

Drive the Better World with Green Energy



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Drive the Better World with Green Energy

CONTENTS

01 / Company Profile

02 / Solutions

03 / iEMS

04 / Products

05 / Events & Partners

Global Markets

Alpsolarr has a global footprint, serving customers in 28 provinces and cities across China and more than 50 countries and regions worldwide, including Europe, Asia, Latin America, and the Middle East.



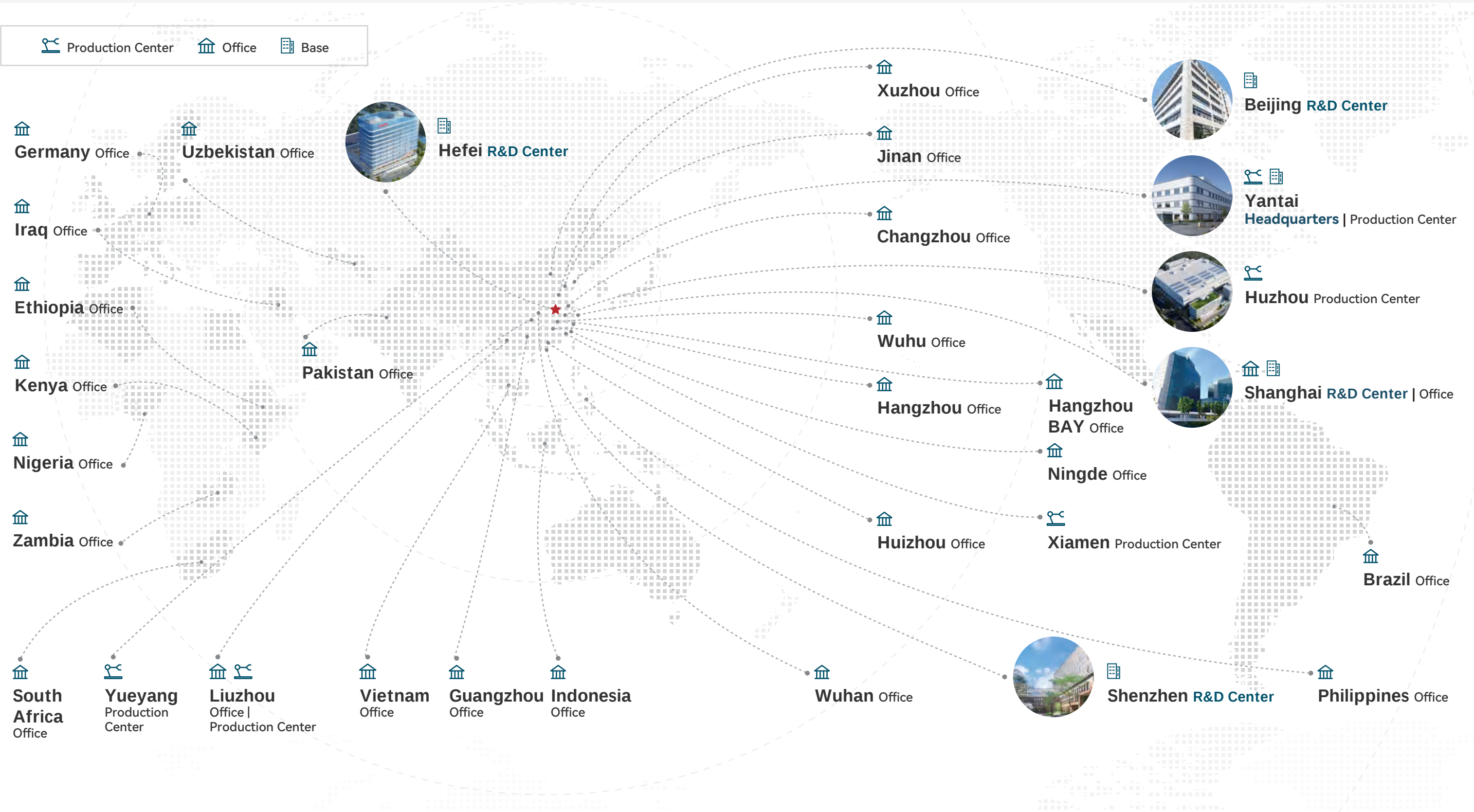
28+

Covers 28 provinces and cities in China



50+

Over 50 countries and regions worldwide



PULSE S2



PULSE S2 ECO Hybrid Inverter

Product Features >>

- Built-in dual MPPT tracking circuit with 1.5x maximum MPPT input power
- Each MPPT has a maximum input current of 27A, supporting multi-string 2-in-1 connections for PV panels
- Dual AC output for intelligent load management
- Supports up to 6 units in single-phase parallel connection / 9 units in three-phase grid parallel connection
- Both AC and PV can activate lithium batteries
- Wide grid voltage adaptability: 90–280Vac
- MPPT minimum operating voltage: 60Vdc
- Comprehensive hardware protection
- 2-year warranty / 3-year extended warranty (optional) / 5-year service

