Solar Energy Solution PV+BESS Smart Home Energy

6-12Kw / 15-30Kwh Smart All In One PV BESS

OASIS ENERGY

Smarter Whole-house Energy System

Energy Links Home

HS3 series

- 8 in 1 Smart Home Energy Storage System
- Max 30kw Output Current
- 6 - 30 kWh Capacity Range
- 6 - 12 kW PV Input
- Integrated TNM EV Charger

6-in-1 Smart Home Energy

A revolutionary 6-in-1 Powered Home ESS integrating Solar Inverter, EV charger, Battery HVS, Battery Hybrid, Backup, and Bell Ring into Powerful unit.

- One-click Energy Hub
- 10 times Energy Optimization Gain
- Seamless Integration Control
- 7.5 X times Home Backup Power

One-Stop Smart Energy Management System

Empowered by our Smart Energy Management System Ecloseyer, the HS3 series revolutionizes Smart Home Energy Solutions.

A comprehensively intuitive and intelligently manages energy generation, storage, and consumption, optimizing allocation and scheduling to significantly lower electricity costs.

- One-Click Settings
- One-Click Diagnosis
- Smart Energy Scheduling & Dispatch
- Energy Trading

Space-Saving Design & Simplified Installation

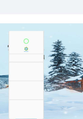
HS3 series comes in modern, space-saving design with six incredibly user-friendly features. Its ultra-thin profile and modular design make it a perfect fit for any home, while plug-and-play connectivity ensures a hassle-free setup experience. Scalability allows the system to adapt to homeowner's changing energy demands.

- Thin Ultra-thin Body
- Modular Design
- Plug-and-Play Connectivity
- Scalable Capacity

Enhanced Performance & Safety

The HS3 series is engineered for uninterrupted reliability and prioritizes safety. Its sleek, ventilation-optimized design ensures peak performance even under demanding conditions.

- Extreme Temperature Operation
- Integrated Fire Protection
- Maximum Compatibility
- Unlimited Expansion



HS3 Single Phase All-in-One Solution

OASIS ENERGY

SAJ's latest all-in-one solution for residential energy storage system, integrated TCL BMS, EMS, EV charger and battery, with plug-in-play design, third-stage safety and easy installation. Meeting the installation in tail waiter, HS3 covers from 3.68K, 5.9KPS and single phase grid.

- Integrated with TNM EV charger module
- Max. 20A input current to better match high power panel
- Battery module integrated with a DC/DC optimizer, expandable whenever you need
- Plug-in connection of the modules without any cabling, easy installation
- 150mm thick, blend in with its surroundings
- Self-heating and fire protection system inside the battery

