SAIL SOLAR

SAIL SOLAR ENERGY CO., LTD

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*If the product information is updated or corrected, no separate notice will be given. The latest product information can be obtained directly by contacting our company

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SAIL SOLAR

SAIL SOLAR ESS Brochures

Company Profiles

SAIL SOLAR is located in Anhui, china, with 16 years energy storage experience, focuses on mid-to-high-end energy storage markets all over the world. As a high-tech company in solar photovoltaic and energy storage , SAIL SOLAR o□ers eco-friendly, smart, sustainable solar photovoltaic and energy storage solutions

To meet diverse market and customer needs, SAIL SOLAR has expanded its range to solar panel, o□-grid and hybrid inverters, integrated storage systems etc.

SAIL SOALR is committed to providing customers with intelligent energy solutions, maximizing the use of green energy and makinopositive contributions to qlobal carbon neutrality.

200+
Workers

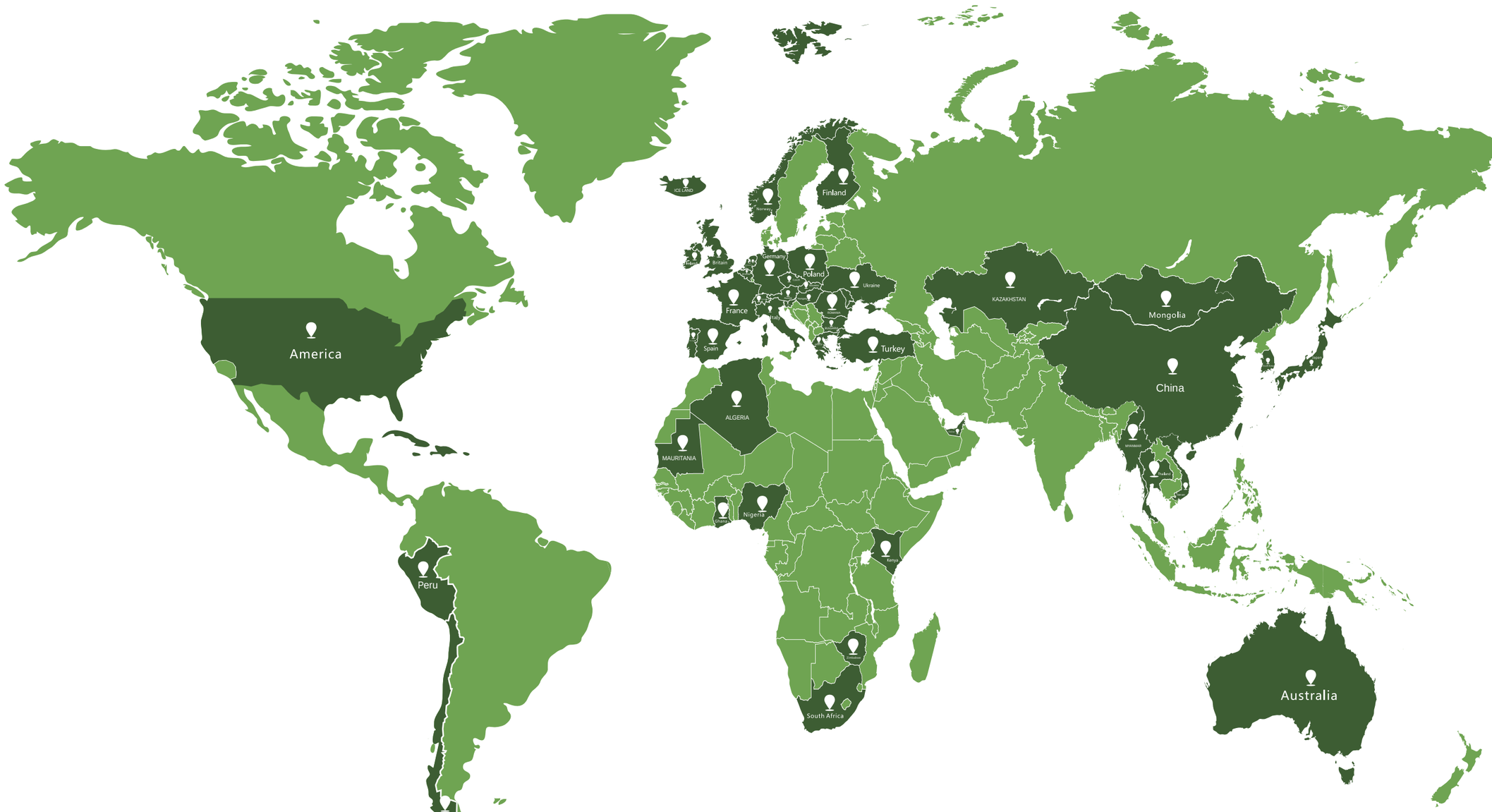
40000M²
Area

150+
Global Footprints

Top
Serve

150+
Supply chain

Global Layout



Main Shipping Areas

All-in-one Air-cooled ESS Cabinet

SAS-S10WX

Brief

The all-in-one air-cooled ESS cabinet integrates long-life battery, efficient balancing BMS, high-performance PCS, active safety system, smart distribution and HVAC into one cabinet, enabling long-term operation with safety, stability and reliability. Through AC side parallel connection, it achieves agile deployment of ESS power station with flexible capacity expansion.

