

SUNESS POWER

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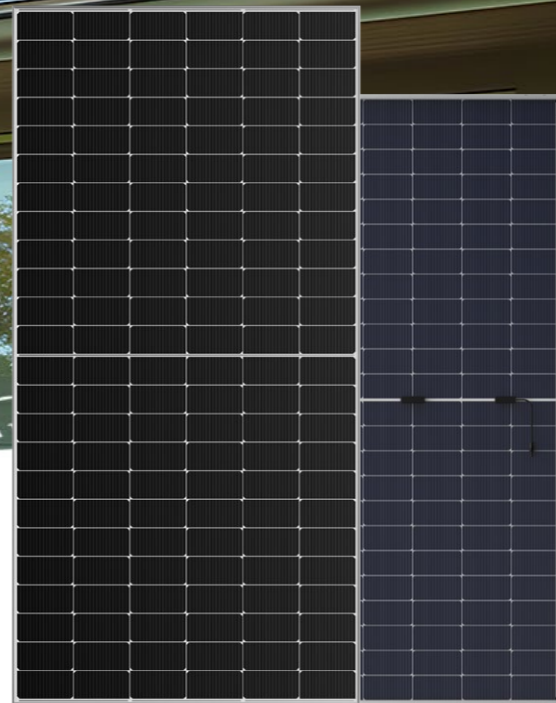
Suness Photovoltaic Storage Catalogue





580~600W

182mm16BB 144Cells Double Glass Bifacial
N Type Mono Half Cell PV Module

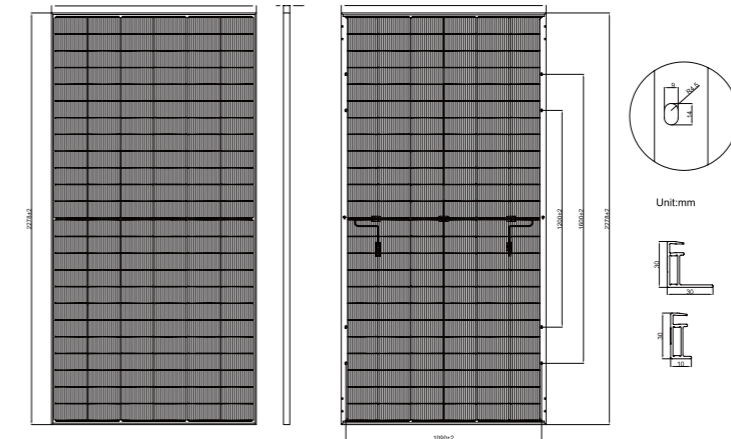


Suness N Type Linear Warranty

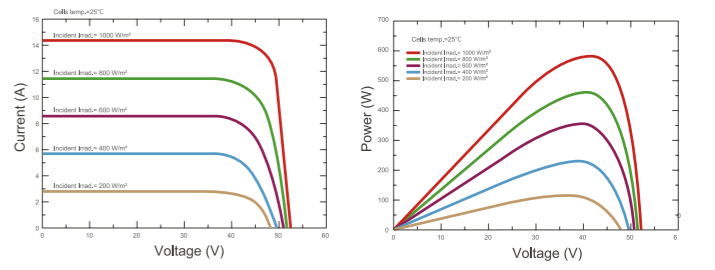


Features

- SMBB Technology Half Cut N Type Cell
- Fire Class A
- High Energy Performance
- Strengthened Mechanical Load
- 100% Inspection 30years Guarantee
- Efficiency Advanced Bifacial



Current-Voltage & Power-Voltage Curves (SE590M-72H)



All Dimensions in mm
The above drawing is a graphical representation of the product,

Electrical Characteristics(STC/NOCT)

Module Type	SE580M-72H		SE585M-72H		SE590M-72H	
	STC	NOCT	STC	NOCT	STC	NOCT
Test Conditions	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power-Pmax(W)	580	436	585	440	590	444
Open Circuit Voltage - Voc(V)	51.47	48.89	51.67	49.08	51.87	49.27
Short- Circuit Current - Isc(A)	14.37	11.21	14.43	11.26	14.49	11.31
Voltage at Pmax -Vmp(V)	42.60	39.86	42.76	39.97	42.92	40.08
Current at Pmax - Imp(A)	13.62	10.94	13.69	11.01	13.75	11.08
Module Efficiency -nm(%)	22.45	/	22.64	/	22.84	/
Power Tolerance(W)	(0, +4.99W)					
Maximum System Voltage(V)	1500Vdc (IEC/UL61730)					
Maximum Series Fuse Rating(A)	25A					

*STC :Irradiance 1000W/m²,Cell Temperature 25°C, Air Mass 1.5
*NOCT : Irradiance 800W/m²,Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s
*Measurement tolerance: ±3% *Power binning up to: +3%

Mechanical Specifications

External Dimensions	2278x1134x30mm
Weight	31kg
Solar Cells	N-Type 16BB 18 mm(2x72pcs)
Front Glass	AR Coated 2+2mm tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68
Output Cables	4.0mm²,300mm(+),300mm(-), length can be customized
Connector	MC4 Compatible
Mechanical Load	Front Side Max. 5400Pa, Rear Side Max.2400Pa

Bifacial Output Rear Side Power Gain

*Take SE585M-72H as an example.

