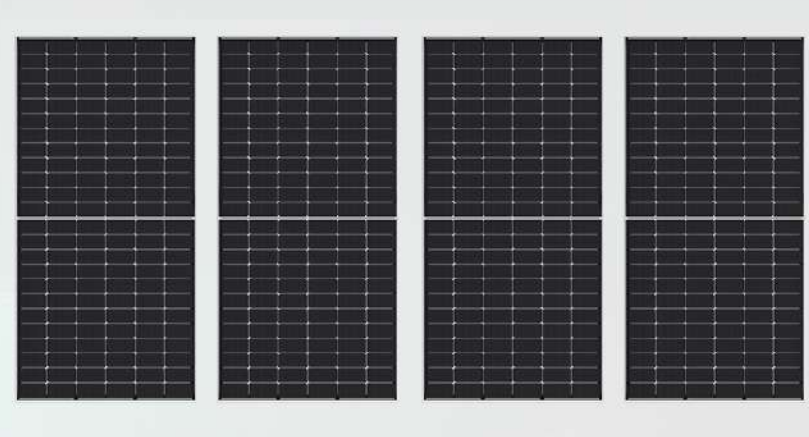
Solar Energy Solution PV+BESS C&I Solutions

OASIS ENERGY



School/ Hospital | Farm/ Winery | Factory/ Warehouse | Commercial Complex | Petrol Station | Residential Community

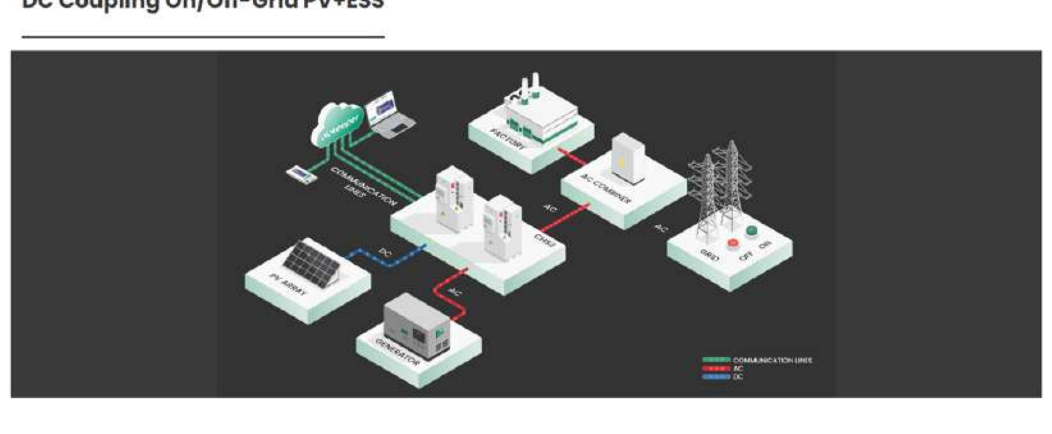
OASIS ENERGY POWER BOX 100 50kW/100kWh C&I Smart All-in-One Energy Storage

OASIS ENERGY

All-In-One Hybrid Energy Storage System

- String current 22.5A, 6 MPPTs, support 200% oversizing
- 60kWh~4MWh Capacity Range
- PV and Battery are DC Coupled with high efficiency
- Enhance VPP revenue with wide environmental adaptability