Features

Fast response
1P fast charge/discharge rate.

Energy Saving
Achieve utilization of new energy via energy storing & releasing of renewables.

Economical & Efficient
RTE up to 87%, DOD up to 100%.

Flexible Expansion
Modular design, simplified parallel expansion, fast expansion.

Smart O&M
Diversified access of monitoring by HMI(local), APP/web (remote).

Safe & Reliable
IP55, fully tested and optimized thermal management, cell difference ≤ 6℃.

Specifications

DC Side	
Cell Type	LFP / 120 Ah
Pack Configuration	9.2 kWh / 1P24S
System Configuration	101 kWh / 1P264S
Rated DC Voltage	844.8 V
DC Voltage Range	739.2 ~ 950.4 V
Max. Charge/Discharge Rate	1 P
Max. Depth of Discharge	100%（25 ± 2 ℃）
AC Side	
Rated Output Power	100 kW
Rated AC Voltage	400V
AC Voltage Range	±15%
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	≤3%
DC Ratio	＜0.5% Ipn
General	
Max. Round Trip Efficiency	87%
Cycle Life	≥ 5,500 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25 ℃~55 ℃ (Derating after 45 ℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤ 75 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,250*1,200*2,150 mm
Weight	2,000 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11

All-in-one Air-cooled ESS Cabinet

SAS-S241WP-2A

Brief

The SAS-S241WP-2A integrates a long-life battery system, high-performance PCS, efficient balancing BMS, active safety systems, smart distribution, and HVAC into a single cabinet, ensuring long-term operation with superior safety, stability, and reliability. Through AC-side parallel connections, it enables agile deployment of ESS power with flexible capacity expansion.

Features

Economical and Efficient
RTE up to 87%,
DoD up to 100%.

Safe & Reliable
IP55 protection level, optimized ventilation design, cells temperature difference ≤6℃.

Commpact
1.8m² footprint only,
easy transportation & fast installation.

Flexible Expansion
Modular design, simplified parallel expansion, fast expansion.

Long Cycle Life
Over 8,000 times cycle life,
excellent performance of battery system.

Smart O & M
Diversified O & M access,
both on APP & Cloud.

Specifications

DC Side	
Cell Type	LFP / 314 Ah
Pack Configuration	241 kWh / 1P24S
System Configuration	241 kWh / 1P240S
Rated DC Voltage	768 V
DC Voltage Range	672 ~ 864 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 ℃)
AC Side	
Rated Output Power	125 kW
Rated AC Voltage	400 V
AC Voltage Range	±15%
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	≤3%
DC Ratio	＜0.5% Ipn
General	
Max. Round Trip Efficiency	87%
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Air cooling
Operating Temperature	-25℃~55 ℃ (Derating after 45 ℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤ 75 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,250*1,450*2,250 mm
Weight	2,670 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11

All-in-one Liquid-cooled ESS Cabinet

SAS-S261LP-2A

Brief

The SAS-S261LP-2A features advanced pack-level liquid cooling and temperature balancing, maintaining cell temperature differences within 3 ℃. This enhances cell temperature consistency and extends battery life. Its modular design enables flexible parallel configurations and higher energy density, significantly improving the cost-effectiveness, safety, and installation convenience of ESS projects.

Features

Compact
1.4m² footprint only, easy transportation & fast installation.

High Integration
261kWh energy in one cabinet with remarkable endurance.

Efficient Cooling
Optimal in-PACK duct design, achieve high - efficient cooling and low energy consumption.

Flexible Expansion
Modular design, simplified parallel expansion.

Long Cycle Life
Over 8,000 times cycle life, excellent performance of battery system.

Ultimate Safety
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

Specifications

DC Side	
Cell Type	LFP / 314 Ah
Pack Configuration	52.2 kWh / 1P52S
System Configuration	261 kWh / 1P260S
Rated DC Voltage	832 V
DC Voltage Range	728 ~ 936 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 ℃)
AC Side	
Rated Output Power	125 kW
Rated AC Voltage	400 V
AC Voltage Range	±15%
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
Power Factor	0.99/ -1 ~ +1
THDi	≤3%
DC Ratio	＜0.5% Ipn
General	
Max. Round Trip Efficiency	89%
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25℃~55 ℃ (Derating after 45 ℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Noise	≤ 75 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	1,050*1,350*2,400 mm
Weight	2,600 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4, UL9540A
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11, CEI0-21, CEI0-16

All-in-one Liquid-cooled ESS Cabinet

SAS-S418LP-A40/69/80

Brief

The S418LP series includes models with 400V, 690V, and 800V output options, suitable for different application scenarios and requirements. They feature advanced pack - level liquid cooling and temperature balancing, maintaining cell temperature differences within 3 ℃. This enhances cell temperature consistency and extends battery life. Its modular design enables flexible parallel configurations and higher energy density, significantly improving the cost - effectiveness, safety, and installation convenience of ESS projects.

Features

Compact
2㎡ footprint only, easy transportation & fast installation.

High Integration
418kWh energy in one cabinet with remarkable endurance.