Power Gain	5%	15%	25%
Maximum Power- Pmax(W)	614	673	731
Open Circuit Voltage - Voc(V)	51.67	51.67	51.67
Short- Circuit Current - Isc(A)	14.81	16.23	17.63
Voltage at Pmax -Vmp(V)	42.76	42.76	42.76
Current at Pmax -Imp(A)	14.36	15.74	17.10

Temperature characteristics

Pmax Temperature Coefficient	-0.290%/°C
Voc Temperature Coefficient	-0.250%/°C
Isc Temperature Coefficient	+0.045%/°C
Operating Temperature Range	-40~+85°C
Nominal Operating Cell Temperature(NOCT)	45±2°C

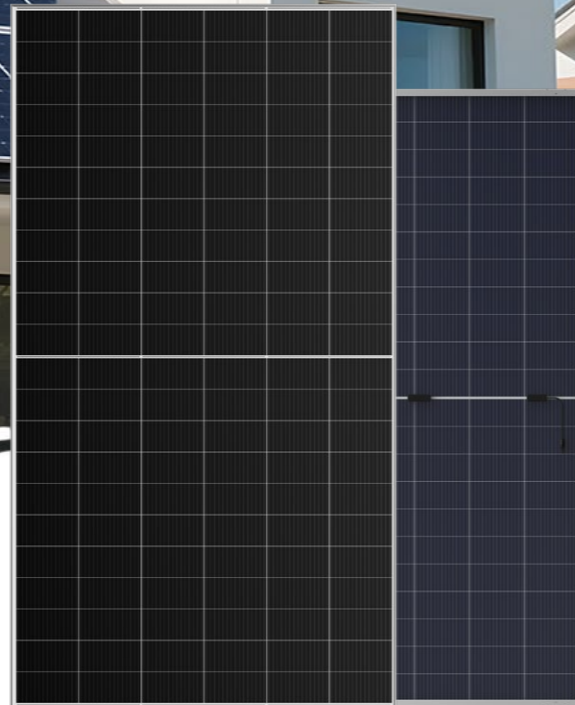
Packing configuration

Pallet Dimensions	2300x1140x1275mm		
Ways of Transport	40'HQ	13m Flatbed Truck	17.5m Flatbed Truck
Pieces per Pallet	37 Pcs	37 Pcs	37Pcs
Pallets per Container	20 Pallets	22 Pallets	24 Pallets
Pieces per Container	740 Pcs	814Pcs	888Pcs



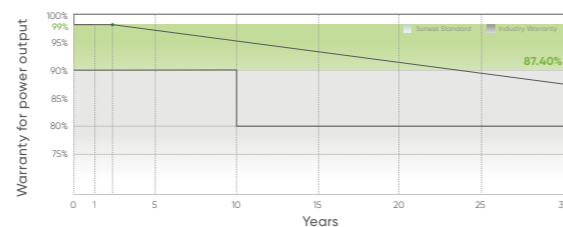
610~630W

210x182mm16BB 132Cells Double Glass Bifacial N Type Mono Half Cell PV Module Series



Suness N Type Linear Warranty

25 Years Materials Warranty 30 Years Power Warranty

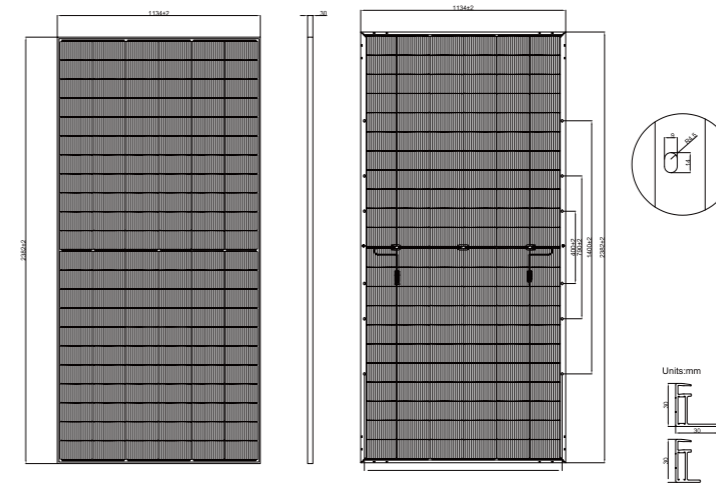


N TYPE



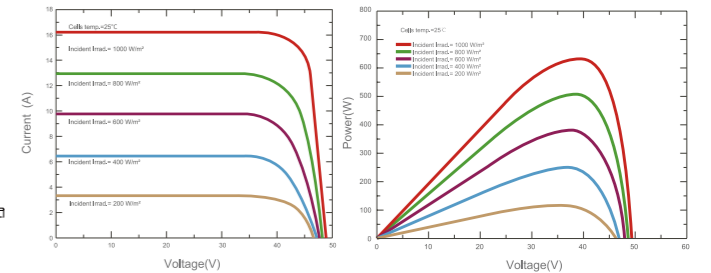
Features

- SMBB Technology Half Cut N Type Cell**
- Strengthened Mechanical Load** (5400Pa)
- Fire Class A**
- 100% Inspection 30years Guarantee** (MES)
- High Energy Performance**
- Anti PID**



