

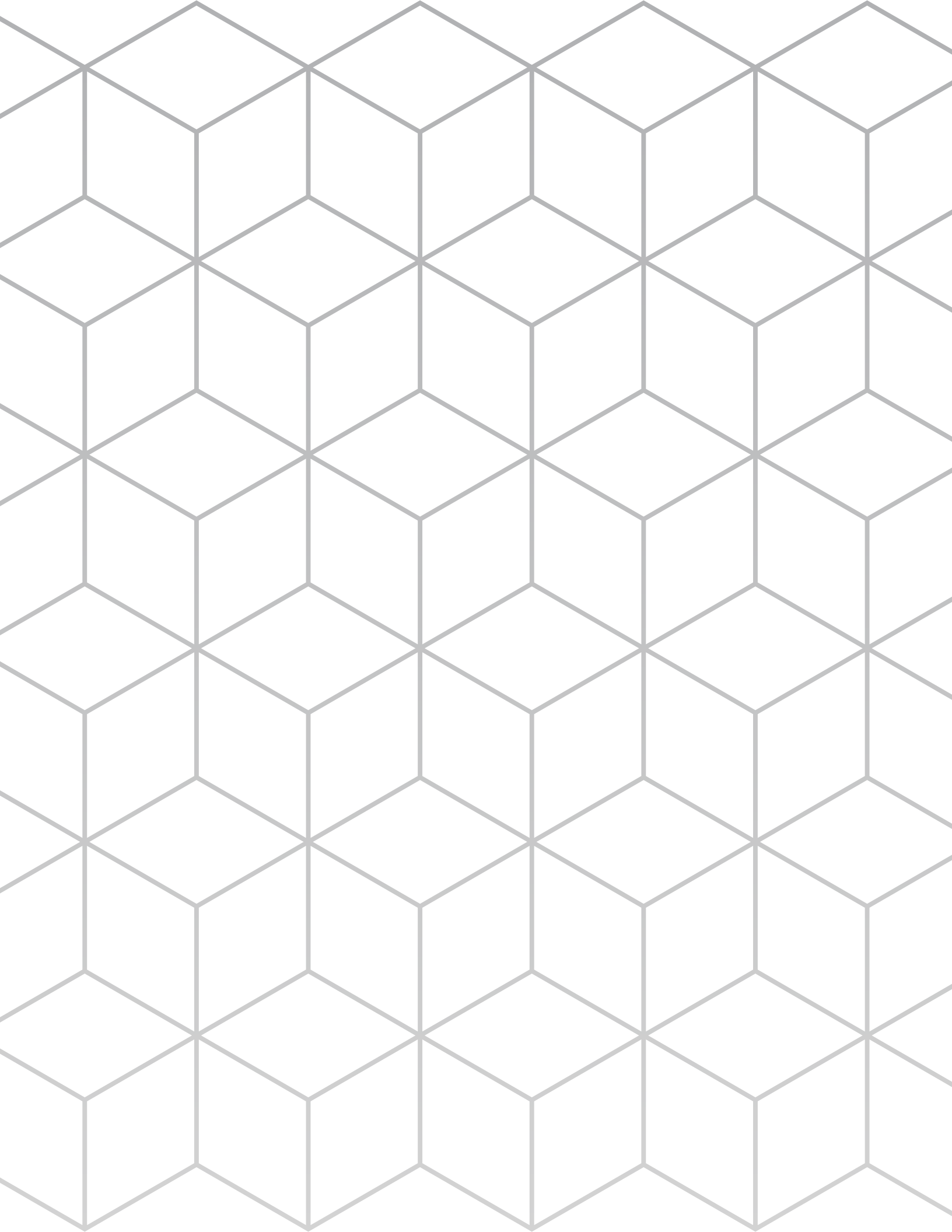


HELIOS

INDUSTRIES



POWERED BY **RAM TECHNOLOGY**
SOLUTIONS FOR YOUR ENERGY NEEDS



DIRECTORY

ABOUT US 5

RECREATIONAL 6

RESIDENTIAL 12

COMMERCIAL 24



POWERED BY **RAM TECHNOLOGY**

HELIOS INDUSTRIES HAS DEVELOPED OUR OWN MICRO-GRID SYSTEMS CALLED RAM TECHNOLOGY, OR RESOURCE ALLOCATION MODULES.

ABOUT US

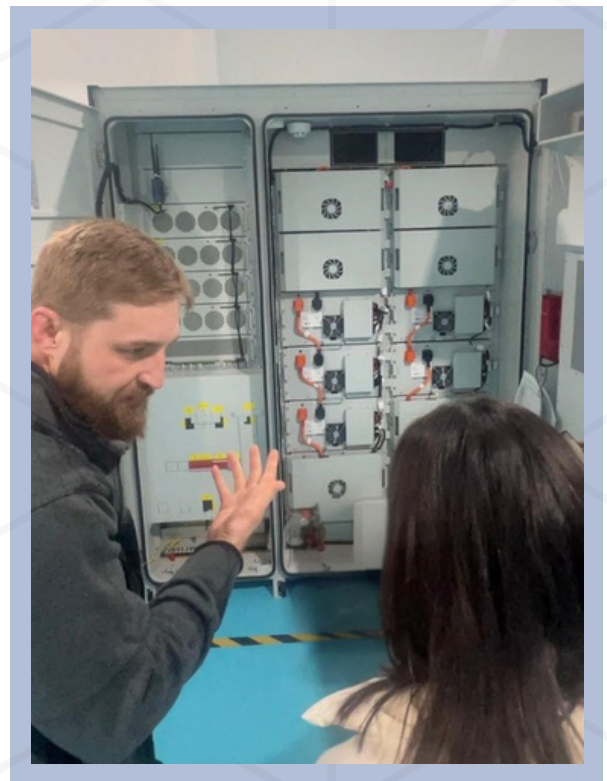
The Helios team boasts over 90 years of combined experience in both military and civilian applications. We offer innovative, custom mobile, semi-mobile, and stationary systems solutions. Our modules provide stable power, connectivity, and water filtration/production using hybrid generators, battery storage, and solar energy.