Efficient Cooling
Optimized in-PACK duct design ensures high-efficiency cooling with reduced energy consumption.

Flexible Expansion
Modular design, simplified parallel expansion.

Long Cycle Life
Over 8,000 cycles, providing excellent long-term battery performance.

Ultimate Safety
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

Specifications

DC Side	SAS-S418LP-A40	SAS-S418LP-A69	SAS-S418LP-A80
Cell Type	LFP / 314 Ah		
Pack Configuration	52.248 kWh / 1P52S		
System Configuration	418 kWh / 1P416S		
Rated DC Voltage	1331.2 V		
DC Voltage Range	1164.8 ~ 1497.6 V		
Max. Charge/Discharge Rate	0.25 P	0.5 P	0.5 P
Max. Depth of Discharge	100% (25 ± 2 ℃)		
AC Side			
Rated Output Power	100 kW	210 kW	210 kW
Rated AC Voltage	400 V	690 V	800 V
AC Voltage Range	-15%~+10%		
Grid Type	3W+PE		
Rated Frequency	50 Hz / 60 Hz		
Power Factor	0.99/ -1 ~ +1		
THDi	≤3%		
DC Ratio	＜0.5% Ipn		
General			
Max. Round Trip Efficiency	89%		
Cycle Life	≥ 8,000 cycles		
Communication	Modbus TCP/IP		
Fire Suppression System	Aerosol		
Ingress Rating	IP55		
Cooling	Liquid cooling+Forced air cooling		
Operating Temperature	-25℃~55 ℃ (Derating after 45 ℃)		
Anticorrosion Rating	C4 (C5 optional)		
Humidity	0~95% RH (non-condensing)		
Noise	≤ 80 dB		
Altitude	3000m (Derating above 2000m)		
Dimensions (W*D*H)	1,500*1,350*2,400 mm		
Weight	3,800 kg		
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4		
Grid code	EN50549-1/-10, EN50549-2/-10, PN-EN-50549-1/-2		

Liquid-cooled
Battery Cabinet

SAS-S418LP-2N

Brief

The SAS-S418LP-2N is a free-standing battery cabinet featuring pack-level liquid cooling and cell-level temperature balancing. It maintains temperature differences within 3 °C between cells, enhancing temperature consistency and extending battery life. Its modular design offers flexible parallel configurations and can be paired with a centralized PCS to create a complete ESS solution that delivers higher energy density and significantly improves cost-effectiveness.

Features

Compact
1.7 ㎡ footprint only, easy transportation & fast installation.

High Integration
Multiple units connected in parallel achieve MV/HV connection with PCS-boost containers.

Efficient Cooling
Optimal in-PACK duct design, achieve high-efficient cooling and low energy consumption.

Flexible Expansion
Support seamless cabinets combination and flexible grid access.

Long Cycle Life
Over 8,000 times cycle life, excellent performance of battery system.

Ultimate Safety
In-PACK fire warning and protection with aerosol, prevent heat diffusion and runaway.

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Specifications

Item	Parameter
Cell Type	LFP / 314 Ah
Pack Configuration	52.248 kWh / 1P52S
System Configuration	418 kWh / 1P416S
Rated DC Voltage	1331.2 V
DC Voltage Range	1164.8 ~ 1497.6 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 ℃)
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol
Ingress Rating	IP55
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25℃~55 ℃ (Derating after 45 ℃)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Altitude	4500m
Dimensions (W*D*H)	1,350*1,350*2,400 mm
Weight	3,700 kg
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4

All-in-one Liquid-cooled
C&IAll-in-One
Hybrid Energy Storage System

It is suitable for various scenarios such as larae residential areas, supermarkets, farms, and small factories. it intearates functions including power, generation, conversion, storage, and utlization, With its hich-end hardware confauration and inteligent software, It supports various application modes such as self-consumption, time-of-use , and backup mode. It meets daily usage scenarios and can also connect with other devices such as diesel generators, helping owners achieve morestable,secure, and economical electricity needs.

Ultimate Safety
- AFCI as standard to prevent fire
- Support core health warning, CO, fire detection, cabinet-level fire protection
- AC and DC type II SPD

Highly Integrated
- Pre-installed in the factory, no need for on-site installation and debugging
- Accessing to DG(diesel generator), no need for additional equipment
- AC coupling available

Higher Revenue
- PV and Battery are dc coupled with high efficiency
- Wide environmental adaptability improves VPP revenue
- Intelligent scheduling, and multiple scheduling modes

DATASHEET

Model number	BESS-I50
Battery	
Battery Cell	LFP 3.2V100Ah
Battery Pack	51.2V 100Ah
Battery Cluster Rated Voltage	512V(10 Batteries in Series)
Battery Cluster Rated Energy	51.2kWh
Recommend Charging/Discharging Current	50A
Max Charge/Disharge Working Current	100A
Discharge Cut-o Voltage	440V
Charge Cut-o Voltage	568V
Cycle Life	≥6000 (25℃±2℃, 0.5C / 0.5C, 90%DOD)
Cabinet	
Size: W*D*H	1200*803*2375mm
Weight	850KG
Level	IP54
Operating Temperature Range	-20~50℃
Relative Humidity	0~95%
Altitude	<2000m
Cooling Method	Air cooling (refrigeration, ventilation, heating)
Noise	75dB
System E ciency	90%
Fire Protection System	Integrated
Communication	RS232/RS485/CAN
Inverter	
Energy Storage Inverter, Deye or Solis 20-50KW, AC: Three Phase 380V	

*The data in this table is for reference only, and is subject to actual delivery
*Inverter power is selectable; please contact our sales team for details.

