

# Solar Power Storage Systems STOREit



**Wagner Solar**

ENERGIETECHNIK  
ENERGY TECHNOLOGY  
TECHNOLOGIE ÉNERGÉTIQUE  
ENERGIETECHNIEK



## With our intelligent solar power storages

you increase your consumption of self produced solar power, reduce the electricity purchase from the public grid and achieve independency from rising electricity prices!

### BENEFITS

- **Flexible storage solutions for new and existing installations**
- **Intelligentes energy management**
- **System control via web access**
- **Powerful, maintenance-free and longlasting batteries**

### DETAILS

Solar power on demand, highly independent from the grid. Own consumption of solar power. Notably reduced electricity bills.

Maximizes own consumption through optimization of the energy flows including personal consumption habits. State-of-the-art communication standards enable easy integration into smart home systems.

On online portals you can call up detailed system information from everywhere.

Systems with choice of highly efficient lithium-ion batteries or the trusted lead-acid batteries.



## Pure sunlight - around the clock

The STOREit systems from Wagner Solar are the perfect combination of intelligent energy management and high-performance batteries. With STOREit battery packages the sun will also shine for you at night.



### Forward Looking Power Storage

We trust in well-engineered and sustainable technology. All storage systems are equipped with highly efficient, durable and maintenance free lithium-ion or lead-gel batteries.

### Smart Home compatible

Intelligent energy management features automatic real-time analysis of all power flows to continuously assure the optimized utilization of all generated solar electricity.

The systems recognize energy saving potentials allow for cost effective operation of load intensive appliances such as washing machines, heaters, airconditioners, heat pumps and more. Automotized E-vehicle charging is another possibility.

### All data in sight at any time

The solar storage systems are simply connected to the Internet. Via free web portals you can always have an eye on your solar power system. Energy flows and system data are presented in a clear and easy to understand manner. Keep optimizing your solar self consumption at any time and from anywhere in the world.

Just relax and enjoy your freedom.



### YOUR STOREIT ADVANTAGES

- ✓ Own consumption of solar power of up to 70%
- ✓ Notably reduced electricity bills
- ✓ More freedom from your utility company
- ✓ Straight forward visualization of the energy flows

## Solar Power Storage Systems with SMA Inverters

- Modular systems designed to optimize the fraction of self-used electricity, also for integration in existing solar power installations
- For new installations an inverter is additionally required for connection to the power grid
- 1- or 3-phase, AC-coupling, free choice of connected DC power
- A system comprises an inverter package and a battery package
- The inverter package comprises an SMA Sunny Island battery inverter and an SMA Sunny Home Manager 2.0 (energy management system with automatic control of appliances and real-time display of all energy flows)
- The battery package comprises lithium-Ion batteries from LG CHEM, BYD, BMZ or lead batteries from HOPPECKE
- The packages can be combined freely



SMA SHM 2.0 Inverter packages	SI 4.4 mono phase	SI 6.0 mono phase	SI 13.2 triple phase	SI 18.0 triple phase	SI 24.0 triple phase
P <sub>ACnom</sub> (kW)	3,3	4,6	9,9	13,8	18,0
Part no.	232 008 10	232 008 11	232 008 12	232 008 13	232 008 14



BMZ ESS Battery package SMA	5,3 kWh	10,5 kWh	15,8 kWh	21,0 kWh	26,3 kWh	31,5 kWh
Type	Lithium-ion					
Usable energy (kWh)	5,3	10,5	15,8	21,0	26,3	31,5
Weight (kg)	95	190	285	380	475	570
Part no.	232 002 75	232 007 30	232 007 31	232 007 32	232 007 33	232 007 34



LG CHEM Battery package SMA	RESU 3.3	RESU 6.5	RESU 10	RESU 13	RESUplus 16,5	RESUplus 20	RESUplus 26
Type	Lithium-ion						
Usable energy (kWh)	2,9	5,9	8,8	12,4	14,7	17,6	24,8
Weight (kg)	31	52	75	98,5	52 + 75	2 x 75	2 x 98,5
Part no.	229 310 00	229 310 01	229 310 02	229 310 06	229 310 04	229 310 05	229 310 07



BYD Battery-Box LV	L 3.5	L 7.0	L 10.5	L 14.0
Type	Lithium-ion			
Usable energy (kWh)	3,5	7,0	10,5	14,0
Weight (kg)	65	108	151	194
Part no.	232 009 20	232 009 21	232 009 22	232 009 23



HOPPECKE SPP classic battery package	4,0 kWh	5,5 kWh	8,0 kWh	11,0 kWh
Type	Lead-AGM			
Usable energy (kWh)	4,0	5,5	8,0	11,0
Weight (kg)	295	370	590	740
Part no.	229 002 63	232 002 64	232 002 65	232 002 66