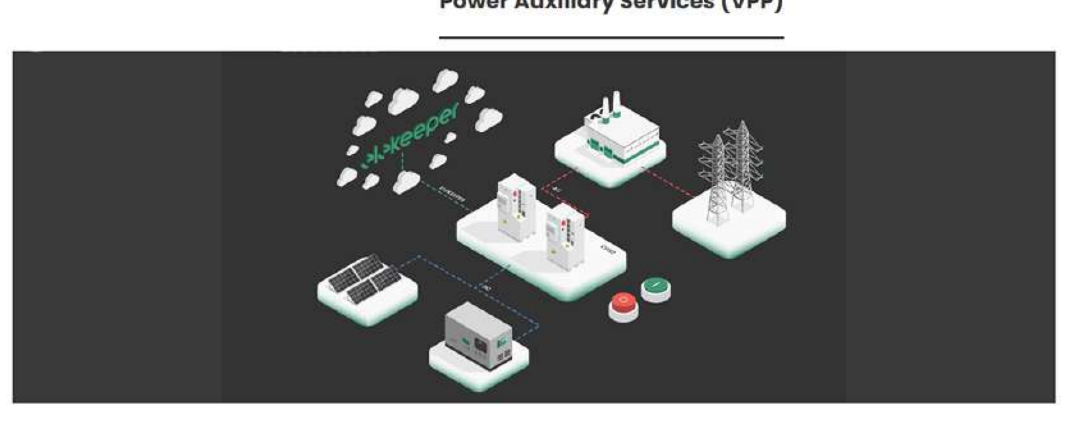
DC Coupling On/Off-Grid PV+ESS



Benefits:

- Seamlessly combine solar power, energy storage, and diesel generators to swiftly shift between grid and off-grid modes, ensuring a steady power supply for your uninterrupted business operations.
- Maximize the solar power generation to minimize diesel consumption and energy costs.

Power Auxiliary Services (VPP)



Benefits:

- Earn extra income by participating in the grid system services and connecting your energy storage to the grid.
- As a C&I customer, you can tap into energy markets and boost your ROI through virtual power plant operator.

All-In-One Hybrid Energy Storage System

- String current 22.5A, 6 MPPTs, support 200% oversizing
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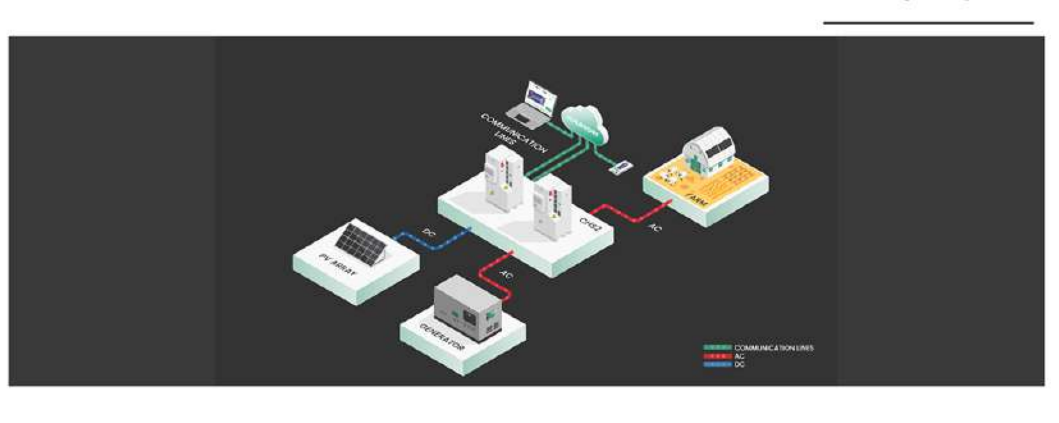
Micro-grid System



Benefits:

- Swap diesel generators with solar storage systems for less fossil fuel use and lower bills.
- Affordable Power for All: enjoy stable, reliable power in remote areas without costly infrastructure.

Versatile Adaptability Across Various Scenarios

Designed for various scenarios like large residential areas, charging stations, supermarkets, farms and factories, C&I Smart All-in-One Energy Storage Solution CHS2 offers up to 10 parallel units and a capacity range from 60kWh to 4MWh for seamless expansion.