All-in-one Liquid-cooled

C&IAll-in-One
Hybrid Energy Storage System

It is suitable for various scenarios such as larae residential areas, supermarkets, farms, and small factories. it inteagrates functions including power, generation, conversion, storage, and utlization, With its hich-end hardware confauration and inteligent software, It supports various application modes such as self-consumption, time-of-use , and backup mode. It meets daily usage scenarios and can also connect with other devices such as diesel generators, helping owners achieve morestable,secure, and economical electricity needs.

Ultimate Safety

- AFCI as standard to prevent fire
- Support core health warning, CO, fire detection, cabinet-level fire protection
- AC and DC type II SPD

Highly Integrated

- Pre-installed in the factory, no need for on-site installation and debugging
- Accessing to DG(diesel generator), no need for additional equipment
- AC coupling available

Higher Revenue

- PV and Battery are dc coupled with high efficiency
- Wide environmental adaptability improves VPP revenue
- Intelligent scheduling, and multiple scheduling modes

DATASHEET

Model number	BESS-I100	
Battery		
Battery Cell	LFP 3.2V 314/280Ah	LFP 3.2V200Ah
Battery Pack	51.2V 314/280Ah	51.2V 200Ah
Battery Cluster Rated Voltage	358.4V(7 Batteries in Series)	512V(10 Batteries in Series)
Battery Cluster Rated Energy	112.53kWh/100.35kWh	102.4kWh
Recommend Charging/Discharging Current	100A	100A
Max Charge/Disharge Working Current	200A	200A
Discharge Cut-o Voltage	308V	440V
Charge Cut-o Voltage	397.6V	568V
Cycle Life	8000 Cycles, 80% DOD, 0.5C	8000 Cycles, 80% DOD, 0.5C
Cabinet		
Size: W*D*H	1200*803*2375mm	
Weight	1300KG	
Level	IP54	
Operating Temperature Range	-20~50 C	
Relative Humidity	0~95%	
Altitude	<2000m	
Cooling Method	Air cooling (refrigeration, ventilation, heating)	
Noise	75dB	
System E ciency	90%	
Fire Protection System	Integrated	
Communication	RS232/RS485/CAN	
Inverter		
Energy Storage Inverter, Deye or Solis 50-100KW, AC: Three Phase 380V		

*The data in this table is for reference only, and is subject to actual delivery
*Inverter power is selectable; please contact our sales team for details.

All-in-one Liquid-cooled
C&IAll-in-One
Hybrid Energy Storage System

It is suitable for various scenarios such as larae residential areas, supermarkets, farms, and small factories. it intearates functions including power, generation, conversion, storage, and utlization, With its hich-end hardware confauration and inteligent software, It supports various application modes such as self-consumption, time-of-use , and backup mode. It meets daily usage scenarios and can also connect with other devices such as diesel generators, helping owners achieve morestable,secure, and economical electricity needs.

Ultimate Safety
- AFCI as standard to prevent fire
- Support core health warning, CO, fire detection, cabinet-level fire protection
- AC and DC type II SPD

Highly Integrated
- Pre-installed in the factory, no need for on-site installation and debugging
- Accessing to DG(diesel generator), no need for additional equipment
- AC coupling available

Higher Revenue
- PV and Battery are dc coupled with high efficiency
- Wide environmental adaptability improves VPP revenue
- Intelligent scheduling, and multiple scheduling modes

DATASHEET

Model number	BESS-I241
Battery	
Battery Cell	LFP 3.2V 314/280Ah
Battery Pack	51.2V 314/280Ah
Battery Cluster Rated Voltage	768V(15 Batteries in Series)
Battery Cluster Rated Energy	241.15kWh/215.04kWh
Recommend Charging/Discharging Current	100A
Max Charge/Disharge Working Current	200A
Discharge Cut-o Voltage	660V
Charge Cut-o Voltage	852V
Cycle Life	8000 Cycles, 80% DOD, 0.5C
Cabinet	
Size: W*D*H	1300*1260*2375mm
Weight	2500KG
Level	IP54
Operating Temperature Range	-20~50 C
Relative Humidity	0~95%
Altitude	<2000m
Cooling Method	Air cooling (refrigeration, ventilation, heating)
Noise	75dB
System E ciency	90%
Fire Protection System	Integrated
Communication	RS232/RS485/CAN
Inverter	
Energy Storage Inverter Solis 100~125KW, AC: Three Phase 380V	

*The data in this table is for reference only, and is subject to actual delivery
*Inverter power is selectable; please contact our sales team for details.