All Dimensions in mm
The above drawing is a graphical representation of the product,

Current-Voltage & Power-Voltage Curves (SE630M-66H)



Electrical Characteristics(STC/NOCT)

Module Type	SE610M-66H		SE615M-66H		SE620M-66H		SE625M-66H		SE630M-66H	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Test Conditions	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Maximum Power-Pmax(W)	610	460.7	615	464.4	620	468.2	625	471.9	630	475.7
Open Circuit Voltage - Voc(V)	48.70	46.24	48.90	46.43	49.10	46.62	49.30	46.81	49.50	47.00
Short- Circuit Current - Isc(A)	15.95	12.88	16.01	12.93	16.07	12.98	16.13	13.03	16.19	13.08
Voltage at Pmax -Vmp(V)	40.48	37.92	40.62	38.10	40.76	38.25	40.91	38.42	41.04	38.59
Current at Pmax - Imp(A)	15.07	12.15	15.14	12.19	15.21	12.24	15.28	12.28	15.35	12.33
Module Efficiency -nm(%)	22.60	/	22.80	/	23.00	/	23.10	/	23.30	/
Power Tolerance(W)	(0, +5W)									
Maximum System Voltage(V)	1500Vdc (IEC/UL61730)									
Maximum Series Fuse Rating(A)	30A									

*STC :Irradiance 1000W/m²,Cell Temperature 25°C, Air Mass 1.5
 *NOCT : Irradiance 800W/m²,Ambient Temperature 20°C, Air Mass1.5, Wind Speed 1m/s
 *Measurement tolerance: ±3% *Power binning up to: +3%

Mechanical Specifications

External Dimensions	2382x1134x30mm
Weight	32.4kg
Solar Cells	N-Type 16BB 18x105mm(2x66pcs)
Front Glass	AR Coated 2+2mm tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP68
Output Cables	4.0mm ² ,300mm(+),300mm(-), length can be customized
Connector	MC4 Compatible
Mechanical Load	Front Side Max. 5400Pa, Rear Side Max.2400Pa

Temperature characteristics

Pmax Temperature Coefficient	-0.290%/°C
Voc Temperature Coefficient	-0.250%/°C
Isc Temperature Coefficient	+0.045%/°C
Operating Temperature Range	-40~+85°C
Nominal Operating Cell Temperature(NOCT)	45±2°C

Bifacial Output Rear Side Power Gain

*Take SE630M-66H as an example.

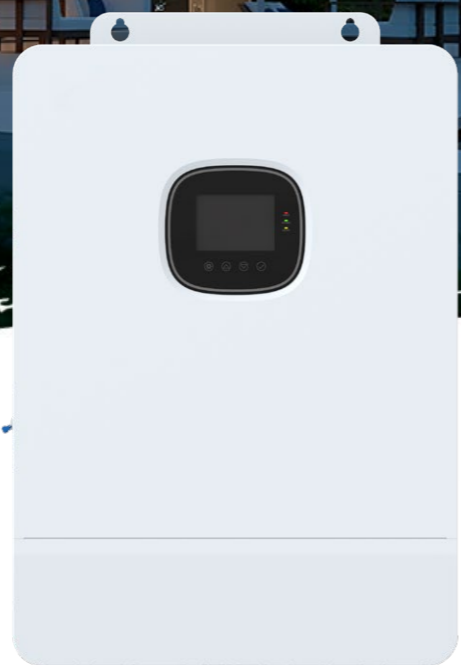
Power Gain	5%	15%	25%
Maximum Power- Pmax(W)	661.5	693.0	756.0
Open Circuit Voltage - Voc(V)	49.50	49.50	49.50
Short- Circuit Current - Isc(A)	16.81	17.60	19.20
Voltage at Pmax -Vmp(V)	41.04	41.04	41.04
Current at Pmax -Imp(A)	16.12	16.89	18.42

Packing configuration

Pallet Dimensions	2390x1140x1275mm		
Ways of Transport	40'HQ	13m Flatbed Truck	17.5m Flatbed Truck
Pieces per Pallet	37 Pcs	37 Pcs	37Pcs
Pallets per Container	20 Pallets	22 Pallets	24 Pallets
Pieces per Container	740 Pcs	814Pcs	888Pcs