Model Name	HS3-3.6-1-EU-AFCI	HS3-5.9-1-EU-AFCI	HS3-3.6-3-EU-AFCI	HS3-5.9-3-EU-AFCI	HS3-8.6-3-EU-AFCI	HS3-11.5-3-EU-AFCI
System Diagram						
Rated Output Power	3.68	5.9	3.68 / 3.68 / 3.68	5.9 / 5.9 / 5.9	8.6 / 8.6 / 8.6	11.5 / 11.5 / 11.5
Rated Output Current	16	25.7	16 / 16 / 16	25.7 / 25.7 / 25.7	37.4 / 37.4 / 37.4	50 / 50 / 50
Rated Output Voltage (Vac)	230		230 / 230 / 230			
Nominal Energy (kWh)	5.3	10.6	7.9	15.8	15.8	26.3
Battery Module Number	1		2		3	
Operating Voltage (V)	48		48		48	
Operating Current (A)	100		100		100	
Communication	RS485/CAN		CAN/RS485	CAN/RS485 CAN/RS485	CAN/RS485 CAN/RS485	CAN/RS485 CAN/RS485
Inverter Module						
Dimensions (mm)	400 / 90 / 500	400 / 90 / 500	400 / 90 / 500	400 / 90 / 500	400 / 90 / 500	400 / 90 / 500
Weight (kg)	14.5	14.5	14.5	14.5	14.5	14.5
PV Input						
Max. DC Input Power (W)	6500		6500 / 6500 / 6500			
Max. DC Voltage (V)	600		600			
Start-up Voltage (V)	60		60			
Rated DC Input Voltage (V)	360		360			
MPPT Voltage Range (V)	60-550		60-550			
Rated DC Input Current (A)	14.2	14.2	14.2 / 14.2 / 14.2			
Max. DC Input Current (A)	18		18 / 18 / 18			
Number of MPPT Trackers	2		2			
Number of Strings/Per Tracker	1 / 1		1 / 1 / 1 / 1			
Rated Output Power(kW)	3.68	5.9	3.68 / 3.68 / 3.68	5.9 / 5.9 / 5.9	8.6 / 8.6 / 8.6	11.5 / 11.5 / 11.5
Max. Output Current (A)	16	25.7	16 / 16 / 16	25.7 / 25.7 / 25.7	37.4 / 37.4 / 37.4	50 / 50 / 50
Rated Output Voltage (Vac)	230		230 / 230 / 230			
Output Frequency	50/60		50/60			
Output Current Harmonic	<3%		<3%			
Power Factor	0.8 leading - 0.8 lagging					
Grid Connection Type	Single phase		Three phase			
Max. Efficiency	97.6%					
Euro Efficiency	97.0%					
Protection						
Battery Anti-Reverse Polarity Protection	Integrated					
Anti-Islanding Protection	Integrated					
AC Short Circuit Current Protection	Integrated					
AC Overvoltage Protection	Integrated					
AC Overcurrent Protection	Integrated					
DC Surge Protection	Type II					
AC Surge Protection	Type II					
GFCI Protection	Integrated					
Certifications						
Certifications	VDE4105					
Grid Connection	Plug-in connector					
Safety Protection Class	I (PE connection)					
Protection Class	IP65					
General Parameters						
Cooling	Fan cooling					
Operating Temperature Range	-40°C ~ +60°C					
Relative Humidity	0 - 100% non-condensing					
Altitude	2000m (>2000m derating)					
Noise Emission	<40dB					
Ingress Protection	IP66					
Pollution Degree Outdoor	PD3					
Installation Method	Wall-mounted					
Certifications	EN 62109-1:2010, EN 62109-2:2011, EN 50549-1:2019, EN 61000-6-1:2007, EN 61000-6-3:2007, EN 50549-1:2019, AS/NZS 4777.2:2020, AS/NZS 3100:2017, IEC 62116:2014, IEC 61727:2004, IEC 61683:2016, IEC 60068-2-1:2007, IEC 60068-2-2:2007, IEC 60068-2-30:2005, IEC 60068-2-14:2009, IEC 60068-2-78:2012, IEC 61000-4-2:2008, IEC 61000-4-3:2010, IEC 61000-4-4:2012, IEC 61000-4-5:2014, IEC 61000-4-6:2013, IEC 61000-4-8:2010, IEC 61000-4-11:2004					

HS3 Three Phase All-in-One Solution

OASIS ENERGY

SAJ's latest all-in-one solution for residential energy storage system, integrated PCS, BMS, EMS, EV charger and battery, with plug-in-play design, third-stage safety and easy installation. Meeting the installation in tail waiter, HS3 covers from 5.12kW, 5.9KPS and three phase grid.

- Integrated with TNM EV charger module
- Max. 20A input current to better match high power panel
- Battery module integrated with a DC/DC optimizer, expandable whenever you need
- Plug-in connection of the modules without any cabling, easy installation
- Supported 100% of phase voltage imbalance
- 150mm thick, blend in with its surroundings
- Self-heating and fire protection system inside the battery