## High-Voltage Solar Power Storage Systems with SMA Inverters

- Systems designed to optimize the fraction of self-used electricity, significantly lighter and easier to install
- Single phase, AC coupling
- A system comprises an inverter package and a battery package
- The inverter package comprises an SMA SBS battery inverter and an SMA Energy Meter or an SMA Sunny Home Manager 2.0 (energy management system with automatic control of appliances and real-time display of all energy flows)
- The battery package comprises lithium-Ion batteries from BYD or LG CHEM



SMA Inverter packages	SBS 2.5 EM/SHM 2.0	SBS 3.7 EM/SHM 2.0	SBS 5.0 EM/SHM 2.0	SBS 6.0 EM/SHM 2.0
P <sub>ACnom</sub> (kW)	2,5	3,7	5,0	6,0
Part no.	232 008 15	232 008 16	232 008 17	232 008 18



BYD Battery-Box	H5.1	H6.4	H7.7	H9.0	H10.2
Type	Lithium-ion				
Usable energy (kWh)	5,10	6,40	7,68	8,96	10,24
Weight (kg)	122	148	174	200	226
Communication	CAN/RS485				
Part no.	232 009 61	232 009 50	232 009 51	232 009 52	232 009 53



LG CHEM High-voltage battery	RESU 7H CAN 2.0B	RESU 10H CAN 2.0B
Type	Lithium-ion	
Usable energy (kWh)	6,6	9,3
Weight (kg)	85	100
Communication	CAN 2.0B	CAN 2.0 B
Part no.	232 006 01	232 006 03



## Solar Power Storage Systems with SMA Inverters for commercial applications

- Systems designed to optimize the fraction of self-used electricity up to the Megawatt range
- Clusters with a nominal output of 72 kW can be implemented in grid parallel operation
- If desired, the plants can be utilized as backup power supply in case of grid failures
- An inverter is additionally required for connection to the power grid
- triple phase, AC-coupling
- A system comprises an inverter package, a battery package as well as a Multicluster Box and a NA Box
- The inverter package comprises an SMA Sunny Island battery inverter and an SMA Sunny Home Manager 2.0 (energy management system with automatic control of appliances and real-time display of all energy flows)
- The battery package comprises lithium-Ion batteries from BMZ, scalable up to 12 pieces per SMA cluster
- The different battery types cannot be combined with each other!



SMA Inverter packages	SI 13.2 SHM 2.0/3-phasig	SI 18.0 SHM 2.0/3-phasig	SI 24.0 SHM 2.0/3-phasig
P <sub>ACnom</sub> (kW)	9,9	13,8	18
Part no.	232 008 12	232 008 13	232 008 14



BMZ ESS 7.0 Battery package SMA	15,8 kWh	21,0 kWh	26,3 kWh	31,5 kWh
No. of batteries	3	4	5	6
Usable energy (kWh)	15,8	21,0	26,3	31,5
Weight (kg)	285	380	475	570
Part no.	232 007 31	232 007 32	232 007 33	232 007 34



BMZ ESS 9.0 Battery package SMA	20,4 kWh	27,2 kWh	34,0 kWh	40,8 kWh
No. of batteries	3	4	5	6
Usable energy (kWh)	20,4	27,2	34,0	40,8
Weight (kg)	291	388	485	582
Part no.	232 007 37	232 007 38	232 007 39	232 007 40



BMZ ESS X Battery package SMA	24,0 kWh	32,0 kWh	40,0 kWh	48,0 kWh
No. of batteries	3	4	5	6
Usable energy (kWh)	24,0	32,0	40,0	48,0
Weight (kg)	291	388	485	582
Part no.	232 007 43	232 007 44	232 007 45	232 007 46







### SMA Multiclustert-Box 12.3-20

- Multiclustert box for up to 12 SMA Sunny Island SI 6.0/8.0H
- 3 identical Sunny Islands form a Clustert, up to 4 Clustert can be connected
- Each clustert includes its own 48V battery; the batteries have to be identical as well (type and capacity)
- Backup power operation is possible in combination with the NA-Box - as is the additional connection of a Diesel generator

### SMA NA-Box 12.3-20

- For the norm conforming connection of the Multiclustert Box to the public grid, acc. to 12.3-20 acc. to VDE ARN-4105



## High-Voltage Solar Power Storage Systems with FRONIUS Inverters

- Modular systems designed to optimize the fraction of self-used electricity
- Can be quickly and easily expanded by an emergency backup function
- Triple phase, AC coupling
- A system comprises an inverter package and a battery package
- The inverter package comprises a FRONIUS Symo hybrid inverter and a FRONIUS Smart Meter for triple phase energy metering and recording the household's load curve
- The battery package comprises a LG Chem high-voltage battery and a Fronius Checkbox 500V for monitoring the battery voltage and disconnection in the event of a fault or a BYD lithium-iron phosphate battery incl. 3 m data cable and 10 m battery connection cable