Liquid-cooled Hybrid Cabinet

SAS-S261LP-2H

Brief

The SAS-S261LP-2H is an integrated liquid-cooled PV-plus energy storage cabinet that combines lithium battery modules, a fire suppression system (FSS), and an embedded EMS into a single compact unit. Its integrated design simplifies system architecture and installation, while the modular structure allows flexible capaci - ty expansion as project requirements grow. When used with a hybrid inverter and intelligent energy management, the cabinet supports multiple operating modes, enabling efficient coordination between PV generation, energy storage, and load demand.

Features

Higher Space Utilization

1.4m ² footprint, larger capacity per cabinet, saving space and site cost.

Safe & Reliable

IP55, optimized ventilation design, temperature difference within 3°C.

Expandable & Modular

Easy modular design supports parallel connection for convenient system expansion.

High PV Utilization Capability

Supports up to 250 kW PV input with wide MPPT voltage range for flexible PV system design.

Versatile

Support multiple brands of hybrid inverter, with higher selectivity.

Simplified System

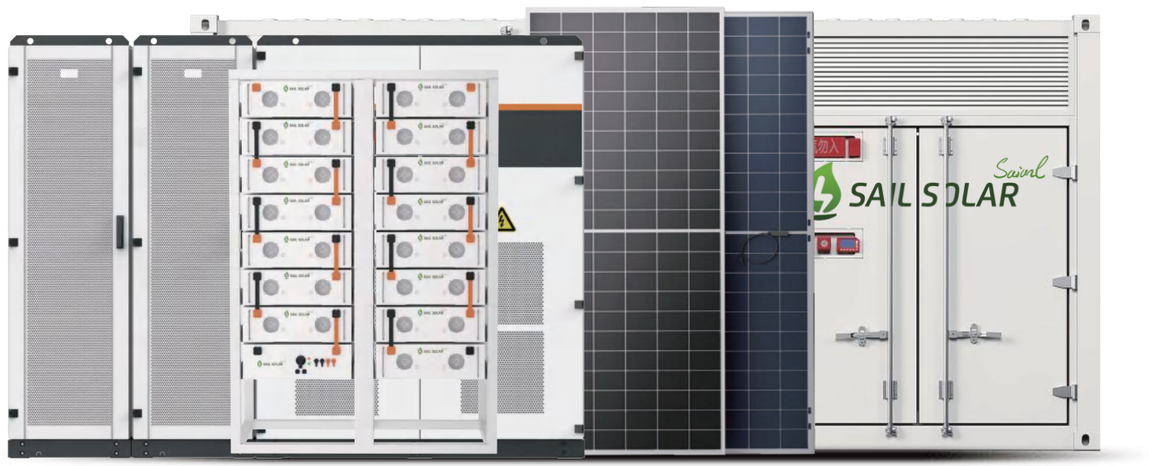
Sufficient power for most C&I applications, reducing parallel inverters.

Specifications

Battery Cabinet					
Cell Type	LFP / 314 Ah				
Pack Configuration	52.25 kWh / 1P52S				
System Configuration	261 kWh / 1P260S				
Rated DC Voltage	832V				
DC Voltage Range	728 ~ 936 V				
Max. Charge/Discharge Rate	0.5 P				
Max. Depth of Discharge	100% (25 ± 2 ℃)				
Cycle Life	≥ 8,000 cycles				
PV Input					
Max. input power	150kW	160kW	200kW	200kW	250kW
PV Voltage Range	150 ~ 950 V				
MPPT	10				
MAX. Input Current	42A*10				
AC Side					
Rated Output Power	75kW	80kW	99.9kW	100kW	125kW
Rated AC Voltage	400 V				
AC Voltage Range	±15%				
Grid Type	3W+N+PE				
Rated Frequency	50 Hz / 60 Hz				
Power Factor	0.99/ -0.8 ~ +0.8				
THDi	≤3%				
DC Ratio	＜0.5% Ipn				
General					
Max. Round Trip Efficiency	90%				
Communication	Modbus TCP/IP				
Fire Suppression System	Aerosol				
Ingress Rating	IP55				
Cooling	Liquid cooling+Forced air cooling				
Operating Temperature	-25℃~55 ℃ (Derating after 45 ℃)				
Anticorrosion Rating	C4 (C5 optional)				
Humidity	0~95% RH (non-condensing)				
Altitude	3000m (Derating above 2000m)				
Dimensions (W*D*H)	1,050*1,350*2,400 mm				
Weight	2,600 kg				
Safety/EMC	UN38.3, IEC62619, IEC63056, IEC62477-1, IEC61000-6-2/4				
Grid code	EN50549-1/-10, EN50549-2/-10, G99, VDE4105, NRS097, C10/11				

All-in-one Liquid-cooled
BESS C Series

BESS-500KW-1205KWh



Industrial Energy Storage System

Standard Proposal

	Equipment	Remark
BESS-C1200	PV	531kWp
	Inverter	500KW
	Batttery	1205KWh

HIGHLIGHTS:

SAIL SOLAR provides the integrated system solution with one stop service

With multiple operating modes to meet customer needs

Optimal configuration, high cost performance ratio

PRODUCT TOPOLOGY

Module ID	Equipment	Model	Unit	Quantity	Remark
BESS-C1200	PV modules	SAS590N-144M10	pcs	900	15 pcs/string, 60 string
	Inverter	BMPS500	pcs	1	3P/400V
	Batttery	SAS51314	pcs	75	51.2V 314Ah
		Control Box	pcs	5	BCU included
		Battery Cluster	pcs	5	15 batteries/Cluster
		BAU Control Box	pcs	1	BAU included
		5input 4output battery combiner cabinet	pcs	1	

*The PV modules and batteries can be adjusted according to actual conditions
*The above table shows the core components. Accessories are subject to the actual project installation.