PULSE S2 Product Specifications

Model	8kW	11kW
Battery Parameters		
Battery Type	Lithium battery & lead-acid battery	
Rated Battery Voltage (Vdc)	48	
Battery Voltage Range (Vdc)	40~60	
Max Charge/Discharge Current (A)	120 / 160	150 / 220
PV Forced Wake-up	Supported	
PV Input		
Max Input Power (W)	2x6000	2x8250
MPPT Voltage Range (Vdc)	500	
Rated Input Voltage (Vdc)	370	
MPPT Voltage Range (Vdc)	60~450	
Number of MPPTs / Strings per MPPT	2/2	
Max Input Current per MPPT (A)	27	
Max Short-Circuit Current per MPPT (A)	35A	
Grid Input & Output		
Rated Grid Voltage (Vac)	220/230/240±5%	
Voltage Input Range (Vac)	90~280	
Rated Grid Frequency (Hz)	50 / 60	
Max Input Current (A)	50	60
Total Current Harmonic Distortion (THDi)	<3% (of nominal power)	
Load Parameters		
Rated Output Power (W)	8000	11000
Rated Output Current (A)	35	48
Rated Output Frequency (Hz)	50/60±0.1%	
Overload Capacity	10s@105% ~ 120%;5s@121% ~ 200%;100ms@ > 200%	
Transfer Time (ms)	10ms for IT equipment, 20ms for household loads	
Total Voltage Harmonic Distortion (THDv)	<3%	
Efficiency		
Max Efficiency	97.0%	
MPPT Tracking Efficiency	99.9%	
Protection		
General	DC reverse polarity protection, AC output overcurrent protection, overheating protection, AC output overvoltage protection, AC output short-circuit protection, DC component monitoring, overload power derating protection, grid monitoring, ground fault detection, surge protection	
Surge Protection	TYPE II(DC), TYPE II(AC)	
Overvoltage Protection	OVC II (DC), OVC III (AC)	
General Parameters		
Operating Temperature (°C)	-10~+55	
Dimensions [W×H×D] (mm)	420*450*105	
Weight (kg)	15.5	
Inverter Topology	Non-isolated	
Cooling Method	Fan cooling	
Altitude (m)	≤3000	
IP Rating	IP21	
Communication Method	RS232 / RS485 / CAN / Dry contact / External battery NTC / Parallel communication / Wi-Fi (optional)	
Warranty	2 years	
Certification Standards		
Safety Standards	IEC 62109-1:2010;EN62109-1:2010;IEC 62109-2:2011;EN62109-2:2011	
EMC Standards	EN IEC 61000-6-1:2019;EN IEC 61000-6-3:2021;EN IEC 61000-3-11:2019;EN61000-3-12:2011	
Energy Efficiency Standard	IEC 61683:1999	


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PULSE S3



PULSE S3

ECO Hybrid Inverter

Product Features >>

- IP66 protection rating
- 1.7x maximum MPPT input power Supports 2x PV input power under specific conditions
- MPPT max input current: 28A, supporting multi-string 2-in-1 connections for PV panels
- Dual AC output for intelligent load management
- Supports battery-free operation mode
- Max discharge current design up to 135A
- Supports up to 6 units in single-phase parallel connection / 9 units in three-phase grid parallel connection
- Both AC and PV can activate lithium batteries
- Wide grid voltage adaptability: 90–280Vac
- 1.5x grid input over-sizing technology
- MPPT minimum operating voltage: 60Vdc
- Comprehensive hardware protection
- 5-year warranty / 10-year service (optional)

PULSE S3 Product Specifications

Model	4kW	6kW
Battery Parameters		
Battery Type	Lithium battery & lead-acid battery	
Rated Battery Voltage (Vdc)	48	
Battery Voltage Range (Vdc)	40~60	
Max Charge/Discharge Current (A)	80 / 100	125 / 135
PV Forced Wake-up	Supported	
PV Input		
Max Input Power (W)	8000	12000
Max MPPT Input Power (W)	6800	10200
Max Input Voltage (Vdc)	500	
Rated Input Voltage (Vdc)	370	
MPPT Voltage Range (Vdc)	60~450	
Number of MPPTs / Strings per MPPT	1/2	
Max Input Current per MPPT (A)	28	
Max Short-Circuit Current per MPPT (A)	35A	
Grid Input		
Rated Grid Voltage (Vac)	220/230/240±5%	
Voltage Input Range (Vac)	90~280	
Rated Grid Frequency (Hz)	50 / 60	
Max Input Current (A)	26	40
Total Current Harmonic Distortion (THDi)	<3% (of nominal power)	
Load Parameters		
Rated Output Power (W)	4000	6000
Rated Output Current (A)	18	27
Rated Output Frequency (Hz)	50/60±0.1%	
Overload Capacity	1min@101~110%;10s@110% ~ 150%;5s@150% ~ 200%;100ms@ > 200%	
Transfer Time (ms)	10ms for Computer Equipment,20ms for Household Equipment	
Total Voltage Harmonic Distortion (THDv)	<3%	
Efficiency		
Max Efficiency	97.0%	
MPPT Tracking Efficiency	99.9%	
Protection		
General	DC reverse polarity protection, AC output overcurrent protection, overheating protection, AC output overvoltage protection, AC output short-circuit protection, DC component monitoring, overload power derating protection, grid monitoring, ground fault detection, surge protection	
Surge Protection	TYPE II(DC), TYPE II(AC)	
Overvoltage Protection	OVC II (DC), OVC III (AC)	
General Parameters		
Operating Temperature (°C)	-40 to +60 (derating above 45°C)	
Dimensions [W×H×D] (mm)	395*485*156	
Weight (kg)	14.5	
Inverter Topology	Non-isolated	
Cooling Method	Smart cooling	
Altitude (m)	≤3000	
IP Rating	IP66	
Communication Method	RS232 / RS485 / CAN / Dry contact / External battery NTC / Parallel communication / Wi-Fi (optional)	
Warranty	5 years	
Certification Standards		
Safety Standards	IEC 62109-1:2010, EN 62109-1:2010, IEC 62109-2:2011, EN 62109-2:2011	
EMC Standards	EN IEC 61000-6-1:2019;EN IEC 61000-6-3:2021;EN IEC 61000-3-11:2019;EN61000-3-12:2011	
Energy Efficiency Standard	IEC 61683:1999	

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PULSE S4



PULSE S4 ECO Hybrid Inverter

Product Features >>

- IP66 protection rating
- Supports up to 12kW of dual-channel PV power input
- Dual AC output for intelligent load management
- Supports battery-free operation mode
- Supports up to 6 units in single-phase parallel connection / 9 units in three-phase grid parallel connection
- AC, PV, and diesel generator can all activate lithium batteries
- Wide grid voltage adaptability: 90–280Vac
- MPPT minimum operating voltage: 60Vdc
- Built-in diesel generator interface with automatic start/stop control
- Grid connection functionality for peak shaving and load shifting
- Built-in Wi-Fi and Bluetooth for mobile device monitoring (supports Android/iOS systems)
- RGB indicator light status display — different operating modes correspond to different colors
- 5-year warranty / 10-year service (optional)


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PULSE S4 Product Specifications