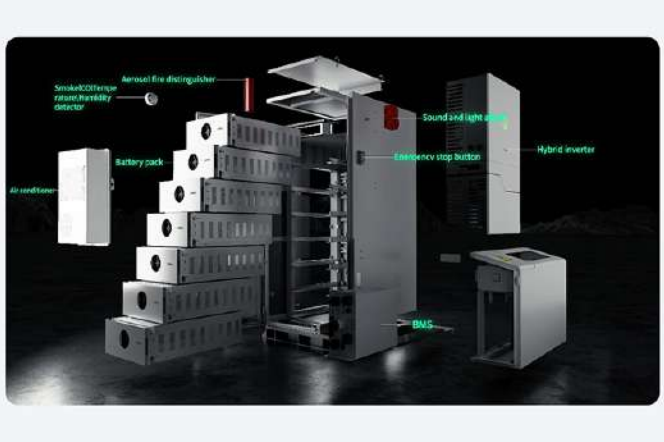
This system supports various application modes such as self-consumption, time-of-use, and backup mode, alongside flexible load control. By seamlessly integrating with diesel generators to build microgrids, it ensures flexibility, enhanced efficiency, safety, and profitability in any setting.

Versatile Adaptability | Seamless Expansion | Various Application Modes | Seamless Integration & Control

Maximizing Power Generation

The CHS2 series boasts a string current of 22.5A, ideal for high-power (210) solar panels. With 6 MPPTs and support for 200% oversizing, this system unleashes the full potential of solar power, optimizing green energy utilization to significantly reduce grid dependency and bolster renewable energy independence.

Matching High Power PV Panel | 6 MPPTs, Support 200% Oversizing | 100% Three Phase Imbalance Output



Ultimate Safety

This system is equipped with Arc Fault Circuit Interrupter(AFCI), proactive cell health monitoring, and sensitive carbon monoxide and fire detection for immediate anomaly responses. Additionally, it features cabinet-level fire protection, serving as a robust shield for device safety.

AC and DC type II surge protection devices (SPDs) safeguard equipment from electrical surges. With IP55(battery) / IP66(inverter) ratings, this system guarantees strong environmental adaptability even in outdoor installations.

AFCI to Prevent Fire | 6 Levels Active/Passive Fire Suppression | AC and DC type II SPD

One-Stop Smart Energy Management System

Empowered by our Smart Energy Management System - elekeeper, the CHS2 series revolutionizes C&I Smart Energy Solutions.

It comprehensively monitors and intelligently manages energy generation, storage, and consumption. By optimizing allocation and scheduling, it significantly reduces electricity costs and enhances profitability.

One-Click Savings | One-Click Diagnosis | Smart Energy Scheduling & Dispatch | Energy Trading

OASIS ENERGY

CHS2 All In One Hybrid Energy Storage System

Better Performance

- String current 22.5A, matching high power (210) PV panel
- 6 MPPT, support 200% oversizing
- Adopting C&I 280Ah cell, good performance and higher energy density