Helios designs tailored units for rural areas, military bases, and emergency relief operations, aiming to meet specific client needs sustainably.

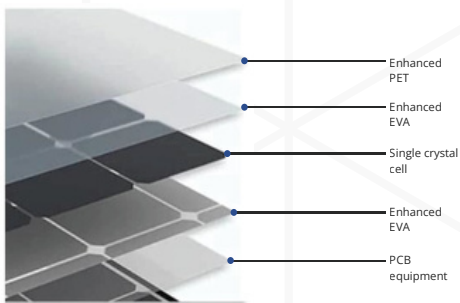
Our diverse selection of energy products are procured and assembled by our team to ensure that every aspect of quality control and functionality is meticulously monitored and inspected. We offer customization for EV chargers, battery storage systems, and solar inverters to align with your project requirements.

Our product lineup includes:

- Portable Charger
- AC Charger
- DC Charger
- Power Module
- Cloud Management System
- Mobile App
- Battery Energy Storage System
- Portable Power Stations
- Home Energy Storage System
- Inverters
- Solar Panels



Solar Generator for Portable Power Station



Features

Constructed from high-efficiency monocrystalline silicon cells, this solar panel can recharge portable power stations and ensure uninterrupted operation of equipment when linked to our portable power station. With a remarkable conversion efficiency of up to 20%, it works seamlessly with a 600w generator. This power kit is ideal for outdoor excursions, power outages, or as a reliable emergency backup. Weighing only 5.1kg, the IP65-rated solar panel is water-resistant and features a foldable design with an adjustable kickstand.



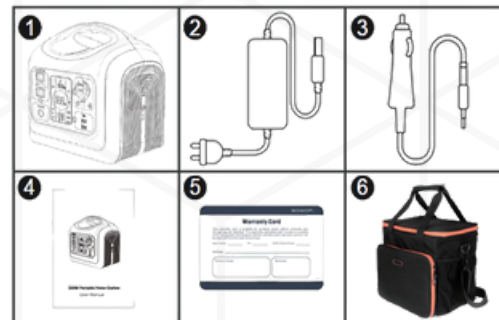
Solar Generator for Portable Power Station

MODEL	SINGLE CRYSTAL SILICON	
Output Power	100W	220W
Cell Efficiency	20%-22%	20%
Power Voltage	19.8V	19.8V
Power Current	5A	12.1A
DC Output	18V/100W	18V/220W
Dimensions	415x370x35 (folded) 1670x415x5 (unfolded)	655x520x35 (folded) 2290x520x5 (unfolded)
Net weight	4.75Kg	10.5Kg
Waterproof	IPX4	IPX4
Operating Temperature Range	-10~70℃	-10~70℃
Packing Dimensions(LxWxH)	480 x 90 x 45mm	750 x 640 x 140mm

Portable Power Station - PPS

Features

- LCD screen to easily track energy storage, power data, and operational status.
- Features a high-quality LiFePO4 battery known for its safety, deep cycling, and extended lifespan.
- Incorporates air cooling to enhance product reliability.
- Equipped with an external main switch to minimize power consumption and enhance safety.
- Includes foot pads and wall brackets to accommodate installation and usage in various locations.



1. 1800W Portable power station
2. Power adapter
3. Car charger to DC7909 line
4. Use manual
5. Two-year warranty card
6. Tote bag

PRODUCT	 Laptop (56W)	 Mobile Phone (12.4W)	 Camera (28W)	 Speaker (20W)	 Drone (22.2W)	 Car refrigerator (65W)	 Tablet (30W)	 Outdoor light (4W)
HELIOS-600 (600W)	Discharge 10 hours	Discharge 48 hours	Discharge 21 hours	Discharge 30 hours	Discharge 27 hours	Discharge 9 hours	Discharge 20 hours	Discharge 150 hours
HELIOS-1200 (1200W)	Discharge 21 hours	Discharge 96 hours	Discharge 42 hours	Discharge 60 hours	Discharge 54 hours	Discharge 18 hours	Discharge 40 hours	Discharge 300 hours

Portable Power Station - PPS

MODEL	HELIOS-PPS-600	HELIOS-PPS-1200
Rated voltage	100~120Vac/220~240Vac	
Rated power	600W	1200W
Peak power	1000W	3600W
Frequency	50/60Hz	
Rated voltage	12V	
Rated current	10A	
USB-A output	5V/3A; 9V/1.5A (18W Max)	
USB-C output	5V/3A; 9V/3A; 12A/3A; 15V/ 3A; 20V/3A (60W Max)	
USB-C output	5V/3A; 9V/3A; 12A/1.5A (18W Max)	
LED Light	7W Three Working Mode	5W Three Working Mode
Input voltage	12V-30V	
Input power	100W Max	200W Max
Rated capacity	595Wh	992Wh
Rated voltage	19.2Vdc	32Vdc
Battery cell type	LiFePO ₄	
Waterproof	IP21	
Working temperature	0-40℃	
Size(LxWxH)	267x197x247mm	330x220x289mm
Net weight	6.8Kg	11Kg

W3 / W5 Portable Power Station



Features

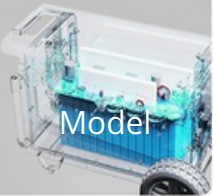
- Durable metal shell featuring a waterproof socket, capable of fast charging from 0-80% in just 2.5 hours, and comes with an uninterruptible power supply (UPS) function.
- LiFePO4 battery designed for over 3500 life cycles to 80%, with IP54 protection for versatile usage in various environments.
- W5 model: 5040Wh capacity (48V/105Ah), providing 5000W of continuous power and 7000W peak power.
- W3 model: 3072Wh capacity (51.2V/60Ah), delivering 3600W of continuous power and 7000W peak power.