Model	6kW	8kW
Battery Parameters		
Battery Type	Lithium battery & lead-acid battery	
Rated Battery Voltage (Vdc)	48	
Battery Voltage Range (Vdc)	40~60	
Max Charge/Discharge Current (A)	125 / 125	165 / 165
PV Forced Wake-up	Supported	
PV Input		
Max MPPT Input Power (W)	12000	
Max Input Voltage (Vdc)	500	
Rated Input Voltage (Vdc)	370	
MPPT Voltage Range (Vdc)	60~450	
Number of MPPTs / Strings per MPPT	2 / 1+1	
Max Input Current per MPPT (A)	18+18	
Max Short-Circuit Current per MPPT (A)	27+27	
Grid Input		
Rated Grid Voltage (Vac)	220/230/240±5%	
Voltage Input Range (Vac)	90~280	
Rated Grid Frequency (Hz)	50 / 60	
Max Input Current (A)	40	50
Total Current Harmonic Distortion (THDi)	<3% (of nominal power)	
Load Parameters		
Rated Output Power (W)	6000	8000
Rated Output Current (A)	27	35
Rated Output Frequency (Hz)	50/60±0.1%	
Overload Capacity	1min@101~110%;10s@110% ~ 150%;5s@150% ~ 200%;100ms@ > 200%	
Transfer Time (ms)	10ms for IT equipment, 20ms for household loads	
Total Voltage Harmonic Distortion (THDv)	<3%	
Efficiency		
Max Efficiency	97.0%	
MPPT Tracking Efficiency	99.9%	
Protection		
General	DC reverse polarity protection, AC output overcurrent protection, overheating protection, AC output overvoltage protection, AC output short-circuit protection, DC component monitoring, overload power derating protection, grid monitoring, ground fault detection, surge protection	
Surge Protection	TYPE II(DC), TYPE II(AC)	
Overvoltage Protection	OVC II (DC), OVC III (AC)	
General Parameters		
Operating Temperature (°C)	-40 to +60 (derating above 45°C)	
Dimensions [W×H×D] (mm)	430*350*177.8	
Weight (kg)	16.0	
Inverter Topology	Non-isolated	
Cooling Method	Smart cooling	
Altitude (m)	≤3000	
IP Rating	IP66	
Communication Method	RS485 / CAN / Dry contact / External battery NTC / Parallel communication / Wi-Fi (built-in)	
Warranty	5 years	
Certification Standards		
Safety Standards	IEC 62109-1:2010, EN 62109-1:2010, IEC 62109-2:2011, EN 62109-2:2011	
EMC Standards	EN IEC 61000-6-1:2019;EN IEC 61000-6-3:2021;EN IEC 61000-3-11:2019;EN61000-3-12:2011	
Energy Efficiency Standard	IEC 61683:1999	

ROSA G2



ROSA G2

Single-Phase Low-Voltage Hybrid Inverter

Product Features >>

- 230A high-current charge/discharge — shorter charging time, eliminating power shortage anxiety
- 200% (2x) support for two-times transient overload, providing stronger load adaptability
- Flexible parallel expansion — supports multiple unit connections for easy capacity expansion
- Low-voltage wake-up — PV low voltage forces the battery to wake up, improving stability and extending power supply duration
- Smart APP monitoring — remote monitoring with convenient operation
- IP66-rated design — dustproof and waterproof, ensuring long equipment life

ROSA G2 Product Specifications

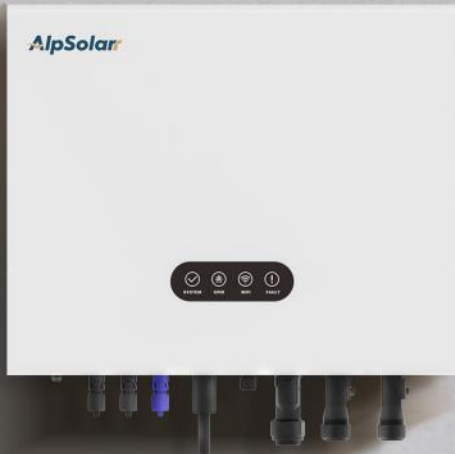
Battery Parameters	8kW	10kW	12kW
Battery Type	Lithium battery & lead-acid battery		
Rated Battery Voltage (Vdc)	48		
Battery Voltage Range (Vdc)	40~60		
Max Charge/Discharge Current (A)	180/180	200/200	230/230
PV Forced Wake-up	Supported		
PV Input			
Max Input Power (W)	12000	15000	18000
Max Input Voltage (Vdc)	500		
Rated Input Voltage (Vdc)	370		
Start-up Voltage (Vdc)	100		
MPPT Voltage Range (Vdc)	100~425		
Number of MPPTs / Strings per MPPT	3/2+1+1		
Max Input Current per MPPT (A)	28/16/16		
Max Short-Circuit Current per MPPT (A)	44/25/25		
Grid Input & Output			
Rated Grid Voltage (Vac)	L/N/PE, 230		
Rated Grid Frequency (Hz)	50		
Rated Grid Connection Power (W)	8000	10000	12000
Rated Grid Connection Current (A)	34.8	43.5	52.2
Max Grid Connection Apparent Power (VA)	8800	11000	13200
Max Grid Connection Current (A)	40	50	60
Max Input Apparent Power (VA)	12000	15000	18000
Max Input Current (A)	52.2	65.2	78.3
Total Current Harmonic Distortion (THDi)	< 3%		
Power Factor	0.8 leading ~ 0.8 lagging		
Load Parameters			
Rated Output Power (W)	8000	10000	12000
Rated Output Current (A)	34.8	43.5	52.2
Rated Output Frequency (Hz)	50		
Overload Capacity	110% continuous; 200% for 10s		
Transfer Time (ms)	≤10		
Total Voltage Harmonic Distortion (THDv)	< 3%		
Efficiency			
Max Efficiency	97.8%		
European Efficiency	96.5%		
MPPT Efficiency	99.9%		
Matching Diesel Generator/Grid Parameters—Slow Charging Port			
General	PV reverse polarity protection, insulation impedance detection, ground fault detection, overcurrent protection, overvoltage protection		
Surge Protection	DC Protection Class II / AC Protection Class II		
Overvoltage Protection	DC Protection Class II / AC Protection Class III		
AFCI	Optional		
General Parameters			
Operating Temperature (°C)	-25 to +60 (derating above 45°C)		
Dimensions [W×H×D] (mm)	450*570*268		
Weight (kg)	39		
Inverter Topology	Non-isolated		
Cooling Method	Smart cooling		
Altitude (m)	≤3000		
IP Rating	IP66		
Communication Method	RS485, Wi-Fi /GPRS, CAN2.0		
Warranty	5 years (standard) / 10 years (optional)		
Maximum Parallel Units	6		
Certification Standards			
Grid-Connection Standards	VDE-AR-N 4105, VDE V 0126-1-1, CEI 0-21, G98/G99, EN 50438/EN50549, NRS 097		
Safety Standards	IEC/EN 62109-1, IEC/EN 62109-2		
EMC Standards	EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN 61000-3-12:2011,EN IEC 61000-3-11:2019		