MODEL	BESS-C1200
System Parameter	
AC rated power	500kW
Battery capacity	1205kWh
AC voltage	3P/400V
Rated grid frequency	50/60Hz
Inverter Parameter	
Model	BMPS500
Rated power	500kVA /500kW
Frequency	50/60 Hz
Nominal Voltage	230/400VAC
Overload capability	110%-10min120%-1min
Max. PV Voltage (V)	1000VDC
PV Array MPPT Voltage Range	250~1000VDC
Max PV power	660/742.5/825KW
Cooling	Forced-air
Battery Parameter	
Model	SAS51314*75
Battery Type	LiFePO4(LFP)
Nominal Voltage (V)	51.2
Nominal Capacity (WH)	16.07
Voltage Range (V)	43.2 ~57.6
Max. Charge/Discharge Current(A)	200
Communicaiton	RS485/CAN
Weight (Kgs)	9750
Design Life	10 years+
Cycle Life	>6000 @25°C
Environment	
Maximum operation altitude	4000m
Working Temperature	Charge : 0 ~ 55℃ / Discharge : -20℃ ~ 55℃

*This parameter is shown as part of the standard plan and can be customized; Subject to actual delivery
*Inverter data is Megarevo, Solis is optional

All-in-one Liquid-cooled
BESS C Series

BESS-500KW-1205KWh

Industrial Energy Storage System
Standard Proposal

	Equipment	Remark
BESS-C1000	PCS	500KW
	Batttery	1205KWh

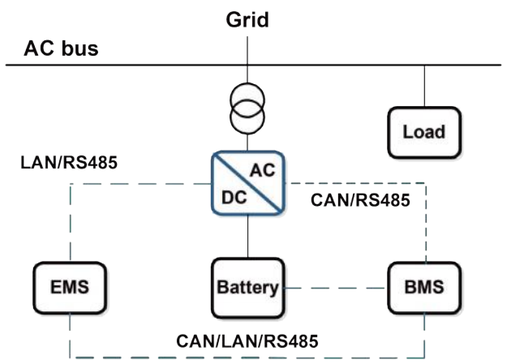
HIGHLIGHTS:

SAIL SOLAR provides the integrated system solution with one stop service

With multiple operating modes to meet customer needs

Optimal configuration, high cost performance ratio

PRODUCT TOPOLOGY



Module ID	Equipment	Model	Quantity
BESS-C1200	Lithium battery	SAS51314	75
	Battery management system	BMU, BAU, BCU High voltage box	1
	Control cabinet	1kva ups, 1500V1250A 24v power supply	1
	PCS	500KW	1
	EMS(energy storage system)	For 1205 KWh energy storage system	1
	Container	20'GP	1

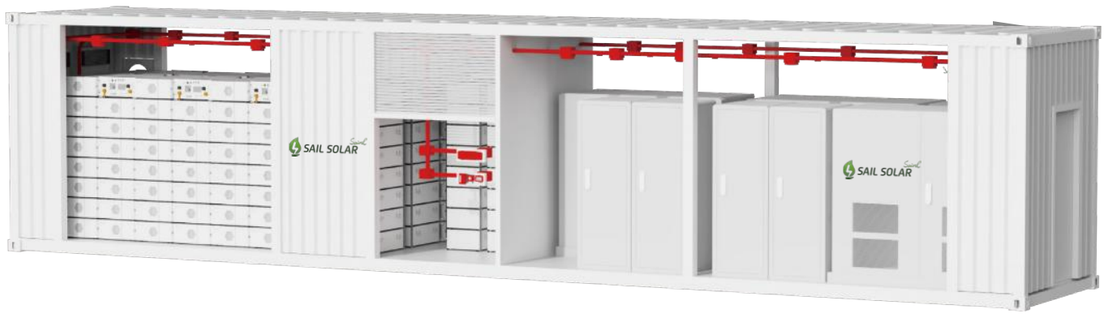
*The battery quantity can be adjusted according to actual conditions
*The above table shows the core components. Accessories are subject to the actual project installation.