MODEL	HELIOS-PPS-W5/W3	
Product type	HELIOS-PPS-W5	HELIOS-PPS-W3
Capacity	5040Wh (48V;105Ah)	3072Wh (51.2V; 60Ah)
AC Output	110V/4000W(Rated):7000w (Peak)	110V/3600W (Rated)6000w (Peak)
USB-A output	5V/3A;9V/1.8A; 12V/1.5A (18W Max)	5V/3A;9V/1.8A; 12V/1.5A (18W Max)
USB-C output	5V/3A;7V/2.4A;9V/1.8A; 12V/1.5A	5V/3A;7V/2.4A;9V/1.8A; 12V/1.5A
AC Charge Input	100~120V 1800W	100~120V 1800W
PV(Anderson) Input	12~150Vd.c mppt18-140V 15A Max 2100W Max	12~150Vd.c mppt18-140V 15A Max 2100W Max
Waveform	Sine Wave	Sine Wave
Size	33.6*20.2*19.8in (852.5*512*502mm)	33.6*20.2*19.8in (852.5*512*502mm)
Net Weight	150.57lb (68.3kg)	121.47lb (55.1kg)

W3 / W5 Portable Power Station

5000W
Rated Output
5040Wh
Capacity

Model



Expandable capacity
5.04-45.36 kWh





Max 2100W
Solar input



High-strength
Steel Shell



Emergency power
supply via gas generator

Big wheel



Extremely
portable design



IP54
protection



60dB(Titan) vs 80dB(traditional)
at 1m distance

60dB



W5 / W3 Power Station



User manual



Warranty Card



Anderson to MC4 Charger



AC Charger





Fast/Slow Charging Switch
Slow Charging: 900W
Fast Charging: 1800W

AC Charge Input

PV(Anderson) Input

Overload Protection
(AC IN Protection)

Main Power

LCD Screen

USB-C&USB-A Output

AC Output Port
(16A MAX)*2+30A

Extended Power Pack Connector

Ground Terminal

AC Output Power On/off

Overcurrent Protection

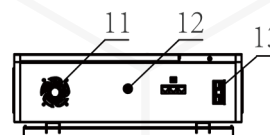
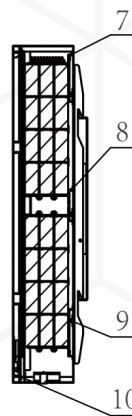
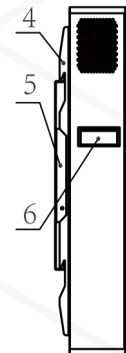
51.2V Energy Storage LiFePO4 Battery-Powerwall-PWG1



Features

- The LCD monitor showcases energy storage power data and operational status.
- Includes a high-quality battery that guarantees safety, deep cycling, and an extended lifespan.
- Air cooling is integrated to improve the product's reliability.
- An external main switch is provided to reduce power consumption and enhance safety.
- Foot pads and wall brackets are included for flexible installation in various settings.
- The built-in Battery Management System (BMS) protects against over-voltage, overload, over-temperature, and more, while remaining compatible with different load types within the voltage range.
- Supports the connection of up to 15 modules in parallel.

Structural Parts



1. White plate
2. LCD display
3. Black plate
4. Battery bracket
5. Wall mounted bracket
6. Handle
- 7/8. Module holder
9. Stiffening plate
10. DC fan
11. OFF/ON
12. Communication
13. Output connector

MODEL	HELIOS-15050BL-PWG1	HELIOS-160100BL-PWG1
BATTERY ENERGY	5.12kWh	10.24kWh
NOMINAL VOLTAGE	51.2V	51.2V
NOMINAL CAPACITY	100Ah	200Ah
EFFICIENCY	≥96%	≥96%
INNER RESISTANCE	10mΩ	7mΩ
CELL TYPE	LiFePO4	LiFePO4
CHARGE VOLTAGE	58.4V	58.4V
STANDARD CHARGING CURRENT	20A	40A
MAX. CONTINUOUS CHARGING CURRENT	1000A	100A
STANDARD DISCHARGE CURRENT	20A	40A
CONTINUOUS DISCHARGE CURRENT	100A	100A
PEAK DISCHARGE CURRENT	200A (3s)	200A (3s)
DISCHARGE CUT-OFF VOLTAGE	42V	42V
CHARGE TEMPERATURE RANGE	0~60°C	0~60°C
DISCHARGE TEMPERATURE RANGE	-10°C~65°C	-10°C~65°C
STORAGE TEMPERATURE RANGE	-5~40°C	-5~40°C
STORAGE HUMIDITY	65±20% HR	65±20%HR
SIZE(LXWXH)	440×170×560mm	440x206x670
PACKAGE SIZE(LXWXH)	625×520×335mm	750×520×385mm
SHELL MATERIAL	SPCC	SPCC
NET WEIGHT	42Kg	73Kg
GROSS WEIGHT	53Kg	91Kg
PACKAGE METHOD	1pcs/Carton	1pcs/Carton
CYCLE LIFE	>8000 Times	>8000 Times
SELF DISCHARGE	2% per month	2% per month
SOC Indication	LED Light & LCD Screen	LED Light & LCD Screen
Communication Mode	RS485/CAN	RS485/CAN
Matching Inverter	Growatt, Goodwe, Deye, Luxpower, HELIOS etc	



Large Life Cycle

Over 8,000 cycles at 80% Depth of Discharge (DoD) for a significantly reduced total cost of ownership.