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ROSA T2



ROSA T2

Three-Phase Low-Voltage Hybrid Inverter

Product Features >>

- Silent & Fanless — Fanless design for low-noise operation
- 150% (1.5x) — Supports 1.5x transient overload, providing stronger load adaptability
- Flexible Parallel Expansion — Supports multiple unit connections for easy capacity expansion
- 110% Unbalanced Load Support — Supports 110% three-phase unbalanced load, adapting to complex grid environments
- Smart APP Monitoring — Remote monitoring with convenient operation
- IP66 Rating — Dustproof and waterproof, ensuring long equipment life

ROSA T2 Product Specifications

Model	5kW	6kW	8kW	10kW	12kW
Battery Parameters					
Battery Type	Lithium battery & lead-acid battery				
Rated Battery Voltage (Vdc)	400				
Battery Voltage Range (Vdc)	135~800				
Max Charge/Discharge Current (A)	33/33				
PV Input					
Max Input Power (W)	7500	9000	12000	15000	18000
Max Input Voltage (Vdc)	1000				
Rated Input Voltage (Vdc)	600				
Start-up Voltage (Vdc)	120				
MPPT Voltage Range (Vdc)	180~900				
Number of MPPTs / Strings per MPPT	2/1+1				
Max Input Current per MPPT (A)	16/16				
Max Short-Circuit Current per MPPT (A)	20/20				
Grid Input & Output					
Rated Grid Voltage (Vac)	3L/N/PE, 400				
Rated Grid Frequency (Hz)	50				
Rated Grid Connection Power (W)	5000	6000	8000	10000	12000
Rated Grid Connection Current (A)	7.3	8.7	11.6	14.5	17.4
Max Grid Connection Apparent Power (VA)	5500	6600	8800	11000	13200
Max Grid Connection Current (A)	8.4	10	13.4	16.7	20
Max Input Apparent Power (VA)	5500	6600	8800	11000	13200
Max Input Current (A)	8.4	10	13.4	16.7	20
Total Current Harmonic Distortion (THDi)	< 3%				
Power Factor	0.8 leading ~ 0.8 lagging				
Load Parameters					
Rated Output Power (W)	5000	6000	8000	10000	12000
Rated Output Current (A)	7.3	8.7	11.6	14.5	17.4
Rated Output Frequency (Hz)	50				
Overload Capacity	110% continuous; 150% for 10s				
Transfer Time (ms)	≤10				
Total Voltage Harmonic Distortion (THDv)	< 3%				
Efficiency					
Max Efficiency	97.5%	97.5%	97.8%	98.0%	98.4%
European Efficiency	96.8%	97.1%	97.1%	97.3%	97.3%
MPPT Efficiency	99.9%				
Protection					
General	PV reverse polarity protection, insulation impedance detection, ground fault detection, overcurrent protection, overvoltage protection				
Surge Protection	DC Protection Class II / AC Protection Class II				
Overvoltage Protection	DC Protection Class II / AC Protection Class III				
AFCI	Optional				
General Parameters					
Operating Temperature (°C)	-25 to +60 (derating above 45°C)				
Dimensions [W×H×D] (mm)	565*465*197				
Weight (kg)	31				
Topology	Non-isolated				
Cooling Method	Natural cooling				
Altitude (m)	≤3000				
IP Rating	IP66				
Communication Method	RS485, Wi-Fi /GPRS, CAN2.0				
Warranty	5 years (standard) / 10 years (optional)				
Maximum Parallel Units	6				
Certification Standards					
Grid-Connection Standards	VDE-AR-N 4105, VDE0126-1-1, EN50549, CEI 0-21/16, EIFS, PSG, TOR				
Safety Standards	IEC/EN 62109-1, IEC/EN 62109-2				
EMC Standards	EN IEC 61000-6-1:2019, EN IEC 61000-6-3:2021, EN 61000-3-12:2011,EN IEC 61000-3-11:2019				


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LIVO-Y

Low Voltage Energy Storage Battery System

Product Features >>

- Intelligent control with dual safety protection
- Wide temperature range operation — all-weather adaptability to high and low temperatures
- Wall-mounted design for efficient space utilization
- Multiple units in parallel for flexible capacity expansion



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LIVO-Y Product Specifications

Model	LIVO-Y
Performance Specifications	
Battery Type	Lithium Iron Phosphate (LFP)
Rated Energy (kWh)	5.12
Rated Voltage (Vdc)	51.2
Rated Capacity (Ah)	100(1C)
Rated Charge Current (A)	50
Rated Discharge Current (A)	50
Max Continuous Charge Current (A)	100
Max Continuous Discharge Current (A)	100
Communication	RS485 / CAN2.0
Display	LED light panel / Display screen (optional)
Cycle Life	6,000 cycles (@90% DOD, 70% SOH)
Protection Features	Dual safety protection [BMS, system circuit protection], over-temperature protection, overcurrent protection, short-circuit protection, overcharge protection, over-discharge protection
Number of Units in Parallel	Max 16 units
Warranty	5 years (standard) / 10 years (optional)
Physical Specifications	
Dimensions [W×H×D] (mm)	450*540*140
Weight (kg)	45
Environmental Specifications	
Storage Temperature (°C)	-20 ~ +55
Discharge Temperature (°C)	-15 ~ +55
Charge Temperature (°C)	0 ~ +50
Relative Humidity	5% ~ 95%
IP Rating	IP65
Altitude (m)	≤2000
Cooling Method	Natural cooling
Mounting Method	Indoor / Outdoor wall-mounted installation
System Certifications	
Other Certifications	UN 38.3

* Test conditions: 25°C, at the beginning of product life cycle.
* Product specifications are subject to change without prior notice.