5-10KW SPI SERIES



Features



Efficiency
Advanced MPPT technology with up to 99.9% efficiency



All in one
Up to 140/200A charging current



User-Friendly
Industrial design with a modern aesthetic look



Safety
Comprehensive security from hardware to software



Reliable
Outputs high-quality pure sine wave AC power



Intelligent
Exclusive Li-ion battery BMS dual activation

Product Specifications

Model	SE-5K-UP	SE-6.5K-UP	SE-8K-UP	SE-10K-UP
Rated Output Power	5000W	6500W	8000W	10000W
Max. Peak Power	10000VA	13000VA	16000VA	20000VA
Rated Output Voltage	120/240Vac(single-phase/split-phase)			
Rated AC Frequency	50/60Hz			
Waveform	Pure sine wave			
Switch Time	10ms (typical value)			
Parallel Capacity	1~6units			
Battery Type	Li-ion / Lead-acid / User-defined			
Rated Battery Voltage	48Vdc			
Battery Voltage Range	40~60Vdc			
Max. Mains/generator Charging Current	60A	80A	100A	120A
Max. Hybrid Charging Current	120A	140A	180A	200A
Num. Of MPPT Trackers	2		2	
Max. PV Array Power	3800W+3800W 5000W+5000W		5,500W+5,500W	
Max. Input Current	18+18A		22A+22A	
Max. Voltage Of Open Circuit	550Vdc+550Vdc		500Vdc+500Vdc	
Mppt Voltage Range	150~450Vdc		125~425Vdc	
Input Voltage Range	65~140Vac		90~140Vac	
Frequency Range	50Hz/60Hz		50Hz/60Hz	
Bypass Overload Current	40A		63A	
Dimensions	584.6*410*133mm		620*445*130mm	
Weight	18.9Kg		27Kg	
Protection Degree	IP20, indoor use only		IP20, indoor only	
Operating Temperature Range	-10~55°C, >45°C derated		-10~55°C, >45°C derated	
Noise	<60dB		<60dB	
Cooling Method	Internal Fan		Internal Fan	
Warranty	18 months		18 months	
Embedded Interfaces	RS485 / CAN / USB / Dry Contact		RS485 / CAN / USB / Dry Contact	
External Modules (Optional)	Wi-Fi/ GPRS		Wi-Fi/ GPRS	



4.8-10KW E1 SERIES



Product Specifications

Model	SE-E1-5kWh	SE-E1-10kWh
Voltage	48/51.2V	
Capacity	100Ah	200Ah
Battery Cell	3.2V 100Ah Pirsmatic Battery Cell	
Configuration	15S/16S 1P	15S/16S 2P
Parallel Capacity	Yes,15units maximum	
Max.Charge Current	100A	
Max.Discharge Current	100A	
Charge Cut-off Protect Voltage	54V/57.6V	
Disharge Cut-off Protect Voltage	42V/44.8V	
Design life	15+ Years (25°C/77°F)	
Cycle life	> 6 000 Cycles, 25°C	
Communication Port	CAN, RS485, RS232	
Size (L×W×H)	460×442×180mm	680×442×180mm
Weight	46Kg±1 Kg/50Kg±1Kg	85Kg±1 Kg/89Kg±1Kg
Operation Temperature Range	Charge:0~55°C/Discharge:-20~55°C	

Features



Safe and Reliable

Cathode material: LiFePO4, safe and long cycle life.Low self-discharge, storable up to 6 months, nomemory effect, good shallow charge-discharge performance.



Intelligent BMS

Provides over-discharge, over-charge, over-current and temperature protection.The system automatically manages charging/discharging and balances cell voltage and current



Flexible Configuration

Parallel for expanding capacity and power. Support USB upgrade,wifi upgrade(optional), remote upgrade (Compatible with Deye inverter)



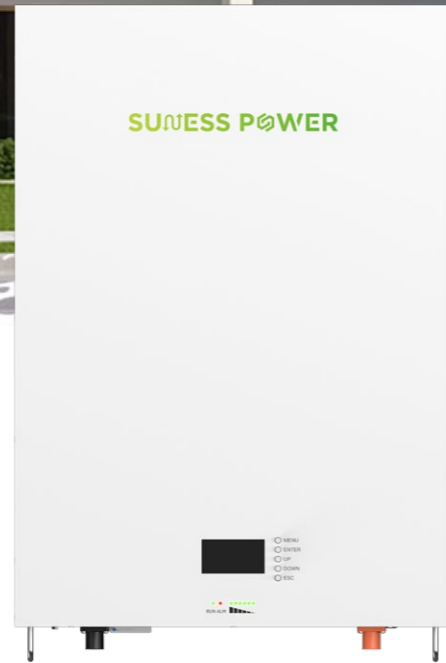
Wide Temperature

Working temperature range is from -0°C to 55°C, with excellent discharge performance and cycle life.