Long Life

Low maintenance batteries with long life technology



Integrated Circuit

Battery Management System (BMS) is incorporated for remote protection 24/7



Better Storage

Up to 6 months of storage with extremely low self discharge (LSD) rate



Quickly Recharge

Save time and increase productivity with less down time due to superior charge/discharge efficiency.



Extreme Heat Tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +140°F or +60°C



Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.



Function

Facilitate simultaneous operations alongside other units.

All-in-one Residential Energy Storage System-S2

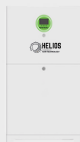


Features

- Vertical industry integration guarantees over 8,000 cycles with an 80% depth of discharge (DoD).
- The integrated inverter design is user-friendly and quick to install. Its compact size reduces installation time and costs, while its stylish design complements your home environment.
- The inverter offers various operational modes, functioning as a primary power source, backup power in areas with an unstable grid, or handling sudden power outages. This system features multiple redundancies for exceptional flexibility.
- It supports diverse charging options: photovoltaic energy, commercial power, or even both simultaneously.



MODEL	HELIOS-AIOV05C-220V
Rated Output Power	5,000W
Max. Peak Power	10,000VA
Load Capacity of Motor	4HP
Wave Form	PSW (Pure Sine Wave)
Rated Output Voltage	240VAC (single-phase)
Max. Parallel Capacity	2units (up to10kW)
Output Mode	Off-grid / Hybrid / On-grid
Solar Charge Type	MPPT
Max. Solar Array Power	5,500W
Max. Solar Open Circuit Voltage	500Vdc
Input Voltage Range	90~280Vac
Bypass Overload Current	40A
Max. Solar Charging Current	100A
Max. Grid / Generator Charging Current	60A
Dimension(LxWxH)	400x580x145mm
Weight	18Kg

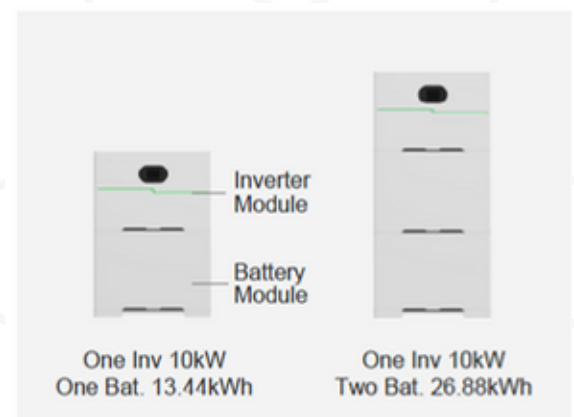
MODEL	HELIOS-AIO48V05-S2	HELIOS-AIO48V10-S2
Battery Module		
Battery Power	5.12kWh (5.12kWh Batteryx1)	10.24kWh (5.12kWh Batteryx2)
Rated Voltage	51.2V	
Rated Capacity	100Ah	
Battery Type	Prismatic LFP	
Cycling Life Span	≥ 8000 (80%DOD, 0.5C, 25°C)	
Max. Parallel Capacity	2 Units (Up to 10kWh)	
Dimension(LxWxH)	Inverter : 1x400x580x145mm Battery : 1x480x580x145mm	Inverter : 1x400x580x145mm Battery : 2x480x580x145mm
Weight	73Kg	118Kg
Standard	UN38.3, MSDS, UL1973, IEC62619:2017, EN IEC61000-3-2, EN IEC61000-6-1, RoHS	

AIO-V Series Home Energy Storage System



Features

- Vertical industry integration guarantees over 8,000 cycles with an 80% depth of discharge (DoD).
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- The inverter offers various operational modes, functioning as a primary power source, backup power in areas with an unstable grid, or handling sudden power outages. This system features multiple redundancies for exceptional flexibility.
- It supports diverse charging options: photovoltaic energy, commercial power, or even both simultaneously.



Inverter Module		HELIOS - INV10KLP1	
Output		5120Wh	
Rated output power		10,000W	
Maximum peak power		20,000VA	
Motor load capacity		6HP	
Wave form		PSW (Pure Sine Wave)	
Rated output voltage		230V ac (single phase)	
Maximum parallel capacity		2 units (up to 20KW)	
Output mode		Off-grid/Hybrid	
Solar input			
Types of solar charging		MPPT	
Maximum solar array power		5,500W + 5,500W	
Maximum solar open-circuit voltage		500Vdc + 500Vdc	
Grid/generator inputs			
Input voltage range		90~275Vac	
Bypass overload current		63A	
Battery charging			
Maximum solar charging current		200A	
Maximum grid/generator charging current		120A	
Routine			
Dimensions (L×W×Hmm)		750×470×250	
Weight (Kg)		~32	
Battery Module	HELIOS-AIOV13B		HELIOS-AIOV26B
Battery power	13.44KWh		26.88KWH
Rated voltage	48V		48V
Rated capacity	280Ah		560Ah
Battery type	Square LFP		
Cycle life	≥6000 (80%DOD, 0.5C, 25°C)		
Maximum parallel capacity	4 units (max. 53.76KWh)		
Dimensions (L×W×Hmm)	750×470×250		750*940*250
Weight (Kg)	~105Kg		120Kg
Standard	UN38.3, MSDS, IEC62619:2017, EN IEC61000-3-2, EN IEC61000-6-1, RoHS		

High Voltage LiFePO4 Battery Storage System-HVG1



Features

- Designed for High-Powered Emergency Backup and Off-Grid Performance
- Exceptional Efficiency Achieved Through a True High-Voltage Series Connection
- Innovative Patented Modular Plug Design
- No Internal Wiring Needed, Offering Maximum Flexibility and User-Friendliness
- Grade A Lithium Iron Phosphate (LFP) Battery
- Ensures Maximum Safety, Longevity, and Compatibility with Top High Voltage Battery Inverters
- Adheres to the Highest Safety Standards