LIVO-16E



LIVO-16E Low Voltage Energy Storage Battery System

Product Features >>

- Intelligent control with Wi-Fi/Bluetooth remote monitoring (optional)
- 1C continuous charge and discharge performance
- Multiple units in parallel for flexible capacity expansion — supports up to 16 units in parallel
- Compatible with multiple inverter brands
- High-quality Lithium Iron Phosphate (LiFePO₄) safety performance
- 5-year warranty

LIVO-16E Product Specifications

Model	LIVO-16E
Performance Specifications	
Battery Type	Lithium Iron Phosphate (LFP)
Rated Energy (kWh)	16.07
Rated Voltage (Vdc)	51.2
Rated Capacity (Ah)	314
Rated Charge Current (A)	157
Rated Discharge Current (A)	157
Max Continuous Charge Current (A)	200
Max Continuous Discharge Current (A)	200
Communication	RS485/CAN2.0
Display	LED light panel
Cycle Life	≥6,000 cycles (25°C ± 2°C, 90% DOD @ 80% SOH)
Protection Features	Overcharge, over-discharge, overcurrent, short-circuit
Number of Units in Parallel	Max 16 units
Warranty	5 years
Physical Specifications	
Dimensions [W×H×D] (mm)	490*831*230
Weight (kg)	125
Environmental Specifications	
Storage Temperature (°C)	-30~60
Discharge Temperature (°C)	-20~60
Charge Temperature (°C)	0~60
Relative Humidity	5% ~ 95%
IP Rating	IP20
Altitude (m)	≤2000
Cooling Method	Natural cooling
Mounting Method	Indoor floor-standing installation
System Certification	
Other Certification	UN 38.3

* Test conditions: 25°C, at the beginning of product life cycle.
* Product specifications are subject to change without prior notice.



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COMO-H5



COMO-H5 High-Voltage Energy Storage Battery System

Product Features >>

- Modular safety, with six layers of protection per battery pack:
 - Full-tab cell design reduces thermal resistance;
 - Built-in fire extinguishing module automatically extinguishes fires within 5 seconds;
 - Comprehensive cell health monitoring;
 - Gas-electric reverse design for enhanced safety;
 - External module insulation;
 - Equipped with a pressure relief valve for automatic pressure relief and explosion protection.
- Modular installation with floating terminals for quick docking.
- Built-in heating system ensures safe operation even at -20°C.
- Supports 1C charging and discharging, adapting to different load requirements.
- Supports 12 parallel clusters, up to 368.6kWh.

COMO H5 Product Specifications

Model	CH510K2M001	CH515K3M001	CH520K4M001	CH525K6M001	CH530K7M001
Performance Specifications					
Battery Type	Lithium Iron Phosphate (LFP)				
Rated Energy (kWh)	10.24	15.36	20.48	25.60	30.72
Rated Voltage	204.8	307.2	409.6	512.0	614.4
Voltage Range	179.2~ 233.6	268.8 ~ 350.4	358.4 ~ 467.2	448.0 ~ 584.0	537.6 ~ 700.8
Rated Capacity (Ah)	50				
Rated Charge Current (A)	25				
Rated Discharge Current (A)	25				
Max Continuous Charge Current (A)	50				
Max Continuous Discharge Current (A)	50				
Communication	RS485 / CAN2.0				
Display	LED indicator lights + mobile APP (coming soon)				
Cycle Life	10 years or 6,000 cycles (@90% DOD, 70% EOL)				
Protection Features	Four-layer safety protection [BMS, fire suppression capsule, system circuit protection, cloud monitoring], over-temperature protection, overcurrent protection, short-circuit protection, overcharge protection, over-discharge protection				
Maximum Parallel Units	12				
Intelligent Heating	Supported				
Warranty	5 years (standard) / 10 years (optional)				
Physical Specifications					
Dimensions [W×H×D] (mm)	550*580*350	550*785*350	550*990*350	550*1195*350	550*1400*350
Weight (kg)	113.2	160.7	208.2	255.7	303.2
Environmental Specifications					
Storage Temperature (°C)	0 ~ +35				
Discharge Temperature (°C)	-20 ~ +55				
Charge Temperature (°C)	-20 ~ +50				
Relative Humidity	5% ~ 95%				
IP Rating	IP65				
Altitude (m)	≤2000				
Cooling Method	Natural cooling				
Mounting Method	Indoor / Outdoor floor-standing installation				
System Certifications					
Battery System	IEC 62619:2022, IEC/EN 62040-1				
EMC Certification	EN/IEC 61000-6-1:2019, EN/IEC 61000-6-3:2021, EN/IEC 61000-6-2:2019, EN/IEC 61000-6-4:2019				
Other Certifications	UN 38.3, RoHS 2.0				

* Test conditions: 25°C, at the beginning of product life cycle.
* Product specifications are subject to change without prior notice.


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FlexCube-A



FlexCube-A

Series Product Overview



Application Scenarios

Weak power grids or off-grid areas, such as construction sites, highlands, islands, fishing villages, grasslands, and deserts. The diesel-storage system can serve as an independent power supply system, with the diesel generator providing supplementary power. When powering loads, the energy storage system works together with the diesel generator to share the load, significantly reducing diesel consumption and improving power supply stability.



Adaptable to Impact Load Equipment

FlexCube is compatible with impact load equipment such as water pumps, drilling rigs, lifts, and tower cranes.



Dual Charging Circuits, Simultaneous Charging and Discharging

The dual charging circuit design allows for simultaneous charging and discharging from weak power grids or diesel generators, ensuring stable operation of the microgrid.



Maintenance Bypass Design — No Downtime in Case of Fault

In the event of unexpected situations, it can operate independently without service interruption. No cable removal is required — quick and convenient.



Easy Transport — Ready to Move and Use

The standard 10-foot container and lightweight design allow for easy transport to different locations for deployment.



Quiet Operation

Peak operating noise is below 75 decibels, suitable for noise-sensitive environments.



Side Cable Outlet — Plug-and-Play

The cabinet features a side cable outlet design, allowing it to be placed directly on flat ground for use without the need for a prefabricated base.