5-10KW Y1 SERIES



Product Specifications

Model	SE-Y1-5kWh	SE-Y1-10kWh
Voltage	48/51.2V	
Capacity	100Ah	200Ah
Battery Cell	3.2V 100Ah Prismatic Battery Cell	
Configuration	15S/16S 1	15S/16S 2P
Parallel Capacity	Yes, 15 units maximum	
Max.Charge Current	100A	
Max.Discharge Current	100A	
Discharge Cut-off Protect Voltage	42V/44.8V	
Charge Cut-off Protect Voltage	54V/57.6V	
Cycle life	6500 Cycles @80% DOD	
Communication Port	CAN,RS485,RS232	
L×W×H(mm)	680×485×180(220)mm	
Weight(KG)	68Kg±1Kg/72Kg±1Kg	98Kg±1Kg/106Kg±1Kg
Discharge Temperature(°C)	-20~50°C	
Charge Temperature(°C)	0~55°C	
Lithium Battery Standard	UL1642/IEC62619/UN38.3/ROHS/CE-EMC	

Features

Long Life And Safety
6000 cycles with 80% DOD,
high-quality prismatic battery cell

Plug In And Play
Plug in batteries then working,
easy to install and set up

Backup Protection
Stores energy, detects outages and
automatically becomes energy source

Compatibility
Compatible with most of the available
Hybrid inverters

Intelligent
With independent smart BMS system, manages
power output effectively

Safety Cert
IEC62619,CE,UN38.3,MSDS





261kWh Energy Storage System



Features

Compact
Easy transportation & fast installation.

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

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

Flexible Expansion
Modular design, simplified parallel expansion.

Product Specifications

Battery rated capacity	261kWh
Battery rated voltage	832V
Battery voltage range	728V~936V
Battery type	LFP
Battery cell capacity	1P*52S*5S
Cell Capacity	314Ah
Max.charging/discharging power	0.5P
Max.charge/discharge current	157A
Rated power	100kW
PV Open Circuit Voltage Range	250~708V
PV Max. Current	160A*2
MPPT quantity	2
Rated AC power	125kW
Rated AC current	180A
Rated AC voltage	400V,3W+N+PE
Rated AC frequency	50/60Hz
THDi	<3 (Rated power)
Power Factor	-1leading to+1 lagging
THDV	<3% (linear load)
Protection level	IP55
Protection level	/
Isolation mode	Isolation transformer
Shutdown self-discharge	<0.1% Rated power (Without transformer)
Display	LCD
Relative humidity	0~95% (No condensation)
Noise	<78dB
Ambient temperature	-25 C to +60°C (Derating above 45 °C)
Cooling mode	Liquid-cooled
Altitude	3000m(>2000m derating)
Communication interface	CAN/Ethernet/485
Dimension (W* D* H)	1600*1350*2300mm
Weight (approx.)	3330kg



418kWh Energy Storage System



Features

Compact
Easy transportation & fast installation.

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

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

Flexible Expansion
Modular design, simplified parallel expansion.

Product Specifications

DC side	SE-E418LP-4A400	SE-E418LP-3A480	SE-E418LP-2A690	SE-E418LP-2A800
Cell Type	LFP / 314 Ah			
Pack Configuration	52.248 kWh/1P52S			
System Configuration	418 kWh/1P416S			
Rated DC Voltage	1331.2V			
DC Voltage Range	1164.8 ~ 1497.6 V			
Max. Charge/Discharge Rate	0.25~0.5 P			
Max. Depth of Discharge	100% (25+2°C)			
Rated Output Power	125kW*	150kW	215kW	215kW
Max. Apparent Power	137.5kW*	165kW	237kW	237kW
Rated AC Voltage	400V	480V	690V	800V
AC Voltage Range	-15%~+10%			
Grid Type	3P3W			
Rated Frequency	50 Hz / 60 Hz			
Power Factor	0.99/-1~+1			
THDi	≤3%			
DC Ratio	<0.5%I _{pn}			
Max. Efficiency	≥90%			
Cycle Life	≥ 8,000 cycles			
Communication	Modbus TCP/RTU			
Fire Suppression System	Aerosol			
Ingress Rating	IP55			
Cooling	Liquid cooling + Air cooling			
Operating Temperature	-25°C~55°C (Derating after 45°C)			
Anticorrosion Rating	C4 (C5 optional)			
Humidity	α5~95% RH (non-condensing)			
Noise	≤ 80 dB			
Altitude	4000m (Derating above 2000m)			
Dimensions (W*D*H)	1,500*1,350*2,400 mm			
Weight	3,800 kg			
Compliance	UN38.3, IEC62477-1, IEC61000, IEC62619, IEC63056, UL9540A, EN50549			



500kWh-1MWh Energy Storage System

Features

All-in-One 10-ft Container
Highly integrated 3S system, cooling system, and fire protection system, delivering greater capacity within a smaller footprint

Seamless On/off-grid Switching
The system equipped with an integrated STS, enabling seamless on-grid and off-grid switching within 20ms.

String-Based Solution
Each battery cluster is independently managed, ensuring higher efficiency and system stability.