MODEL	BESS-C1200
System Parameter	
AC rated power	500kW
Battery capacity	1205kWh
AC voltage	3P/400V
Rated grid frequency	50/60Hz
PCS Parameter	
Model	MEGA0500
DC(battery)	
Voltage range (V)	600-900
Max. current (A)	929
AC(on-grid)	
Max. output power (kW)	550
Rated output power (kW)	500
Rated voltage (V)	400
Voltage range (V)	320~460
Rated current (A)	722
Max. output current (A)	800
Rated frequency (Hz)	50/60
Battery Parameter	
Model	SAS51314*75
Battery Type	LiFePO4(LFP)
Nominal Voltage (V)	51.2
Nominal Capacity (kWH)	16.07
Voltage Range (V)	43.2 ~57.6
Max. Charge/Discharge Current(A)	200
Communicaiton	RS485/CAN
Weight (Kgs)	9750
Design Life	10 years+
Cycle Life	>6000 @25°C
Environment	
Maximum operation altitude	4000m
Working Temperature	Charge : 0 ~ 55℃ / Discharge : -20℃ ~ 55℃

*This parameter is shown as part of the standard on grid plan, can be customized; Subject to actual delivery
*PCS data is Megarevo, Other brand is optional

All-in-one Liquid-cooled
BESS C Series

BESS-1000KW-2250KWh

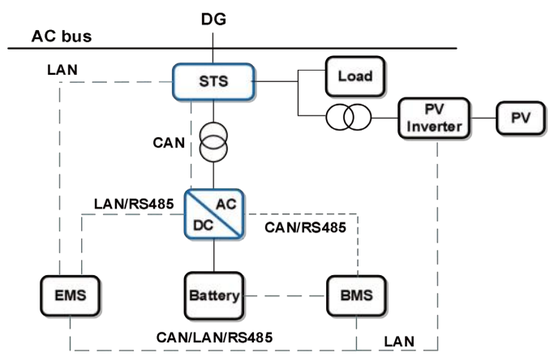


Industrial Energy Storage System

Standard Proposal

	Equipment	Remark
BESS-C2000	PCS	1000KW
	Batttery	2250KWh

PRODUCT TOPOLOGY



HIGHLIGHTS:

SAIL SOLAR provides the integrated system solution with one stop service

With multiple operating modes to meet customer needs

Optimal configuration, high cost performance ratio

Module ID	Equipment	Model	Quantity
BESS-C2000	Lithium battery	SAS51314	140
	Battery management system	BMU, BAU, BCU High voltage box	1
	Control cabinet	1kva ups, 500w 24v power supply	1
	PCS	500KW	2
	EMS(energy storage system)	For 2250 KWh energy storage system	1
	Container	40'HQ	1
	STS	Grid-tied/o□-grid switch time<200ms	1

*The battery quantity can be adjusted according to actual conditions
*The PV side can be customized
*The above table shows the core components. Accessories are subject to the actual project installation.

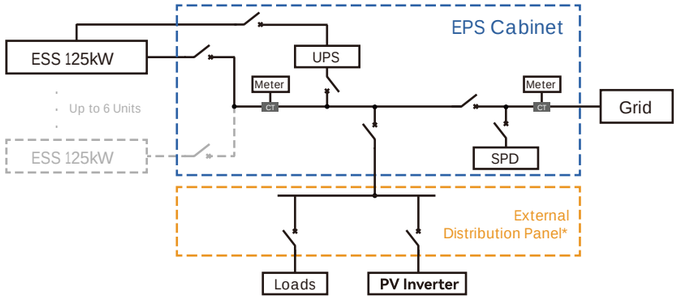
MODEL	BESS-C2000
System Parameter	
AC rated power	1000kW
Battery capacity	2250kWh
AC voltage	3P/400V
Rated grid frequency	50/60Hz
PCS Parameter	
Model	MEGA0500T
DC(battery)	
Voltage range (V)	500-850
Max. current (A)	1128
AC(on-grid)	
Max. output power (kW)	550
Rated output power (kW)	500
Rated voltage (V)	400
Voltage range (V)	320~460
Rated current (A)	722
Max. output current (A)	794
Rated frequency (Hz)	50/60
Battery Parameter	
Model	SAS51314*140
Battery Type	LiFePO4(LFP)
Nominal Voltage (V)	51.2
Nominal Capacity (kWH)	16.07
Voltage Range (V)	43.2 ~57.6
Max. Charge/Discharge Current(A)	200
Communicaiton	RS485/CAN
Weight (Kgs)	18200
Design Life	10 years+
Cycle Life	>6000 @25°C
Environment	
Maximum operation altitude	4000m
Working Temperature	Charge : 0 ~ 55℃ / Discharge : -20℃ ~ 55℃

*This parameter is shown as part of the standard plan, can be customized; Subject to actual delivery
*PCS data is Megarevo, Other brand is optional

EPS Cabinet

SAS-STS-S125-1/3/6IN

Recommended Compatible Products:
SAS-S101WX SAS-S241WP-2A SAS-S261LP-2A



*Note: Distribution panel is not included in EPS cabinet.

Brief

SAILSOLAR EPS (Emergency Power Supply cabinet SAS-EPS-S125-1/3/6IN series is designed to enable on/o□-grid switching for single unit or multiple parallel-connected units in emergency situations, with the switching time within 20 seconds, ensuring the operation of critical loads under off-grid conditions. The EPS cabinet supports both remote and on-site manual switching between on/off-grid modes, meeting the switching requirements of various application scenarios. In addition, the EPS cabinet allows the integration of grid-tied inverters and ensures their normal operation under off-grid conditions, thereby optimizing the system logic and overall efficiency of PV-plus-BESS projects. This enables the ESS to be applied in a wider range of complex application

Features

IP54 Outdoor Design
High protection rating for harsh environments

Space Saving
Integrated structure with minimal size.