Model Name	HS3-5.12-3-EU-AFCI	HS3-5.9-3-EU-AFCI	HS3-8.6-3-EU-AFCI	HS3-11.5-3-EU-AFCI	HS3-14.7-3-EU-AFCI
System Diagram					
Rated Output Power	5.12 / 5.12 / 5.12	5.9 / 5.9 / 5.9	8.6 / 8.6 / 8.6	11.5 / 11.5 / 11.5	14.7 / 14.7 / 14.7
Rated Output Current	7.4 / 7.4 / 7.4	8.5 / 8.5 / 8.5	12.4 / 12.4 / 12.4	16.7 / 16.7 / 16.7	21.3 / 21.3 / 21.3
Rated Output Voltage (Vac)	400				
Nominal Energy (kWh)	10.2	15.3	25.5	25.5	30.6
Battery Module Number	2	3	5	5	6
Operating Voltage (V)	48		48		
Operating Current (A)	100		100		
Communication	CAN/RS485	CAN/RS485 CAN/RS485	CAN/RS485 CAN/RS485	CAN/RS485 CAN/RS485	CAN/RS485 CAN/RS485
Inverter Module					
Dimensions (mm)	520 / 90 / 500	520 / 90 / 500	520 / 90 / 500	520 / 90 / 500	520 / 90 / 500
Weight (kg)	23	23	23	23	23
PV Input					
Max. DC Input Power (W)	9000 / 9000 / 9000		9000 / 9000 / 9000		
Max. DC Voltage (V)	1100				
Start-up Voltage (V)	180				
Rated DC Input Voltage (V)	600				
MPPT Voltage Range (V)	160-1000				
Rated DC Input Current (A)	9 / 9 / 9		9 / 9 / 9		
Max. DC Input Current (A)	18 / 18 / 18		18 / 18 / 18		
Number of MPPT Trackers	2		2		
Number of Strings/Per Tracker	1 / 1		1 / 1 / 1 / 1		
Rated Output Power(kW)	5.12 / 5.12 / 5.12	5.9 / 5.9 / 5.9	8.6 / 8.6 / 8.6	11.5 / 11.5 / 11.5	14.7 / 14.7 / 14.7
Max. Output Current (A)	8.0	9.4	13.4	17.9	22.9
Rated Output Voltage (Vac)	400				
Output Frequency	50/60				
Output Current Harmonic	<3%				
Power Factor	0.8 leading - 0.8 lagging				
Grid Connection Type	Three phase				
Max. Efficiency	97.6%				
Euro Efficiency	97.0%				
Battery Parameters					
Battery Type	LiFePO4				
Battery Voltage Range (V)	150-500				
Max. Charge/Discharge Current (A)	50				
Recommended Charge/Discharge Power (kW)	15.8	19.1	25.5	31.9	38
Protection					
Battery Reverse Polarity Protection	Integrated				
Anti-Islanding Protection	Integrated				
AC Short Circuit Current Protection	Integrated				
AC Overvoltage Protection	Integrated				
AC Overcurrent Protection	Integrated				
DC Surge Protection	Type II				
AC Surge Protection	Type II				
Anti-Islanding Protection	Integrated				
GFCI Protection	Integrated				
Certifications					
Certifications	VDE4105				
AC Connection	Plug-in connector				
Safety Protection Class	I (PE connection)				
Protection Class	IP65				
General Parameters					
Cooling	Fan cooling				
Operating Temperature Range	-40°C ~ +60°C				
Cooling Method	Natural convection				
Relative Humidity	0 - 100% non-condensing				
Max. Operating Altitude (m)	2000m				
Noise Emission	<40dB				
Ingress Protection	IP66				
Pollution Degree Outdoor	PD3				
Weight (kg)	23				
Certifications	EN 62109-1:2010, EN 62109-2:2011, EN 50549-1:2019, EN 61000-6-1:2007, EN 61000-6-3:2007, EN 50549-1:2019, AS/NZS 4777.2:2020, AS/NZS 3100:2017, IEC 62116:2014, IEC 61727:2004, IEC 61683:2016, IEC 60068-2-1:2007, IEC 60068-2-2:2007, IEC 60068-2-30:2005, IEC 60068-2-14:2009, IEC 60068-2-78:2012, IEC 61000-4-2:2008, IEC 61000-4-3:2010, IEC 61000-4-4:2012, IEC 61000-4-5:2014, IEC 61000-4-6:2013, IEC 61000-4-8:2010, IEC 61000-4-11:2004				

OASIS ENERGY

72HL4-BDV

575-600 Watt

BIFACIAL MODULE WITH DUAL GLASS

N-type

N-Type Technology

N-Type module with TOPCon Technology, Partnering Canadian's TOPCon technology partner, Canadian Solar's bifacial and bifacial half-cell performance.

HOT 3.0 Technology

N-type modules with ultra-low hot3.0 technology offer better reliability and efficiency.

Dual-Sided Power Generation

Dual-sided power generation gain increases with backside exposure to lights, significantly reducing LCOE.

Mechanical Load Enhanced

Certified to withstand heavy snow loads of up to 5400 Pa and wind loads of up to 2400 Pa.

SMBB Technology

Better light trapping and current collection for extra-low module power output and reliability.