Multiple Power Source Options
Equipped with reserved interfaces for diesel generator and PV inverter, the system supports multiple power sources, making it suitable for a wide range of application scenarios.

Product Specifications

Cell Type	LFP/314Ah
Pack Configuration	52.2 kWh/1P52S
System Configuration	1044 kWh/4P260S
Rated DC Voltage	832V
DC Voltage Range	728~936V
Max. Charge/Discharge Rate	0.5P
Max. Depth of Discharge	100% (25 + 2 °C)
Rated Output Power	500 kW
Max. Apparent Power	550kVA
Rated AC Voltage	400V
AC Voltage Range	+15%
Grid Type	3W+N+PE
Rated Frequency	50Hz/60Hz
On/off-grid Switching Time	<20 ms
Power Factor	0.99/-1~+1
THDi	≤3%
DC Ratio	<0.5 pn
Max. PV Inverter Input Current	800 A
Max. Diesel Generator Input Current	800 A
Max. Backup Load Port Current	800 A
Recommended Max. Backup Load Power	350 kW (70% of Rated Output Power)
Cycle Life	≥8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol system(pack level and container level), water spray system
Ingress Rating	P54
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25°C~55°C (Derating after 45°C)
Anticorrosion Rating	C4 (C5 optional)
Humidity	5~95% RH (non-condensing)
Noise	≤80 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	2991*2438*2591 mm
Weight	14t
Certification	UN38.3, IEC62477-1, CE/EMC, IEC62619, IEC63056, UL9540A, EN50549



2170kWh BESS System

Features



Hybrid Cooling System

The liquid-cooled battery cooling system combined with an air-cooled PCS cooling system provides dual assurance for system efficiency.



All-in-One Design

Highly integrated 3S system, cooling system, and fire protection system, delivering greater capacity with a smaller footprint.



String-Based Solution

Each battery cluster is independently managed, ensuring higher efficiency and system stability.



Standard 20ft Container

Pre-tested and pre-installed before delivery, enabling easy transportation, simple commissioning, and shorter lead times.

Product Specifications

Cell Type	LFP314Ah
PACK	48.23kWh/1P48S
Battery System	2170.3kWh/9P240S
Voltage Range	672-864Vdc
Rated Power	1000kW
Max. Power	1100kW
THDi	≤3%
DCRatio	<0.5% pn
Nominal Voltage	400Vac/3P+N+PE
Power Factor	-1lagging ~1leading
Nominal Frequency	50Hz/60Hz
System Efficiency	≥88%
Charge/Discharge Rate	0.5P
DOD	95% (25+2°C)
Cycle Life	8000cycles@+25°C, 95%DOD0.5P
Communication	Ethernet /RS485
Ingress Rating	IP55
Cooling System	Liquid Cooled + Forced Air Cooled
Operating Temperature	-25°C~55°C
Humidity	5-95%RH, non-condensing
Noise	≤80dB
Altitude	≤2,000m (derating above 2,000m)
Fire Suppression System	Aerosol system (pack level and container level), water spray system
Dimensions (W*D*H)	6058*2438*2591 (mm)
Weight	25t
Compliance	UN38.3, IEC62477-1, CE/EMC, IEC62619, IEC63056, UL9540A, IEC62933, EN50549



4244kWh BESS System



Features



High Adaptability
IP54 Protection, wind resistant, snow resistant, and earthquake resistant design



High Integration
Modular and standard design, plug-and-play, easy to transport and install



Safety and Reliability
Original Grade A lithium iron phosphate battery cell has high safety and reliability



High Efficiency
High energy density, high charge/discharge cycle efficiency, 1500V DC high voltage system, high efficiency LFP battery

Product Specifications

Model	SE-ESS-4244kWh-1500V
Battery Cell Type	LFP/314Ah
Battery Configuration	11P384S
Battery Capacity at DC Side (BOL)	4,244kWh
Maximum P-Rate / Discharge Duration	0.5P/2 Hours -4 Hours
Battery Rated Voltage	1,228.8V
Voltage Range	1,075.2~1,382.4V
Container Size (WxDxH)	6,058x2,438x2,896mm (20x8x9.5ft)
Container Weight	35,000kg
Container Colour	RAL 7035
IPLevel	IP54
Anti-Corrosion	Default: C4 Optional: C5
Operating Temperature Range	-25°C~50°C(>45°C de-rating)/-13°F ~122°F (>113°F de-rating)
Relative Humidity	5%~95%
Highest Working Altitude	3,000m
Temperature Control Method	Liquid Cooling
Fire Suppression System	Default: Aerosol, Smoke, and Temperature Detector, Ventilation System with Flammable Gas Detector, Dry Pipe Fire Sprinkler Optional: Deflagration Panel
Communication Interface	Ethernet
Communication Protocol	Modbus TCP, IEC 61850, IEC 104
Compliance Standard	    