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

CHS2-29.9K-T4-X | CHS2-30K-T4-X
CHS2-50K-T6-X

MODEL	CHS2-29.9K-T4-X	CHS2-30K-T4-X	CHS2-50K-T6-X
DC Input			
Max. PV Array Power [Wp]@STC	59998	60000	100000
Max. DC Voltage [V]		1000	
MPPT Voltage Range [V]		180 ~ 850	
Rated DC Voltage [V]		600	
Start Voltage [V]		200	
Max.DC Input Current [A]	4*45	4*45	6*45
Max.DC Short Circuit Current [A]	4*56.5	4*56.5	6*56.5
Number of Strings per MPPT	2	2	2
Battery Parameters			
Battery Type		LiFePO4	
Rated Energy [kWh]		100.3	
Max.Charging/Discharging Current [A]		140	
AC Output [On-grid]			
Rated AC Power [W]	29999	30000	50000
Max.Apparent Power[VA]	29999	33000	55000
Rated Output Current[A]@230V	43.3	43.5	72.5
Max. Output Current [A]@230V	43.3	47.9	79.8
Rated AC Voltage [V]		3+N+PE, 380/ 400	
Rated Output Frequency/Range [Hz]		50,45 ~ 55	
Power Factor [cos φ]		0i - 1 - 0c	
Total Harmonic Distortion [THDi]		<3%	
AC Input [On-grid]			
Rated AC Voltage/Range [V]		3+N+PE, 380/ 400	
Rated Output Frequency [Hz]		50	
Max. Input Current [A]		200	
AC Output [Back-up]			
Max.Output Power [VA]	29999	33000	55000
Peak Output Apparent Power [VA]	29999	45000,5s	75000,5s
Rated AC Voltage [V]		3+N+PE, 380/ 400	
Rated Output Frequency/Range [Hz]		50,45 ~ 55	
Output THDv (@ Liner Load)		<3%	
AC Input [Generator]			
Max. Input Power [W]	29999	30000	50000
Max. Input Current [A]@230V		200	
Rated Input Voltage [V]		3+N+PE, 380/ 400	
Rated Input Frequency/Range [Hz]		50,45 ~ 55	
Efficiency			
Max. Efficiency		98%	
Euro Efficiency		97.3%	
Max. Battery to AC Efficiency		96.0%	
Protection			
PV Reverse Polarity Protection		Integrated	
Anti-islanding Protection		Integrated	
AC Overcurrent Protection		Integrated	
AC Short Circuit Protection		Integrated	
AC Overvoltage Protection		Integrated	
DC switch		Integrated	
DC Surge Protection		II	
AC Surge Protection		II	
AFCI		Integrated	
RSD		Optional	
General Parameters			
Communication		Wi-Fi/Ethernet/RS485	
Topology		Transformerless	
Operating Temperature Range		-30℃ to +50℃ (45℃ to 50℃ with derating)	
Cooling Method		Air Conditioner	
Ambient Humidity		5~95%(No Condensing)	
Altitude [m]		2000	
Ingress Protection		IP55, IP66(Inverter)	
Dimensions [H*W*D] [mm]		1980*988*1065	
Weight [kg]		1035(57.3kWh)/1145(71.6kWh)/1255(85.9kWh)/1365(100.3kWh)	
Warranty [Year]		10	
Standard		VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150, IEC62109-1/-2, NBT32004-2018, EN61000-6-1,EN61000-6-2,EN61000-6-3, EN61000-6-4	

MODEL	CB2-57.3-HV5	CB2-71.6-HV5	CB2-85.9-HV5	CB2-100.3-HV5
Rated Energy [kWh]	57.3	71.6	85.9	100.3
Usable Energy [kWh]	51.5	64.4	77.3	90.2
Rated Capacity [Ah]	280	280	280	280
No. of Modules	4	5	6	7
Nominal Voltage [V]	204.8	256	307.2	358.4
Voltage Range [V]	179.2~230.4	224~288	268.8~345.6	313.6~403.2
Charge/Discharge Current [A]	140	140	140	140
Rated Power [kW]	28.6	35.6	42.9	50.1
Weight [kg]	960	1060	1160	1260
Dimension [H*W*D] [mm]		1980*988*1065		
Communication		CAN		
Operating Temperature Range [℃]		~30~50		
Cooling Method		Air Conditioner		
Relative Humidity		5~95% (No Condensing)		
Altitude [m]		2000		
Ingress Protection		IP55		
Mounting		Ground-Mounted		
Control Module		CBC2-HV5		
Weight [kg]		28		
Dimension [H*W*D] [mm]		225*483*610		
Battery Module		CBU2-14.33-HV5		
Rated Energy [kWh]		14.33		
Weight [kg]		115		
Dimension [H*W*D] [mm]		231*523*805		
Applicable Standard		IEC62619-2017, UN38.3, IEC61000-6-2/4, IEC62477		