Fast Deployment
Modular design for efficient wiring and installation.

On/off-grid Switching
Built-in UPS provides backup power for on-grid and off-grid switching.

Specifications

ESS Side Parameters	SAS-STS-S125-1IN	SAS-STS-S125-3IN	SAS-STS-S125-6IN
Max. No. of ESS Connection	1	3	6
Max. ESS Current	250A	3*250A	6*250A
Max. ESS Power	125kW	3*125kW	6*125kW
Grid Side Parameters			
No. of Grid Connection Port		1	
Max. Grid Current	315A	800A	1600A
Rated Voltage		400V	
Voltage Range		400V±15%	
Grid Type		3W+N+PE	
Rated Frequency		50/60Hz	
On/off-grid Switching Time		≤20s	
PV & Loads Requirements			
Max. PV&Loads Port Current	250A	630A	1250A
Recommended Max. PV Power	170kW	430kW	860kW
Recommended Max. Load Power*		70% × ESS Power	
Auxiliary Equipments Parameters			
UPS		Standard	
Surge Protection		AC Type Ⅱ	
Meter Accuracy		0.5S	
General			
Dimension(W×D×H)	600×800×1500 mm	800×1000×2400 mm	1000×1000×2400 mm
Altitude		≤3000m	
Ambient Temperature		-10℃~40℃	
Humidity		0~95%RH (non-condensing)	
Cooling Method		Air cooling	
IP Rating		IP54	
Communication		RS485, Modbus TCP/IP	

*Note: The value indicated herein is a recommended r erence based on PF=0.7. When the load involves motors or other types of impact loads, it is recommended to equip the system with a soft starter. Please contact SAILSOLAR for further technical support prior to order placement.

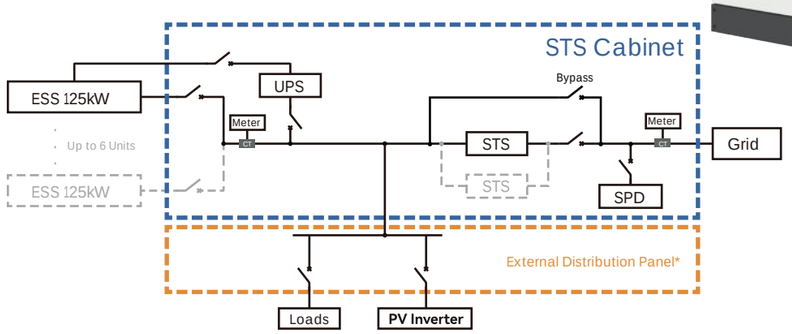
STS Cabinet

SAS-STS-S125-2/4/6IN

Recommended Compatible Products:
SAS-S101WX SAS-S241WP-2A SAS-S261LP-2A

Brief

SAS-STS-S125-2/4/6IN is a seamless on/off-grid switching cabinet designed for the 125kW rated power SAIL SOLAR all-in-one ESS cabinet within 20ms switching time. It enables on/off-grid switching for single or multiple parallel-connected application. Equipped with reserved ports for PV inverter power and critical loads connection, allowing for the normal operation of PV system and loads in grid outage condition.



*Note: Distribution panel is not included in STS cabinet.

Features

Intelligent collaboration
Seamless on/off-grid switching within 20ms.

Reliable
Leading brands selection of all equipments, safe and reliable.

Highly Integration
Integrate STS, UPS, meter, breakers, ATS(optional) and other accessories in one system, compact and easy transportation.

Electrical Safety
Backup design and assurance of critical loads without interuption.

Specifications

ESS Side Parameters	SAS-STS-S125-2IN	SAS-STS-S125-4IN	SAS-STS-S125-6IN
Max. No. of ESS Connection	2 units	4 units	6 units
Max. ESS Current	2*250A	4*250A	6*250A
Rated ESS Power	2*125kW	4*125kW	6*125kW
Grid Side Parameters			
No. of Grid Connection Port		1	
Max. Grid Current	500A	800A	1600A
Grid Voltage Range		400V±15%	
Grid Type		3W+N+PE	
Rated Frequency		50/60Hz	
On/off-grid Switching Time		20ms	
PV Input Requirements			
Max. PV&Loads Port Current	250A	630A	800A
Recommended Max. PV Power	170kW	430kW	550kW
Recommended Max. Load Power*		70% × ESS Power	
Auxiliary Equipments Parameters			
UPS		Standard	
Maintenance Socket		Standard, 16A	
Surge Protection		AC Type Ⅱ	
Meter Accuracy		0.5S	
ATS		Optional	
General Parameters			
Dimension(W×D×H)	800×1200×1800 mm	1000×1200×1800 mm	1200×1200×2200 mm
Altitude		3000m	
Ambient Temperature		-15℃~45℃	
Humidity		0~95%RH (non-condensing)	
Cooling Method		Air cooling	
IP Rating		IP54	
Communication		RS485, Modbus TCP/IP	

*Note: The value indicated herein is a recommended reference based on PF=0.7. When the load involves motors or other types of impact loads, it is recommended to equip the system with a soft starter. Please contact SAILSOLAR for further technical support prior to order placement.