter safety in PV systems Energy management	yes DIN EN 62109 certified Victron ESS adapted to the salt battery
Emergency power supply Mains independence Recharging by PV in off-grid operation Emergency power switchover	asymmetrical 3-phase operation DC→DC: Victron MPPT automatic (in under 20 milliseconds)
Further functions Self-consumption optimisation Breaking demand peaks (peak shaving) Automatic stand-by operation Visualisation, data analysis, energy statistics Battery monitoring	integrated and configurable integrated and configurable with unloaded inverters Web platform plus app for iOS + Android Remote monitoring of batteries in real time
Intelligent control Potential-free contact for switching consumers on and off (charging station, heat pump, etc.) Time control for recharging the battery from the mains (calibration 100 % SOC) Lifetime-optimised operation of the battery (power limits)	



Warranty

Provided that the installation and operating conditions are complied with, the salt battery is covered directly by the manufacturer with a time-value guarantee of 10 years. The battery inverters are covered by a 5-year warranty. Everything else is covered by a standard 2-year warranty. The warranty is an device warranty. Travel costs and working hours will be charged separately in the event of replacement or faults, unless you have subscribed to a service contract for the relevant year.



Recycling

100 % of the discarded salt batteries are returned to the raw material cycle. In Switzerland, this recycling is ensured by INOBAT. Different recycling regulations apply in each country and advance disposal fees are charged accordingly. Please ask your sales partner in the respective country.



Salt battery storage systems for at home with 9 or 18 kWh

innovenergy® offers you **ecologically harmless** salt-based home storage for your PV system:

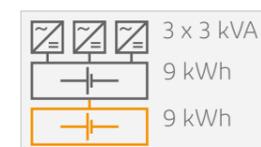
- 9 kVA (3 x 3 kVA) Inverter power (400 V)
- 9 kWh storage capacity (salidomo® 9) – can be expanded to 18 kWh at any time with a simple plug-in unit (salidomo® 18)
- Maximising your own consumption through intelligent control
- Monitoring the power situation and energy analysis via smartphone app or internet browser
- plug & store – turnkey solution with easy installation

When do you need electricity the most? Sure, in the morning when you get up and then again in the evening when everyone is back in the house. But your photovoltaic system only produces during the day - when you need less electricity. So you feed diligently into the grid. And when you need electricity, you have to buy it again. But what if you could now store your electricity all to yourself, available at any time? You and your house would be independent!

The **salidomo**® is an AC-coupled salt battery storage system that works with all PV inverters. The installed battery inverter capacity is 9 kVA. DC coupling of the photovoltaic system via our MPPTs is also possible. The **salidomo**® can be expanded from 9 to 18 kWh at any time with the existing three inverters.

	salidomo® 9	salidomo® 18
System characteristics		
AC installation effort	approx. 1/2 day (depending on local conditions)	
Dimensions (WxHxD)	715 x 1538 x 680 mm	
Total weight	185 kg	290 kg
Battery storage		
Nominal storage size	9.4 kWh	18.8 kWh
Usable storage	approx. 8 kWh	approx. 16 kWh
Charging power	≤ 40 A (≤ 2 kW)	≤ 80 A (≤ 4 kW)
Continuous power discharge	≤ 150 A (6.5 kVA) Battery limited	≤ 220 A (9 kVA) Inverter limited
Inverter		
Nominal power (Victron, adapted to salt battery)	3 x 3 kVA / 400 V	
Overload capacity (max. 5 sec.) max. discharge power	18 kVA	
Emergency power supply		
Separate emergency circuit	≤ 9 kVA freely definable	

salidomo® 9/18





Salt battery storage systems for larger solar roofs
with 18 kWh, 27 kWh or 36 kWh

innovenergy[®] offers you **ecologically harmless** salt-based home storage for your PV system:

- 15 kVA (3 x 5 kVA) inverter power (400 V)
- 18 kWh (salidomo[®] EXT 18) or 27 kWh storage capacity (salidomo[®] EXT 27) – can be expanded to 36 kWh (salidomo[®] EXT 36) at any time with a simple plug-in unit
- Maximisation of your own consumption through intelligent control
- Monitoring of the power situation and energy analysis via smartphone app or internet browser
- plug & store – turnkey solution with easy installation

	salidomo [®] EXT 27	salidomo [®] EXT 36
System characteristics		
AC installation effort	approx. 1/2 day (depending on local conditions)	
Dimensions (WxHxD)	1430 x 1538 x 680 mm (2 parts)	
Total weight	415 kg	520 kg
Battery storage		
Nominal storage size	28.2 kWh	37.6 kWh
Usable storage	approx. 24 kWh	approx. 32 kWh
Charging power	≤ 120 A (≤ 6 kW)	≤ 160 A (≤ 8 kW)
Continuous power discharge	≤ 350 A (15 kVA) Inverter limited	
Inverter		
Nominal power (Victron, adapted to salt battery)	3 x 5 kVA / 400 V	
Overload capacity (max. 5 sec.) max. discharge power	30 kVA	
Emergency power supply		
Separate emergency circuit	≤ 15 kVA freely definable	

You have a larger roof area available that produces more solar energy than you can consume. The normal feed-in is not profitable enough. You would like to not only store your electricity, but also sell it to your neighbours. Or maybe even your neighbours have a PV system too. So, what if you team up and buy a larger storage unit together? You would have a profitable storage community!



The salidomo[®] EXT is an AC-coupled salt battery storage system that works with all PV inverters. The installed battery inverter capacity is 15 kVA. DC coupling of the photovoltaic system via our MPPTs is also possible. The salidomo[®] EXT can be expanded from 18 to 36 kWh at any time with the existing three inverters.

salidomo[®] EXT 18/27/36





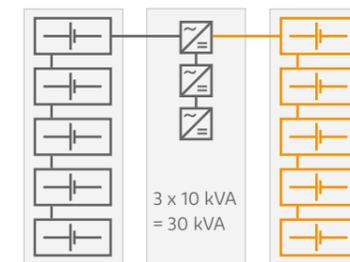
Salt battery storage system for commercial applications with 45 kWh or 90 kWh

innovenergy® offers you a **safe profitable** salt battery storage system for your business:

- 30 kVA inverter capacity (400 V)
- Salt battery storage capacity 45 or 90 kWh (slow expansion from 45 to 90 kWh possible at any time)
- Safe control and take-over of power supply in less than 20 milliseconds in case of mains failure
- Existing online UPS systems can be integrated
- High operational safety – no fire hazard

	salipro® 45	salipro® 90
System characteristics		
AC installation effort	approx. 1 day (depending on local conditions)	
Dimensions (WxHxD)	220 x 210 x 80 cm	300 x 210 x 80 cm
Total weight	1180 kg	1880 kg
Battery storage		
Nominal storage size	5 x 9 kWh 47 kWh	10 x 9 kWh 94 kWh
Usable storage	approx. 40 kWh	approx. 80 kWh
Charging power	≤ 200 A (≤ 10 kW)	≤ 400 A (≤ 20 kW)
Continuous power discharged (in off-grid operation)	≤ 400 A (500 A)	≤ 800 A (500 A) Inverter limited
Inverter		
Nominal power (Victron, adapted to salt battery)	3 x 10 kVA / 400 V	
Overload capacity (max 5 sec.) max. discharge power	2 x nominal power	
Emergency power supply		
Separate emergency circuit	≤ 30 kVA	

salipro® 45/90



You need more storage capacity than usual and want to be on the safe side. Because you have installed a lot of photovoltaics on your commercial roof, apartment building or agricultural land. You need more power for your various consumers, some of which are sensitive. Emergency power supply or islanding capability is very important to you. What if there was an emergency power supply that is not only operational when everything fails, but additionally optimises your own consumption all the time and thus generally reduces your electricity costs? You would have cost-effective security!

The salipro® is an AC-coupled emergency power-capable salt battery storage system that automatically switches to off-grid operation in less than 20 milliseconds in the event of a power failure and continues to operate autonomously. It guarantees the safe continued functioning of your commercial enterprise. The AC-coupled salt battery storage system works with all PV inverters. Suitable solar charge controllers can be installed as an option. After a mains failure, energy continues to be stored in the battery or the stand-alone grid.