OASIS ENERGY

72HL4-BDV

575-600 Watt

BIFACIAL MODULE WITH DUAL GLASS

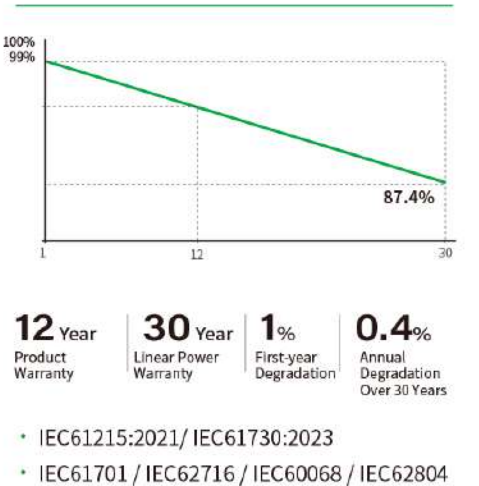
N-type

N-Type Technology

N-Type modules with Tunnel Oxide Passivating Contacts (TOPcon) technology offer lower LID/LeTID degradation and better low light performance.

HOT 3.0 Technology

N-type modules with JinkoSolar's HOT 3.0 technology offer better reliability and efficiency.



Dual-Sided Power Generation

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

Mechanical Load Enhanced

Certified to withstand:
5400 Pa front side max static test load
2400 Pa rear side max static test load

12 Year Product Warranty | 30 Year Linear Power Warranty | 1% First year Degradation | 0.4% Annual Degradation Over 30 Years

- IEC61215:2021/ IEC61730:2023
- IEC61701 / IEC62716 / IEC60068 / IEC62804
- ISO9001:2015: Quality Management System
- ISO14001:2015: Environment Management System
- ISO45001:2018: Occupational health and safety management systems

SMBB Technology

Better light trapping and current collection to improve module power output and reliability.

Anti-PID guarantee

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

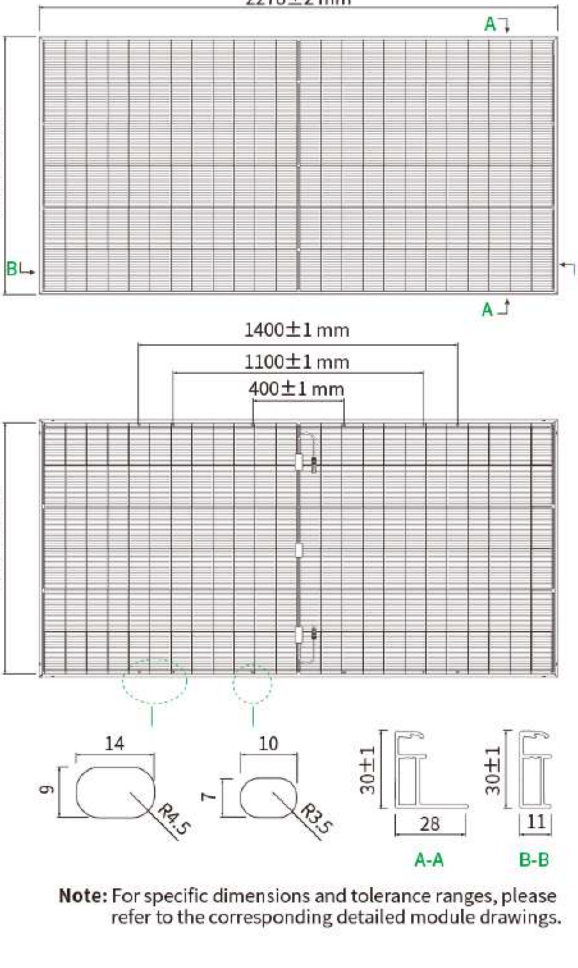
EU-JKM575-600N-72HL4-BDV-F9-EN

72HL4-BDV 575-600 Watt

Mechanical Characteristics

Cell Type	N-type Mono-crystalline
No. of cells	144 (72×2)
Dimensions	2278×1134×30 mm
Weight	31.0 kg
Front Glass	2.0 mm, Anti-Reflection Coating
Back Glass	2.0 mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Output Cables	4.0 mm² (+): 400 mm , (-): 200 mm or Customized Length

Engineering Drawings



Note: For specific dimensions and tolerance ranges, please refer to the corresponding detailed module drawings.