Specification

MODEL	HELIOS-45100BL-HVG1	HELIOS-60100BL-HVG1	HELIOS-75100BL-HVG1	HELIOS-90100BL-HVG1	HELIOS-105100BL-HVG1	HELIOS-105100BL-HVG1
System Stackability						
Battery Module	HELIOS-15100BL-HV					
Number of Modules	3	4	5	6	7	8
Energy Capacity	14.4kWh	19.2kWh	24kWh	28.8kWh	33.6kWh	38.4kWh
Energy Capacity	100Ah	100Ah	100Ah	100Ah	100Ah	100Ah
Battery Voltage	144V	192V	240V	288V	336V	384V
Size(LxWxH)	570×380×833mm	570×380×1000mm	570×380×1167mm	570×380×1334mm	570×380×1501mm	570×380×1668mm
Weight	148Kg	189Kg	230Kg	271Kg	312Kg	353kg
Standard Charge/Discharge Current	20A	20A	20A	20A	20A	20A
Battery Type	Lithium Iron Phosphate (LFP)					
Nominal Voltage	48V					
Operating Voltage Range	40- 54.7V					
IP Protection	IP65					
Installation	Floor Installation					
Operation Temperature	-10 to 60°C or 14 to 140°F					
BMS Monitoring Parameters	SOC, system voltage, current, cell voltage, cell temperature, and PCBA temperature measurements					
Communication Port	CAN					
Warranty	5 years/10 years (optional)					



Large Life Cycle

Over 8,000 cycles at 80% Depth of Discharge (DoD) for a significantly reduced total cost of ownership.



Long Life

Low maintenance batteries with long life technology



Integrated Circuit Protection

Battery Management System (BMS) is incorporated for remote protection 24/7



Better Storage

Up to 6 months of storage with extremely low self discharge (LSD) rate



Quickly Recharge

Save time and increase productivity with less down time due to superior charge/discharge efficiency.



Extreme Heat Tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +140°F or +60°C



Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.



Function

Facilitate simultaneous operations alongside other units.

High-Capacity Energy Storage Batteries.



Features

- Class A high-reliability lithium iron phosphate battery that is eco-friendly and sustainable
- Smart integrated Battery Management System (BMS) offering comprehensive protection and fault detection
- Equipped with a built-in fire extinguishing device to automatically address early-stage thermal runaway situations
- Bottom tripod design for standard cabinet compatibility, simplifying installation and maintenance
- Modular architecture allowing for parallel expansion and flexible voltage and capacity options
- High capacity with efficient charging and discharging, exceeding 8,000 cycles



MODEL	HELIOS-RBG1-64S100BL-U	HELIOS-RBG1-96S100BL-U
Module Presentation		
Number Of Modules	4	6
Energy Capacity (Ah)	100	100
Standard Voltage (V)	204.8	307.2
Rated Energy (KWh)	20.48	30.72
Product Dimensions (L×W×Hmm)	548×584×1500	548×584×1500
Net Weight (Kg)	235	340
Standard Charge Current (A)	20	20
Maximum Discharge Current (A)	100	100
IP Protection	21	21

MODEL	HELIOS -RBG1-128S100BL-U	HELIOS -RBG1-192S100BL-U
Module Presentation		
Number Of Modules	8	12
Energy Capacity (Ah)	100	100
Standard Voltage (V)	409.6	614.4
Rated Energy (KWh)	40.96	61.44
Product Dimensions (L×W×Hmm)	548×584×1950	548×584×2750
Net Weight (Kg)	425	595
Standard Charge Current (A)	20	20
Maximum Discharge Current (A)	100	100
IP Protection	21	21

50kW/100kWh Outdoor Cabinet Energy Storage System



Features

- High-efficiency LFP energy storage with a long-lasting design
- Compatible with a wide voltage range of photovoltaic systems and features an intelligent temperature control system
- Modular design for easy maintenance and expansion
- Various communication interfaces available for remote monitoring and control



System Integration

The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.



Intelligent Dispatch

Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage. When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.



Environmental Protection

The protection level is IP54, which can perfectly cope with various types of weather in the outdoor environment.



Efficient Cooling

It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.



Convenient Management

The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

MODEL	HELIOS-ESS100 (50kW/100kWh)
Battery rated capacity	100kWh
Battery rated voltage	844.8V
Battery voltage range	739.2V~950.4V
Battery type	Lithium Iron Phosphate battery (LFP)
Battery cell capacity	120Ah
Series of Battery	1P*24S*11S
Maximum charge and discharge current	60A
Photovoltaic rated capacity	50kW
Photovoltaic voltage range	200~550V
Rated AC power	50kW
Rated AC current	72A
Rated AC voltage	480VAC,3W+N+PE/3W+PE
Rated AC frequency	50/60Hz
THDI	<3% (Rated power)
Power Factor	-1 leading to+1 lagging
THDU	<3%(Linear Load)
Degree of protection	IP54
Protective Class	/
Isolation mode	No-Isolation(A ding isolation transformer is optional)
Shutdown self-discharge	<100W (Without transformer)
Display	LCD
Relative humidity	0 ~ 95%(no condensation)
Noise	<78dB
Ambient temperature	-25°C to +60°C(with derating at temperatures above 45°C)
Cooling mode	Intelligent air-cooled
Altitude	3000m (> 3000m reduction)
Communication interface	CAN/Ethernet / 485
Size (W*D*H)	1300*1030*2100mm
Weight (approx.)	2150kg