Anti-PID guarantee

Minimizes the chance of degradation caused by PID phenomenon through optimization of cell production technology and material control.

12 yrs Product Warranty | 30 yrs Linear Power Warranty | 0.4% Linear Power Degradation

- IEC61215(ed.2),IEC61730(ed.2)
- IEC61701, IEC62716, IEC61853, IEC62804
- IEC61215(ed.2),IEC61730(ed.2),Salt Mist,Ammonia Corrosion,UV Test,Dynamic Mechanical Load Test,Hail Test,Potential Induced Degradation Test
- UL 61730,IEC61701,IEC62716,IEC62804 and solar bankability tests
- ISO9001:2015,ISO14001:2015,ISO45001:2018
- IEC61215(ed.2),IEC61730(ed.2),IEC61701,IEC62716,IEC62804,IEC61853,IEC62941,IEC60068-7&8,IEC60068-2-68,IEC60068-2-14,IEC60068-2-78

EU JRC/IES-SERIN: TÜV6,JRC-PP-STA

72HL4-BDV 575-600 Watt

Electrical Characteristics

Product	72HL4-BDV					
Nominal Power (Pmax)(W)	575	580	585	590	595	600
Maximum Power Voltage (Vmp)(V)	45.73	45.93	46.13	46.32	46.51	46.70
Maximum Power Current (Imp)(A)	12.58	12.63	12.68	12.74	12.79	12.85
Open-circuit Voltage (Voc)(V)	54.06	54.30	54.53	54.76	54.99	55.22
Short-circuit Current (Isc)(A)	13.48	13.55	13.61	13.67	13.73	13.79
Module Efficiency(%)	21.98	22.17	22.36	22.55	22.74	22.93
Bifacility	70 ± 5%					
Operating Temperature	-40°C ~ +75°C					
Maximum System Voltage	1500 VDC (IEC)					
Maximum Series Fuse Rating	30 A					
Power Tolerance	0W ~ +5W					
Temperature Coefficient of Pmax	-0.29 %/°C					
Temperature Coefficient of Voc	-0.25 %/°C					
Temperature Coefficient of Isc	0.045 %/°C					

Mechanical Data

Cell Type	Mono-crystalline
Cell Arrangement	144 (6×24)
Dimensions	2278×1134×30 mm (89.72×44.65×1.18 inch)
Weight	29.5 kg (65.0 lb)
Front Glass	2.0 mm, Anti-Reflection Coating
Back Glass	2.0 mm, Heat Strengthened, Anti-Reflection Coating
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	4 mm²
JBC Pole Spacing	1.0 m
Connector Cables	1.0 m Vertical, 1.2 m Horizontal or Customized Length

Packaging Configuration

Pallet Dimensions	2278×1134×1135 mm
Packing Detail	36 pcs/pallets, 72pcs/stack, 720pcs/40HQ container

Specifications (STC)

Module	575W	580W	585W	590W	595W	600W
Maximum Power (Pmax)(W)	575	580	585	590	595	600
Maximum Power Voltage (Vmp)(V)	45.73	45.93	46.13	46.32	46.51	46.70
Maximum Power Current (Imp)(A)	12.58	12.63	12.68	12.74	12.79	12.85
Open-circuit Voltage (Voc)(V)	54.06	54.30	54.53	54.76	54.99	55.22
Short-circuit Current (Isc)(A)	13.48	13.55	13.61	13.67	13.73	13.79
Module Efficiency(%)	21.98	22.17	22.36	22.55	22.74	22.93

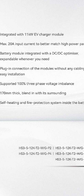
Specifications (NMOT)

Maximum Power (Pmax)(W)	427
Maximum Power Voltage (Vmp)(V)	43.08
Maximum Power Current (Imp)(A)	9.91
Open-circuit Voltage (Voc)(V)	51.00
Short-circuit Current (Isc)(A)	10.85

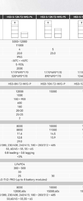
Application Conditions

Operating Temperature	-40°C ~ +75°C
Maximum System Voltage	1500 VDC (IEC)
Max Series Fuse Rating	30 A
Bifaciality Coefficient	approx. 70 ± 5% , also 10 % ~ 30 % if ordered

Engineering Drawings



Electrical Performance



GUANGDONG OASIS ENERGY CO., LTD.