Packaging Configuration

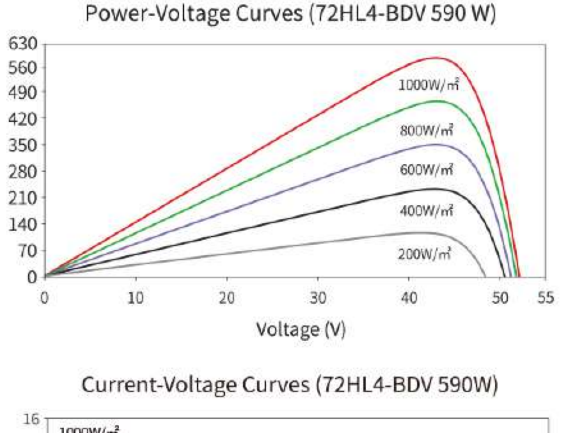
Pallet Dimensions	2338×1140×1251 mm
Packing detail (Two pallets=One stack)	36 pcs/pallets, 72 pcs/stack, 720 pcs/ 40'HQ Container

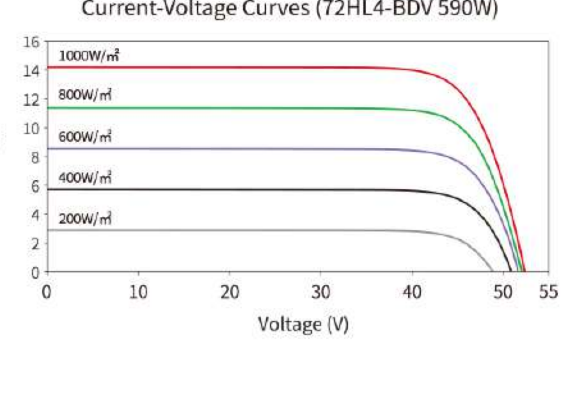
Specifications (STC)

Maximum Power – Pmax [Wp]	575	580	585	590	595	600
Maximum Power Voltage – Vmp [V]	43.73	43.88	44.02	44.17	44.31	44.45
Maximum Power Current – Imp [A]	13.15	13.22	13.29	13.36	13.43	13.50
Open-circuit Voltage – Voc [V]	52.30	52.50	52.70	52.90	53.10	53.30
Short-circuit Current – Isc [A]	13.89	13.95	14.01	14.07	14.13	14.19
Module Efficiency STC [%]	22.26	22.45	22.65	22.84	23.03	23.23
Power Tolerance	0 ~ +3 %					
Temperature Coefficients of Pmax	-0.29 %/℃					
Temperature Coefficients of Voc	-0.25 %/℃					
Temperature Coefficients of Isc	0.045 %/℃					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

Electrical Performance





Specifications BNPI

Maximum Power – Pmax [Wp]	633	638	644	649	655	660
Maximum Power Voltage – Vmp [V]	43.84	44.00	44.17	44.33	44.50	44.66
Maximum Power Current – Imp [A]	14.44	14.50	14.58	14.64	14.72	14.78
Open-circuit Voltage – Voc [V]	52.33	52.53	52.73	52.93	53.13	53.33
Short-circuit Current – Isc [A]	15.19	15.25	15.31	15.37	15.43	15.49

BNPI: Irradiance: front 1000W/m², rear 135W/m², Cell Temperature 25°C, AM=1.5

Application Conditions

Operating Temperature	-40 ℃ ~ +70 ℃
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30 A
Bifaciality Coefficient	φVoc: 98±5 %, φIsc: 80±5 %, φPmax: 80±5 %

GUANGDONG OASIS ENERGY CO., LTD.