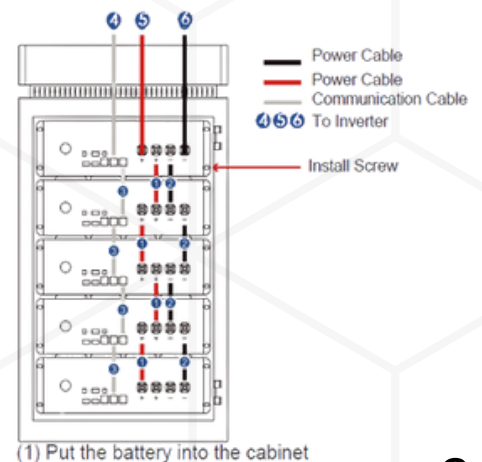
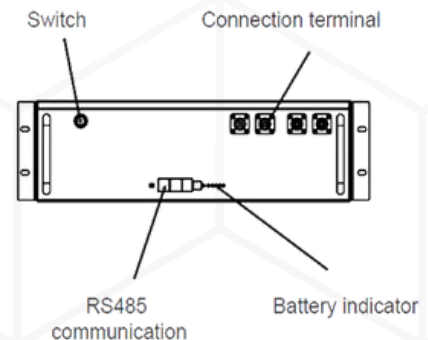
LiFePO4 Energy Storage Battery-Rack-BR



Features

- Standardized design: Utilizes a standard 3U and 4U case for enhanced versatility.
 - Parallel energy expansion: Incorporates a current limiting module to support multiple batteries working in parallel, increasing overall capacity to meet customers' high energy demands.
- Intelligent lithium battery management system:
 - Features RS485 communication for real-time battery status monitoring.
 - Allows for customizable protection parameters such as charging and discharging based on customer specifications.
 - Includes warning functions for overcharging, over-discharging, overcurrent, as well as high and low temperatures, significantly reducing potential safety risks.
- Balancing:
 - Automatically collects voltage data from individual battery series, with a pressure difference adjustable up to 30MV.

Specifications



MODEL	HELIOS-15050BL-BR	HELIOS-150100BL-BR
Battery Energy	2.4kWh	4.8kWh
Nominal Voltage	48V	48V
Nominal Capacity	50Ah	100Ah
Efficiency	≥96%	≥96%
Inner Resistance	10mΩ	7mΩ
Cell Type	LiFePO ₄	LiFePO ₄
Charge Voltage	54.71V	54.71V
Standard Charging Current	10A	20A
Max. Continuous Charging Current	50A	100A
Standard Discharge Current	25A	50A
Continuous Discharge Current	50A	100A
Peak Discharge Current	100A (3s)	200A (3s)
Discharge Cut-off Voltage	45.5V	45.5V
Charge Temperature Range	0~60°C	0~60°C
Discharge Temperature Range	-20°C~65°C	-20°C~65°C
Storage Temperature Range	-5~40°C	-5~40°C
Storage Humidity	65±20% HR	65±20% HR
Size(LxWxH)	453×493×133mm	520×241×175mm
Package Size (LxWxH)	530×480×230mm	530×540×260mm
Shell Material	SPCC	SPCC
Net Weight	27.5Kg	41Kg
Gross Weight	39.5Kg	47Kg
Package Method	1pcs per carton	1pcs per carton
Cycle Life	>8000 times	>8000 times
Self Discharge	2% per month	2% per month
SOC Indication	LED Light	LED Light
Communication Mode	RS485	RS485/CAN
Matching Inverter	Growatt, Goodwe, Deye, Luxpower, HELIOS etc	



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Extreme Heat Tolerance

Suitable for use in a wider range of applications where ambient temperature is unusually high: up to +140°F or +60°C



Lightweight

Lithium batteries provide more Wh/Kg while also being up to 1/3 the weight of its SLA equivalent.



Function

Facilitate simultaneous operations alongside other units.

100kW/215kWh Commercial Energy Storage System



Features

- High-efficiency energy storage solution: 100kW/215kWh LFP battery
- Compatible with grid-connected photovoltaic systems:
 - 200-450V wide voltage range
- Intelligent cooling for large-capacity batteries: IP54 protection, weighing 3100kg
- Versatile communication interfaces: CAN/Ethernet/485



System Integration

The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.



Intelligent Dispatch

Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage. When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.



Environmental Protection

The protection level is IP54, which can perfectly cope with various types of weather in the outdoor environment.



Efficient Cooling

It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.