FRONIUS Inverter packages	Symo Hybrid 3.0-3-S	Symo Hybrid 4.0-3-S	Symo Hybrid 5.0-3-S
P <sub>ACnom</sub> (kW)	3,0	4,0	5,0
Part no.	221 986 56	221 986 57	221 986 58



LG CHEM Battery package FRONIUS	RESU 7H RS485	RESU 10H RS485
Type	Lithium-ion	
Usable energy (kWh)	6,6	9,3
Weight (kg)	76	97
Part no.	232 006 16	232 006 17



BYD Battery-Box	H6.4	H7.7	H9.0	H10.2	H11.5
Type	Lithium-iron-phosphate				
Usable energy (kWh)	6,40	7,68	8,96	10,24	11,52
Weight (kg)	148	174	200	226	252
Part no.	232 009 50	232 009 51	232 009 52	232 009 53	232 009 60





## High-Voltage Solar Power Storage Systems with KOSTAL Inverters

- Systems designed to optimize the fraction of self-used electricity
- Triple phase, AC coupling
- A system comprises an inverter package and a battery package
- The inverter package comprises an KOSTAL PLENTICORE plus hybrid-inverter with integrated battery charger and three independent MPP-Tracker. An input can be parameterised as a battery input with an activation code. Intelligent energy management and battery management system. Integrated communication- and monitoring package with yield and consumption forecast
- The battery package comprises a BYD lithium-iron phosphate battery, 3 m data cable and 10 m battery connection cable



KOSTAL Inverter packages	PLENTICORE plus 4.2	PLENTICORE plus 5.5	PLENTICORE plus 7.0	PLENTICORE plus 8.5	PLENTICORE plus 10
P <sub>ACnom</sub> (kW)	4,2	5,0	7,0	8,5	10
Part no.	221 801 21	221 801 22	221 801 23	221 801 24	221 801 25

KOSTAL

BYD Battery-Box	H5.1	H6.4	H7.7	H9.0	H10.2	H11.5
Type	Lithium-iron-phosphate					
Usable energy (kWh)	5,10	6,40	7,68	8,96	10,24	11,52
Weight (kg)	122	148	174	200	226	252
Part no.	232 009 61	232 009 50	232 009 51	232 009 52	232 009 53	232 009 60



## High-Voltage Solar Power Storage Systems with SOLAREEDGE Inverters

- Modular systems designed to optimize the fraction of self-used electricity, also for integration in existing solar power installations with single or triple phase inverters
- For new installations an inverter is additionally required for connection to the power grid
- Mono phase, AC coupling
- A system comprises an inverter package and a battery package
- The inverter package comprises an SOLAREEDGE StorEdge battery inverterr
- The battery package comprises a LG Chem high-voltage battery, a SOLAREEDGE StorEdge interface and a RS485 extension set



SOLAREEDGE Inverter packages	StorEdge SE3680H AC	StorEdge SE5000H AC
P <sub>ACnom</sub> (kW)	3,6	5,0
Part no.	221 979 87	221 981 28

LG Chem Battery package SOLAREEDGE	RESU 7H RS485	RESU 10H RS485
Type	Lithium-Ion	
Usable energy (kWh)	6,6	9,3
Weight (kg)	76	97
Part no.	232 006 18	232 006 19



solar**edge**

 **LG Chem**

Solar Power Storage System LG ESS

- All-in-one system designed to optimize the fraction of self-used electricity
- Triple phase, DC coupling
- A system comprises:
  - a transformerless LG hybrid inverter
  - one or two LG high-voltage lithium batteries
  - an ABB energy meter
  - MC4 connectors



LG ESS Solars power storage packages	Home 8 8,0 kW/6,6 kWh	Home 8 8,0 kW/9,3 kWh	Home 10 10,0 kW/6,6 kWh	Home 10 10,0 kW/9,3 kWh
P <sub>ACnom</sub> (kW)	8,0	8,0	10,0	10,0
Usable energy (kWh)	6,6	9,3	6,6	9,3
Weight (inverter/battery) (kg)	34/78	34/78	34/78	34/78
Part no.	229 300 75	229 300 76	229 300 77	229 300 78



► **INFO** Further system configurations on request



## Power. Heat. Future

We are solar pioneers with foresight and have been successfully working with the sun for 40 years.

As a one-stop systems supplier we stand for integrated sustainable solar power, solar heat, mounting systems and energy technology.



Wagner Solar has a constantly expanding international distribution network.