Multi-Unit Parallel Expansion

Power capacity can be flexibly configured to meet the power demands of various scenarios.



AI Cloud Platform for Intelligent Management

Remote management and maintenance, real-time data updates, and AI-powered intelligent analysis for efficient management.

FlexCube-A Series Product Specifications

Model	FlexCube-250P	FlexCube-250L	FlexCube-500L
System Capacity	250kW/161kWh	250 kW / 261 kWh (321 kWh optional)	500 kW / 402 kWh (422/482 kWh optional)
System Wiring	Three-phase four-wire + PE		
Grid-Connected Operation Mode			
Rated Output Power (kVA)	250	250	500
Rated Output Current (A)	361	361	722
Allowed Grid Voltage (Vac)	400 (-15%~15%)		
Isolation Method	Power Frequency Isolation		
Allowed Grid Frequency (Hz)	50±5/60±5		
Total Current Harmonic Distortion Rate	≤ 3%		
Voltage Ripple Factor	≤ 1%		
Power Factor	0.99/-1~1	0.99/-1~1	0.99/-1~1
Rated Input Power (kVA)	250	500	500
Rated Input Current (A)	361	722	722
Number of Grid-Connected Units	Diesel generator does not support paralleling; Grid allows 4 units in parallel		
Off-Grid Mode			
Rated Output Voltage (Vac)	400		
Output Voltage Distortion	≤ 1% (linear load)		
Rated Output Frequency (Hz)	50/60		
Grid/Off-Grid Switching Device	Present		
Number of Off-Grid Units	4		
Interaction Method			
Remote	Cloud platform		
Local	Touch screen		
Battery Parameters			
Battery Type	Lithium Iron Phosphate (LFP) Battery		
System Nominal Voltage (V)	512	832	704
Operating Voltage Range (V)	464~576	728~936	616~792
Total Battery System Capacity (kWh)	161	261 (321 optional)	422
Operating Temperature Range	Charging: 0°C to 45°C Discharging: -20°C to 45°C		
Matching Diesel Generator/Grid Parameters—Slow Charging Port			
Wiring Method	Three-phase three-wire + PE		
Input Voltage (Vac)	320~485		
Input Frequency (Hz)	45~65		
Power (kW)	40 (*)	40 (*)	80 (*)
Communication Method	Charging: 0°C to 45°C Discharging: -20°C to 45°C		
Matching Diesel Generator/Grid Parameters—Main Input Port			
Capacity	≥ 125kW	≥ 125kW	≥ 250kW
Communication Method	RS485		
System Parameters			
System Dimensions (WxHxD) (mm)	1600*2300*2500	2500*2000*2591	2991*2438*2591
IP Rating	IP54		
Weight (kg)	5000	9180	9460
Allowed Altitude (m)	2000		
Communication Interface	Ethernet, RS485, CAN		

*Smaller input sources can be used, but this will result in slower charging speeds.

FlexCube-C



FlexCube-C

Series Product Overview

Application Scenarios

Areas without grid power or with weak power grids, such as mines, mountainous regions, and construction sites. These areas are characterized by the impracticality or high cost of installing charging piles. Therefore, mobile charging vehicles are a more suitable solution for providing DC fast charging to electric construction vehicles/machinery in the work area.

Strong Economic Advantages

This solution saves on grid construction costs in the work area. The mobile charging vehicle directly provides fast charging to construction vehicles on-site (e.g., in mines), significantly reducing infrastructure investment.

Strong Adaptability

Mobile charging vehicles are available in two battery capacity options: 1306 kWh and 2090 kWh. These options cater to the fast-charging needs of small and medium-sized electric construction vehicles/machinery and medium and large-sized electric construction vehicles/machinery, respectively.

Flexible Product Transport

The containerized design allows for flexible transport. Enables rapid relocation. After use at one site, it can be easily transported to the next location for deployment.

Safety Features

- The product is equipped with a 320kW dual-gun integrated charging pile, meeting the DC fast-charging needs (less than 2 hours) of most domestic construction vehicles/machinery.
- The product itself supports both AC charging and DC fast charging, offering flexible charging options. For DC fast charging, up to six simultaneous charging guns can be customized.

FlexCube-C Series Product Specifications

Model	FlexCube-2090C	FlexCube-1306C
System Capacity	2090 kWh (2351/2612 kWh optional)	1306 kWh (1044 kWh optional)
Battery Parameters		
Cell Type	Lithium Iron Phosphate (LFP)	
Cell Specifications	3.2V 314Ah 0.5P	
IP Rating	IP67	
AC Charge and Discharge		
Rated Output Power	810 kW (expandable to 1350 kW)	405 kW (expandable to 675 kW)
Rated System Output Voltage	AC400V, 3P+N+PE	
Rated Discharge Frequency	50/60Hz	
Discharging Outlet 1	3P+N+PE Heavy-Duty Outlet (Customizable)	
Discharging Outlet 2	1*16A Single-Phase 5-Port Socket (Expandable & Customizable)	
DC Discharging		
Charging Pile	320 kW Dual-Gun Integrated DC Charging Pile	
Number of Charging Piles	2	1
Charging Pile Interface	250A	
Output Voltage Range	300-1000Vdc	
Gun Cable Length	7 meters	
DC Charging		
Rated Charging Power	3*320kw	2*320kw
DC Charging Voltage Range	DC728~936V	
DC Charging Interface Type	4*300A Vehicle-Mounted Charging Socket (Customizable)	
System Parameters		
Cooling Method	Liquid cooling	
Communication Interface	RS485, Ethernet, CAN, 4G	
Operating Temperature Range	-20°C ~50°C	
Interaction Method	Cloud platform/touch screen	
Altitude	2000m	
IP Rating	IP54	
Corrosion Protection Rating	C4 (C5 Customizable)	
Dimensions (WxHxD)	2438*2591*6058mm	2438*2896*2991mm

FlexCube-E



FlexCube-E

Series Product Overview

Application Scenarios

Ideal for off-grid or weak-grid areas such as construction sites, mines, islands, fishing villages, grasslands, and deserts lacking reliable grid power. The diesel storage system serves as an independent power supply. When under load, the energy storage system works together with the diesel generator to significantly reduce diesel consumption and improve power supply stability.