5MWh BESS System

Product Specifications

Item	
Cell Type	LFP314 Ah
Pack Configuration	104.5kWh/1P104S
System Configuration	5.015MWh /12P416S
Rated DC Voltage	1331.2V
DC Voltage Range	1165 ~ 1498V
Max. Charge/Discharge Rate	0.5P
Max. Depth of Discharge	100% (25+2°C)
Cycle Life	≥ 8,000 cycles
Fire Suppression System	Aerosol system(pack level and container level), water spray system
Ingress Rating	IP55
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25°C~55°C (Derating after 45°C)
Anticorrosion Rating	C4 (C5 optional)
Humidity	0~95% RH (non-condensing)
Altitude	4000m
Dimensions (W*D*H)	6,058*2,438*2,896 mm
Weight	45t
Certification	IEC62477, IEC61000, IEC62619, IEC63056, UL9540A, UN353 ⁶

Features



Higher Energy Density
The 20-ft liquid-cooled energystorage container offers a maximumcapacity of 5.015MWh, delivering higherenergy density and reducing overall costs.



Lower Self Power Consumption
A variable-frequency compressor adapts totemperature conditions,reducing the system's power consumption



Longer Service Life
Enhanced cell temperature consistency extendslife, increases safety, and improves batteryreturn oninvestment



Better Temperature Control
The liquid cooling system maintains cell temperature differences below3°C, improving voltage consistencyand overall performance



100kWh BESS System



Features



Economical and Efficient
RTE over 90%, DOD over 95%.



Compact & Convenient
1.16m² footprint, easy to transport and install.



Safe and Reliable
IP54, optimized ventilation design, temperature difference within 6°C.



Self-developed
PACK, BMS and EMS are all independently developed with good compatibility.



Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.



Easy O&M
Support multiple ways of operation and maintenance, including onsite, cloud.

Product Specifications

Model	Suness-eBank-120F(50kW)
System Parameter	
System energy	120.576wh
Inverter	S6-EH3P50K10-H
Transformer	50kW
Communication access method	3P4W
Rated output voltage	380/400V
Rated output power	50kW
Cooling method	air cooling风冷
Placement environment	Outdoor室外
Battery cabinet+Inverter	Size:L074*D1200*H2095mm Weight: 1.4T
Protection grade	IP54
General Parameter	
Combination method	120S1P
Rated capacity	314Ah
Factory voltage	384V-396V
Voltage at end of discharge	≤324V
Recommended charging voltage	420V
Internal impedance	≤120mΩ
Max charging current(Icm)	157A
Limited charging voltage(Ucl)	792V
Max discharging current	157A
Discharge cut-off voltage(Udo)	300V
Operation temperature range	Charge:0~55°C/Discharge: -20~55°C
Storage temperature range	-20°C~50°C
Single pack size/weight	W519*D940*H230 150kgQuantity:6pcs
High pressure box size/weight	W488*D574*H230 25kgQuantity: 1pcs
Inverter parameters	
Recommended max. PV array size	100kW
Max. usable PV input power	96kW
Max. input voltage	1000V
Rated voltage	600V
Start-up voltage	180V
MPPT voltage range	150-850V
Max. input current	4*40A
Max. short circuit current	4*60A
MPPT number/Max input stringsnumber	4/8
Battery type	Li-ion
Battery voltage range	150-800V
Max. charge / discharge current	70A*2
Number of battery port	2
Maximum charge / dischargecurrent of each port	70A
Communication	CAN/RS485
Rated output power	50kW
Max. apparent output power	1.4 times of rated power, 10s 1.6 times of rated power,200ms
Back-up switch time	<10ms
Rated output voltage	3/N/PE, 220V/380 V3/N/PE, 230V/400 V
Rated frequency THDv(@linearload)	50 Hz/60 Hz
Rated frequency THDv(@linearload)	<3%



221KwH BESS System



Features



Economical and Efficient
RTE over 90%, DOD over 95%.



Compact & Convenient
1.16m² footprint, easy to transport and install.



Safe and Reliable
IP54, optimized ventilation design, temperature difference within 6°C.



Self-developed
PACK, BMS and EMS are all independently developed with good compatibility.



Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.



Easy O&M
Support multiple ways of operation and maintenance, including onsite, cloud.