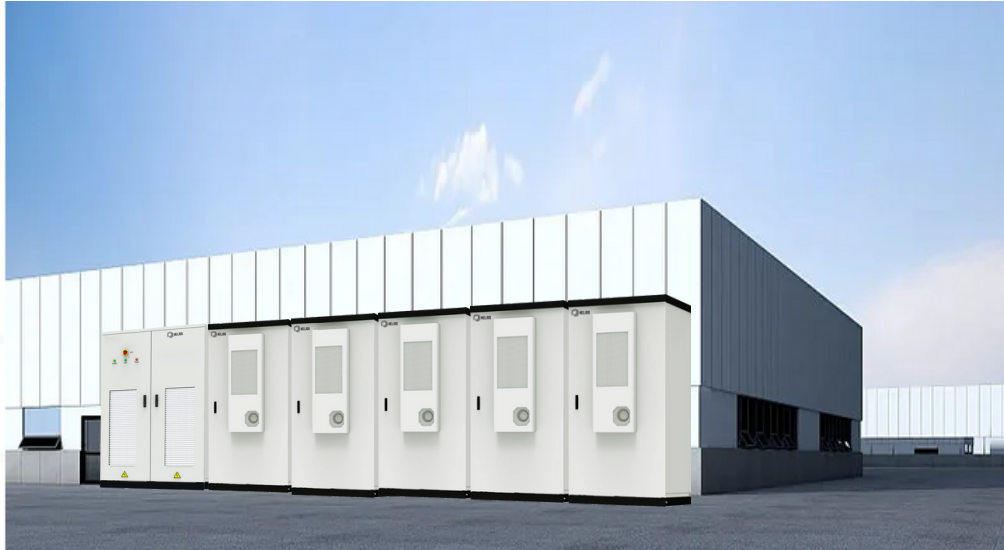


Convenient Management

The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

MODEL		HELIOS-ESS215 (100kW/215kWh)
Battery rated capacity		215kWh
Battery rated voltage		768V
Battery voltage range		672V~864V
Battery type		Lithium iron phosphate battery(LFP)
Battery cell capacity		280Ah
Series of Battery		1P*20S*12S
Maximum charge and discharge current		140A
Photovoltaic rated capacity		100kW
Photovoltaic voltage range		200~450V
Rated AC power		100kW
Rated AC current		144A
Rated AC voltage		480VAC, 3W+N+PE/3W+PE
Rated AC frequency		50/60Hz
THDI		<3% (Rated power)
Power Factor		-1 leading to+1 lagging
THDU		<3%(Linear Load)
Degree of protection		IP54
Protective Class		/
Isolation mode		No-Isolation(A ding isolation transformer is optional)
Shutdown self-discharge		<100W (Without transformer)
Display		LCD
Relative humidity		0 ~ 95%(no condensation)
Noise		<78dB
Ambient temperature		-25°C to +60°C(with derating at temperatures above 45°C)
Cooling mode		Intelligent air-cooled
Altitude		3000m (> 3000m reduction)
Communication interface		CAN/Ethernet/485
Size (W*D*H)		1800*1200*2300mm
Weight (approx.)		3100kg

250kW/500kWh Outdoor Cabinet Energy Storage System



Features

- High-efficiency LFP energy storage with a long-lasting design
- Wide-voltage compatibility with photovoltaic systems and an intelligent temperature control system
- Modular design for easy maintenance and expansion
- Various communication interfaces for remote monitoring and control



System Integration

The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.



Intelligent Dispatch

Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage. When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.



Environmental Protection

The protection level is IP54, which can perfectly cope with various types of weather in the outdoor environment.



Efficient Cooling

It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.



Convenient Management

The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

MODEL		HELIOS-ESS500(250kW/500kWh)
GRID POINT		
Rated power		250kW
Max.power		275kW
Rated current		361A
Max.current		400A
Rated voltage		480VAC,3W+N+PE
Rated frequency		60Hz(±5Hz)
PV POINT		
Max.PV input voltage		Minimum battery voltage -30V
Max.PV input power		250kW
MPPT quantity		1/5/10
GENERAL PARAMETERS		
Degree of protection		IP55
Protective Class		/
Power Factor		-1leading to+1 lagging
THDU		<3%(Rated power)
Isolation mode		Transformer isolation
Shutdown self-discharge		<0.1%Rated Power(Without transformer)
Display		LCD
Relative humidity		0 ~ 95% (No condensation)
Noise		<78dB
Noise		<78dB
Ambient temperature		-25°C to +60°C(Derating above 45°C)
Cooling mode		Intelligent air-cooled
Altitude		3000m (> 2000m reduction)
BMS Communication		CAN
EMS Communication		Rs485 / CAN/Ethernet
Dimensions(W*D*H)		1300*1000*2300mm
Weight (approx.)		2150kg
MODEL		5*100kWh
Battery rated capacity		5* 100kWh
Battery rated voltage		844.8V
Battery voltage range		739.2V~950.4V
Battery type		Lithium iron phosphate battery (LFP)
Battery cell capacity		120Ah
Series of Battery		1P*24S*11S
Rated charging rate		1P
Degree of protection		IP55
Operating ambient temperature		-20~50°C
Storage Temperature		-40~50°C
Cooling mode		Air cooling
Altitude		3000m (>2000m reduction)
Dimensions (W*D*H)		1300*1030*2300mm
Weight (approx.)		1500kg

500kW/1075kWh Integrated Energy Storage System



Features

- High-efficiency LFP energy storage with a long-lasting design
- Wide-voltage compatibility with photovoltaic systems and an intelligent temperature control system
- Modular design for easy maintenance and expansion
- Various communication interfaces for remote monitoring and control



System Integration

The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.



Intelligent Dispatch

Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage. When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.



Environmental Protection

The protection level is IP54, which can perfectly cope with various types of weather in the outdoor environment.



Efficient Cooling

It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.



Convenient Management

The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

MODEL		HELIOS-ESS1075(500kW/1075kWh)
Battery rated capacity		215kWh*5
Battery voltage range		672~864V
Battery pack series and parallel connection		1P*20S*12S
Maximum charge/discharge current		140A
Adaptive battery		LFP
Cell Capacity		280Ah
Maximum PV input voltage		Battery minimum voltage -50V
PV Input power		500kW
PV Input power		500kW
Rated AC voltage		500kW
Rated AC frequency		50/60Hz (±5Hz)
THDU		<3% (Linear Load)
Overload capacity		110%, normal operation; 120%, 1 minute
Overload capacity		110%, normal operation; 120%, 1 minute
Degree of protection		IP20 (Indoor)
Protective Class		/
Isolation mode		Transformer isolation
Shutdown self-discharge		<100W (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		Intelligent air-cooled
Altitude		2000m (> 2000m reduction)
Communication interface		Rs485 / CAN
Dimensions (W*D*H)		1200*1000*2300mm(Energy Storage Converter) 1200*800*2100mm(PV Converter) 12192*2438*2896mm(Container)
Weight (approx.)		~17.5t

1000KW / 2150KWH Integrated Energy Storage System



Features

- Highly efficient LFP energy storage with a long-lasting design
- Compatibility with a wide range of photovoltaic systems and an intelligent temperature control system
- Modular design for easy maintenance and expansion
- Various communication interfaces for remote monitoring and management



System Integration

The system has been commercialized, integrating energy storage batteries, energy storage converters, photovoltaic converters, energy management monitoring systems, power distribution systems, environmental control systems, and fire control systems. It can fully control the operation status and risks of the system.