Abundant Interfaces

Features a standard 400A single-core PowerLock quick-connect input/output interface for high-power applications and a 125A five-core quick-connect input interface for rapid charging and efficient deployment. Offers a variety of AC output interfaces: AC 380V 63A/32A/16A sockets for powering small construction machinery. Customizable socket options are available.

Proven System Reliability

Dual redundancy with energy storage + diesel. Total battery system capacity of 474/711 kWh (using CATL battery cells). Adapts to complex energy demands.

Flexible Product Transport

Designed to fit a standard 10-foot shipping container for easy transportation. After use at one site, it can be easily transported to the next location for deployment.

Multiple Power Control Modes

The system supports VF, PQ, and VSG modes to meet the power support requirements of complex field operations.

Liquid Cooling

Employs liquid-cooled battery packs. Liquid cooling offers superior temperature uniformity and heat dissipation efficiency compared to air cooling, enabling high-rate operation and extending lifespan. The IP67 rating ensures performance in harsh environments, including high temperatures, humidity, and dust.

FlexCube-E Series Product Specifications

Model	FlexCube-EL-500kW/784kWh	FlexCube-EL-500kW/522kWh
Basic Parameters		
System Capacity	783.744kWh	522.496kWh
Battery Parameters		
Cell Type	Lithium Iron Phosphate (LFP)	
Cell Specifications	3.2V 314Ah	
Discharge Rate	1C	
Pack Assembly Method	1P52S	
Rack Assembly Method	1P260S	
Stack Assembly Method	3P260S	
IP Rating	IP67	
AC Output		
Rated Output Power	500kW	
Rated Output Voltage	AC400V, 3P+N+PE	
Rated Output Frequency	50Hz	
Output Interface 1	2*400A Powerlocks	
Output Interface 2	3P+N+PE:1*63A CEE,1*32A CEE,1*16A CEE	
AC Input		
Rated Input Voltage	AC400V, 3P+N+PE	
Charging Input Range	340~460V	
Rated Input Frequency	50Hz	
Charging Interface 1	1*400A Powerlocks	
Charging Interface 2	1 × 63A CEE (125A optional)	
Configuration		
Automatic Grid Connection/Disconnection	Supported	
Grid Connection/Disconnection Transfer Time	≤20ms	
Charger	40 kW (80 kW optional)	
Power Control Mode	PQ/VF/VSG	
External Anti-Backflow Meter	Included	
System Parameters		
Number of Units in Parallel	2	
Cooling Method	Liquid cooling	
Communication Interface	Modbus TCP	
Operating Temperature Range	-20°C ~50°C	
Noise	75dB	
Altitude	2000m	
IP Rating	IP54	
Corrosion Protection Rating	C4	
Dimensions (WxHxD)	2438*2591*2991mm	
Weight	Approximately 13 tons	Approximately 11.2 tons
Certifications	EN 50549-1/10; EN 50549-2/10; IEC 61000-6-2; IEC 61000-6-4; IEC 60529; IEC 62619; IEC 62477; IEC 60370; UN 38.3; RoHS	

FlexCube-T



FlexCube-T

Series Product Overview

Application Scenarios

Open-pit mining operations, large construction sites, emergency rescue projects, and other areas with no grid power or weak grid coverage. These locations are characterized by their distance from fixed power sources. In these scenarios, a high-capacity mobile charging vehicle is needed to provide stable power to electric construction vehicles, ensuring continuous and stable operation and providing convenient, efficient, and reliable power support for construction work.

Ultra-High Energy Density

Two models with ultra-high capacities (2090 kWh and 3135 kWh) are available, supporting the long-term operational needs (approximately 8-10 hours) of medium and large electric construction vehicles. A single charge is sufficient for a full day's work, significantly improving efficiency and reducing operating costs.

Flexible and Fast Charging

The mobile energy storage vehicle supports simultaneous DC fast charging with 2-4 charging guns, with charging times of only 2-3 hours. It also supports AC charging from the mains power supply, offering flexible charging options.

Easy Transport and Plug-and-Play Operation

The standard containerized design enables flexible transportation. The quick-connect design for charging and discharging simplifies the connection process.

Safety Features

- Multiple Battery Protections**
Multiple safety mechanisms are in place, including overcharge, over-discharge, overcurrent, and short-circuit protection.
- Fire and Explosion Prevention Design**
The battery compartment is equipped with a combustible gas detector, as well as thermal and smoke sensors. Should gas concentration exceed a preset threshold, the system automatically activates the ventilation system to expel it. In the event of high gas concentration accompanied by thermal or smoke alarms, the fire suppression system is triggered. The entire compartment is also fitted with water-based firefighting interfaces.
- Stable Electrical Insulation**
The entire vehicle's electrical system has excellent insulation performance, effectively preventing electrical leakage. All electrical components undergo rigorous insulation treatment, with insulation resistance far exceeding industry standards, ensuring the electrical safety of operators and construction vehicles even in humid and harsh construction environments.

FlexCube-T Series Product Specifications

Model	FlexCube-2090T	FlexCube-1306T
System Capacity	2090 kWh (3135 kWh optional)	1306 kWh (1045 kWh optional)
Battery Parameters		
Cell Type	Lithium Iron Phosphate (LFP)	
Cell Specifications	3.2V 314Ah 0.5P	
IP Rating	IP67	
AC Charge and Discharge		
Rated Output Power	1080 kW (expandable to 1350 kW)	675 kW (expandable to 1350 kW)
Rated System Output Voltage	AC400V, 3P+N+PE	
Rated Discharge Frequency	50/60Hz	
Discharging Outlet 1	3P+N+PE Heavy-Duty Outlet (Customizable)	
Discharging Outlet 2	1*16A Single-Phase 5-Port Socket (Expandable & Customizable)	
DC Charging		
Rated Charging Power	3*320kw	2*320kw
DC Charging Voltage Range	DC728~936V	
DC Charging Interface Type	4*300A Vehicle-Mounted Charging Socket (Customizable)	
System Parameters		
Cooling Method	Liquid cooling	
Communication Interface	RS485, Ethernet, CAN, 4G	
Operating Temperature Range	-20°C ~50°C	
Interaction Method	Cloud platform/touch screen	
Altitude	2000m	
IP Rating	IP54	
Corrosion Protection Rating	C4 (C5 Customizable)	
Dimensions (WxHxD)	2438*2896*6058mm	2438*2896*2991mm

FlexCube-H



FlexCube-H

Series Product Overview

Application Scenarios

Ideal for off-grid or weak-grid areas such as mines, islands, fishing villages, grasslands, and deserts. The solar+storage+diesel system serves as an independent power supply. During the day, solar panels generate electricity, with excess energy stored in the battery system. At night or during inclement weather, the stored energy or the diesel generator provides power. This significantly reduces diesel consumption and enhances power stability.