Product Specifications

Model	Suness-eBank-221F(100kW)
System Parameter	
System energy	221.056wh
Inverter	S6-EH3P100K10-NV-YD-H
Transformer	100kW
Communication access method	3P4W
Rated output voltage	380/400V
Rated output power	100kW
Cooling method	air cooling风冷
Placement environment	Outdoor室外
Battery cabinet+inverter	Size:W1200*D1700*H2100mm Weight: 2.8T
Protection grade	IP54
General Parameter	
Combination method	220S1P
Rated capacity	314Ah
Factory voltage	704V-726V
Voltage at end of discharge	≤594V
Recommended charging voltage	770V
Internal impedance	≤120mΩ
Max charging current(Icm)	157A
Limited charging voltage(Ucl)	792V
Max discharging current	157A
Discharge cut-off voltage(Udo)	550V
Operation temperature range	Charge:0-55°C/Discharge: -20-55°C
Storage temperature range	-20°C-50°C
Single pack size/weight	W519*D940*H230 150kgQuantity: 11pcs
High pressure box size/weight	W488*D574*H230 25kgQuantity: 1pcs
Inverter Parameters	
Recommended max. PV array size	200kW
Max. usable PV input power	200kW
Max. input voltage	1000V
Rated voltage	600V
Start-up voltage	180V
MPPT voltage range	150-950V
Max. input current	10*42A
Max. short circuit current	10*60A
MPPT number/Max input stringsnumber	10/20
Battery type	Li-ion
Battery voltage range	300-950V
Max. charge / discharge current	100A*2
Number of battery port	2
Maximum charge / discharge current of each port	100A
Communication	CAN/RS485
Rated output power	100kW
Max. apparent output power	1.4 times of rated power, 10s 1.6 times of rated power, 200ms
Back-up switch time	<10ms
Rated output voltage	3/N/PE, 220V/380 V3/N/PE, 230V/400 V
Rated frequency THDv(@linearload)	50 Hz/60 Hz
Rated frequency THDv(@linearload)	<3%



261KwH BESS System

Features

Economical and Efficient
RTE over 90%, DOD over 95%.

Safe and Reliable
IP54, optimized ventilation design, temperature difference within 6°C.

Expandable & Modular
Easy modular design supports parallel connection for convenient system expansion.

Compact & Convenient
1.16m² footprint, easy to transport and install.

Self-developed
PACK, BMS and EMS are all independently developed with good compatibility.

Easy O&M
Support multiple ways of operation and maintenance, including onsite, cloud.

Product Specifications

Model	Suness-eBank-221F(100kW)
System Parameter	
System energy	221.056wh
Inverter	S6-EH3P100K10-NV-YD-H
Transformer	100kW
Communication access method	3P4W
Rated output voltage	380/400V
Rated output power	100kW
Cooling method	air cooling风冷
Placement environment	Outdoor室外
Battery cabinet*Inverter	Size:W1200*D1700*H2100mm Weight: 2.8T
Protection grade	IP54
General Parameter	
Combination method	220S1P
Rated capacity	314Ah
Factory voltage	704V-726V
Voltage at end of discharge	≤594V
Recommended charging voltage	770V
Internal impedance	≤120mΩ
Max charging current(Icm)	157A
Limited charging voltage(Ucl)	792V
Max discharging current	157A
Discharge cut-off voltage(Udo)	550V
Operation temperature range	Charge:0-55°C/Discharge: -20-55°C
Storage temperature range	-20°C-50°C
Single pack size/weight	W519*D940*H230 150kgQuantity:11pcs
High pressure box size/weight	W488*D574*H230 25kgQuantity: 1pcs
Inverter Parameters	
Recommended max. PV array size	200kW
Max. usable PV input power	200kW
Max. input voltage	1000V
Rated voltage	600V
Start-up voltage	180V
MPPT voltage range	150-950V
Max. input current	10*42A
Max. short circuit current	10*60A
MPPT number/Max input stringsnumber	10/20
Battery type	Li-ion
Battery voltage range	300-950V
Max. charge / discharge current	100A*2
Number of battery port	2
Maximum charge / discharge current of each port	100A
Communication	CAN/RS485
Rated output power	100kW
Max. apparent output power	1.4 times of rated power, 10s 1.6 times of rated power, 200ms
Back-up switch time	<10ms
Rated output voltage	3/N/PE, 220V/380 V3/N/PE, 230V/400 V
Rated frequency THDv(@linearload)	50 Hz/60 Hz
Rated frequency THDv(@linearload)	<3%

APP MONITORING

Control and Monitor The System



ENERGY Leading Smart EMS MANAGEMENT SYSTEM(EMS)

The energy storage EMS energy management system completes the centralized monitoring and management of the entire energy storage power station, and connects with power quality monitoring devices, grid-connected protection devices, fan systems, secondary telecontrol systems, PCS, BMS, air conditioning control devices and other systems and devices through RS485/RS232/Ethernet/CAN, etc., collects the operating data of each device and uploads important information to the power grid dispatching center and the cloud control cloud to achieve real-time monitoring of the energy storage system.

At the same time, it receives commands from the dispatching center or the cloud control cloud, and adopts corresponding optimization strategies according to different operating modes to control the charging and discharging of the energy storage system to meet the peak and frequency regulation needs of the power grid and the safe and stable operation of the power grid.



50A-300A
Multiple Discharge Rate Options



Over 40+
Adaptive Inverter Protocol Selection



Detection & Control

Real-time monitoring of battery voltage, current, temperature and other parameters, and control according to the set parameter range



Signal Processing

Receive control instructions from the external system and send battery status information, and process thereceived instructions and information.



Data Processing & Storage

Process and analyze the collected battery parameters, and record and store the battery's operating status and historical data.



Bluetooth, WiFi Function

Remote real-time monitoring, online parameter setting, OTA software upgrade.