Intelligent Dispatch

Real-time acquisition of local load power, photovoltaic power generation priority is self-generation and self-use, and surplus electricity storage. When the power generated by photovoltaic power generation is insufficient to provide local load, the battery storage is prioritized.



Environmental Protection

The protection level is IP54, which can perfectly cope with various types of weather in the outdoor environment.



Efficient Cooling

It adopts door-mounted embedded integrated air conditioning, which does not occupy cabinet space, improves the available space of outdoor cabinets, has better structural integrity at the top, and has good waterproof performance.



Convenient Management

The local control screen can achieve diversified functions such as system operation monitoring, energy management strategy development, equipment remote upgrading, etc.

MODEL		HELIOS-ESS2150(1075W/2150kWh)
Operating Voltage Range		680~1000V
Full load voltage range		680~1000V
Maximum DC current		200A*8
Adaptive Battery		Lithium Battery/lead acid/photovoltaic modules
Charging Mode		As per BMS command/Tri-Stage/MPPT
Operating mode		Constant current, constant power, MPPT, AC voltage source, DC voltage source
AC-Side Parameters On-Grid		
Rated/Maximum AC Power		1000/1100kW
Rated AC current		180A*8
Rated AC voltage		480VAC, 3W+N+PE
THDI		<3% (Rated Power)
power factor		-1 ahead ~ +1 behind
AC-Side Parameters Off-Grid		
Rated AC voltage		480VAC
Rated AC frequency		50/60Hz
THDU		<3% (Linear Load)
Overload capacity		110%, normal operation; 120%, 1 minute
General Parameters		
Degree of protection		IP21 (Indoor)
Protective Class		/
Isolation mode		Transformer isolation
Shutdown self-discharge		<0.1% rated power (Without transformer)
Display		LCD
Relative humidity		0 ~ 95% (no condensation)
Noise		<78dB
Ambient temperature		-35℃ to +60℃ (derating above 45℃)
Cooling mode		Intelligent air-cooled
Altitude		3000m (> 3000m reduction)
Communication interface		Rs485 / CAN
Dimensions (W * D * H)		1200*1000*2100mm(PCS cabinet)
Weight (approx.)		3400kg

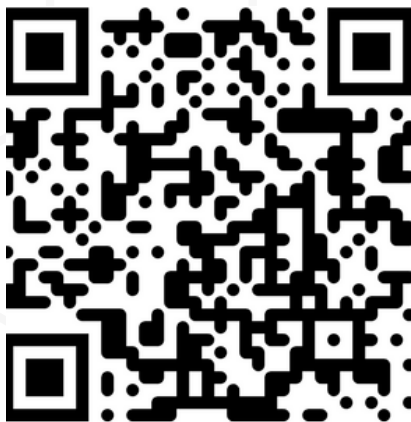
MODEL		HELIOS-ESS1075(500kW/1075kWh)
Rated power		1000kW
Rated voltage		1443A
Rated AC current		480VAC
Rated AC frequency		50/60Hz (±5Hz)
Switching mode		Manual Switching, Automatic Transfer
Input		Two Circuits: One Mains Power, One Diesel Generator
Output		One Circuit
Conducting mode		Grid priority
Protection features		With open-phase protection, under-voltage, and voltage loss protection functions
Degree of protection		IP21 (Indoor) ; IP54 (Outdoor)
Relative humidity		0 ~ 95% (No Condensation)
Ambient temperature		-25 ℃ to +60 ℃ (Derating above 45 ℃)
Altitude		3000m (Derating above 2000m)
Communication interface		CAN/Ethernet / 485
Dimensions (W * D * H)		800*800*2100mm (Indoor)
Weight (Approx.)		600kg (Indoor)
PV input voltage		315-550V (Minimum battery voltage -50V)
Max. PV input current		10*160A
MPPT quantity		1/5/10
Battery voltage range		600~950V
DC side bus power		500kW
Number of DC side inputs		1
Degree of protection		IP21 (Indoor)
Protective Class		/
Power Factor		-1leading to+1 lagging
THDU		<3% (Rated power)
Isolation mode		Transformer isolation
Shutdown self-discharge		<0.1% rated power (Without transformer)
Display		LCD
Relative humidity		0 ~ 95% (No condensation)
Noise		<78dB
Ambient temperature		-25 ℃ to +60 ℃ (Derating above 45 ℃)
Cooling mode		Intelligent air-cooled
Altitude		3000m (> 2000m reduction)
BMS Communication		CAN
EMS Communication		Rs485 / CAN/Ethernet
Dimensions(W*D*H)		1200*800*2100mm (Indoor)
Weight (approx.)		650kg (Indoor)
Dimensions(W*D*H)		1200*800*2100mm (Indoor)
Weight (approx.)		650kg (Indoor)

MODEL		HELIOS-ESS2150(1075W/2150kWh)
Battery parameters		1000kW
Battery rated capacity		1443A
Battery rated voltage		480VAC
Battery voltage range		50/60Hz (±5Hz)
Battery pack series and parallel connection		Manual Switching, Automatic Transfer
Adaptive battery		Two Circuits: One Mains Power, One Diesel Generator
Cell Capacity		One Circuit
Degree of protection		IP54
Relative humidity		0 ~ 95% (no condensation)
Noise		<78dB
Ambient temperature		-25℃ to +60℃(derating above 45℃)
Cooling mode		Intelligent air-cooled
Altitude		3000m (> 2000m reduction)
Fire extinguishing system		Perfluorohexane/heptafluoropropane pipeline fire extinguishing system
Communication interface		Rs485 / CAN
Dimensions (W * D * H)		12196*2438*2896mm (Container) ; 800*800*2100mm (Combiner Converter)
Weight (approx.)		27.5t



Notes

Notes



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