Strong Economic Advantages

The system boasts a maximum solar power capacity of 720 kW, reducing diesel consumption and electricity costs, while extending the lifespan of the diesel generator (by minimizing runtime).

Proven System Reliability

Offers triple protection with solar, energy storage, and diesel backup. Battery system capacity options of 1205 kWh and 1446 kWh address diverse energy needs.

Flexible Product Transport

Designed to fit a standard 20-foot shipping container for easy transportation. After use at one site, it can be easily relocated to another.

Safety Features

- Grid and off-grid operation; up to 4 units can be paralleled, with a 500 kW rated hybrid inverter.
- Each hybrid inverter is equipped with 10 MPPT (Maximum Power Point Tracking) modules; each PV input cabinet has 5 MPPT modules.
- Each MPPT channel allows only one PV array connection; PV strings require the use of surge protection combiner boxes.

FlexCube-H Series Product Specifications

Model	FlexCube-H	
System Capacity	500kW/1205kWh	500kW/1446kWh
System Wiring	3W+N+PE	
Grid-Connected Mode		
Rated Output Power (kVA)	500	
Rated Output Current (A)	722	
Grid Voltage (Vac)	400 (±15%)	
Isolation Method	Power Frequency Isolation	
Grid Frequency (Hz)	50±5/60±5	
THDi	≤ 3%	
Power Factor	0.99/~1~1	
Rated Input Power (kVA)	500	
Rated Input Current (A)	722	
Number of Grid-Connected Units	4	
Off-Grid Mode		
Rated Output Voltage (Vac)	400	
Rated Output Frequency (Hz)	50/60	
Grid/Off-Grid Switching Device	Present	
Number of Off-Grid Units	4	
Human-Machine Interaction		
Remote	Cloud platform	
Local	Touch screen	
Battery Parameters		
Cell Type	LFP	
Cell Capacity	314Ah	
Rated Cell Voltage	3.2V	
Discharge Rate	0.5C	
Battery Pack Assembly	5P240S/6P240S	
Rated System Voltage	768V	
Operating Voltage Range	672~864V	
Total System Capacity	1205kWh/1446kWh	
Operating Temperature Range	Charging: 0°C to 45°C Discharging: -20°C to 45°C	
PV Output Parameters		
PV Input Power (kW)	600/660/720	
Number of MPPT Modules	10/11/12	
MPPT Module Power (kW)	60	
MPPT Voltage Range (V)	250~650	
MPPT Maximum Current (A)	100	
Matching Diesel Generator/Grid Parameters—Slow Charging Port		
Wiring Method	3W+PE	
Input Voltage (Vac)	320~453	
Input Frequency (Hz)	45~65Hz	
Power (kW)	80*	
Communication Method	RS 485	
System Parameters		
Dimensions (WxHxD) (mm)	2438*2591*6058	
IP	IP54	
Weight (kg)	18000/20000	
Permissible Altitude	2000m	
Communication Interface	Ethernet, RS485, CAN	

*Smaller input sources can be used, but this will result in slower charging speeds.

ATLAS 05



ATLAS 05 Commercial & Industrial Integrated Energy Storage Unit

Product Features >>

- 314 Ah battery cells with high energy density design
- Modular design, rapid deployment, parallel expansion
- Liquid cooling solution for enhanced safety and reliability
- Real-time monitoring, cloud-based centralized maintenance, multi-platform display
- Multi-level distributed architecture with neural network intelligent SOX algorithm



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ATLAS 05 Commercial & Industrial Integrated Energy Storage Unit

Model		ATLAS 261L	
Battery Parameters			
Cell Type	Lithium Iron Phosphate (LFP)		
Cell Specifications	314Ah		
Pack Capacity	52.2kWh		
Rated Capacity	261.2kwh		
Rated Voltage	832V		
AC Side Grid-Connected Parameters			
AC Rated Power	125kW	135kW	
Max Output Power	137.5kVA	148.5kVA	
Current Distortion Rate	<3% (at rated power)		
Rated Voltage	400V		
Rated Frequency	50/60Hz		
AC Side Off-Grid Parameters			
AC Rated Power	125kW	135kW	
Wiring Method	3L+N+PE		
Rated Output Voltage	400V		
Rated Output Frequency	50/60Hz		
Voltage Distortion Rate	<3% (at rated power)		
System Parameters			
Communication Interface	Ethernet		
Communication Protocol	Modbus		
Human-Machine Interaction	Touch Screen, cloud platform, mobile APP		
IP Rating	IP54		
Cooling Method	Liquid cooling		
Mounting Method	Outdoor		
Corrosion Protection Rating	C3 (C5 Customizable)		
Ambient temperature	-20°C to +55°C (derating above 45°C)		
Ambient Humidity	0 ~ 100% (non-condensing)		
Noise	<70dB		
Altitude	2000m		
Dimensions (W×D×H)	1100×1300×2450mm		
Weight	Approximately 2,300 kg		

Residential Inverter and Energy Storage Case Studies



FlexCube Case



Singapore

500kW / 430kWh
Construction Site
Application Scenarios

Singapore

2*250kW / 143kWh
Construction Site
Application Scenarios



Thailand

500kW / 430kWh
Construction Site
Application Scenarios

South Africa

500kW / 1446kWh
Solar-Storage-Diesel
Applications



China

500kW / 430kWh
Construction Site
Application Scenarios



China

240kW / 1306kWh
Integrated Charging Pile
Construction Machinery
Charging Application
Scenarios



China

500kW / 699kWh
Construction Machinery
Charging Application
Scenarios



Energy Storage Partner Companies

