



Power the Green World



RESIDENTIAL ESS SOLUTIONS

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ABOUT EVADA

爱维达



EVADA (Xiamen) Technology Co., Ltd. was founded in 1998, for over two decades, the company has been focusing on power conversion and smart energy fields, offering solutions for data center, digital power, energy storage and photovoltaic power. EVADA is a high-tech enterprise that achieves the TOP 5 brands of China UPS and data center, and currently being present in 48+ countries. As part of the general push for the transformation of energy decarbonization, EVADA stays ahead in the field and trying to promote “green” development of energy.

CONTENTS

eLite Pro Series On & Off Grid Solar Inverter	01
eLith Block Series Battery	05
eLite Series Off Grid Solar Inverter	07
eLith Rack Series Battery	11
eLith Wall Series Battery	13
WFBLE	17
Reference Project	19



TOP 5

UPS brands in China



25+

Years' experience in power conversion and smart energy field



32

Branches nationwide and counting



3

R&D centers



25,000+

Square meters workplace



20+

Industry standards drafting



100+

Researchers

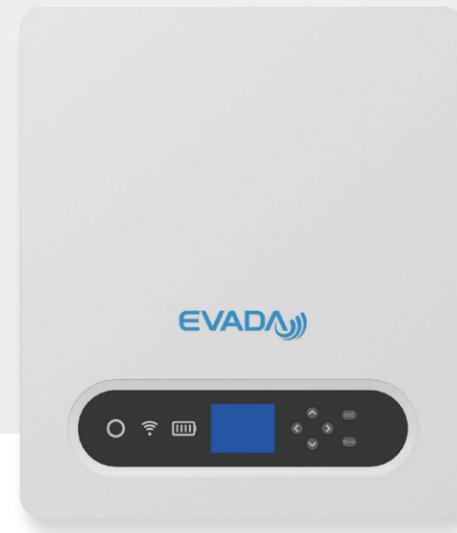


30+

Invention patents

eLite Pro Series On&Off Grid Solar Inverter

eLite Pro Series works with solar panels and batteries to form an energy storage system. It can be used to optimize self-consumption and store the excess power in the battery. Multiple working modes to meet users' needs, featuring backup mode to ensure the stable power supply when utility failed.



Features

User Friendly

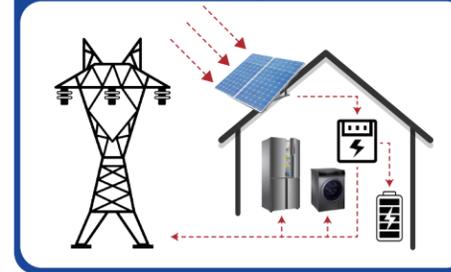
- Compact and light weight design for easy installation
- IP65 rated, natural cooling convection, maintenance-free and reduces acoustic noise, suitable for use in various outdoor environment
- Built-in dual loop integrated MPPT charger
- Multiple working modes for various applications
- LCD status display provides real-time information readouts

Comprehensive Function

- Anti-islanding protection and anti-countercurrent design
- Battery reverse polarity protection
- Enables multiple ways of protection and fault detection to ensure the safety of the equipment
- Advanced BMS allows configuration of charge and discharge time
- Supports multiple ways of monitoring

Working Modes

Self-consumption Mode



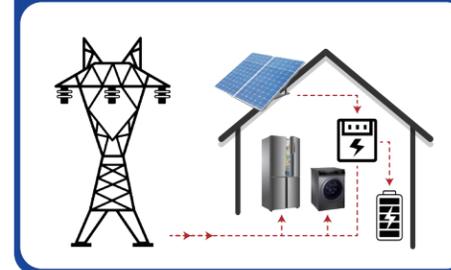
When solar power is sufficient:

The inverter always prioritizes the solar production to power loads and then uses the excess solar production to recharge the battery. If there is still more energy being produced, it will flow into the utility grid.

When solar power is insufficient:

The battery starts to discharge and supply loads until it's empty then the grid will start to power the loads.

Force Time Mode



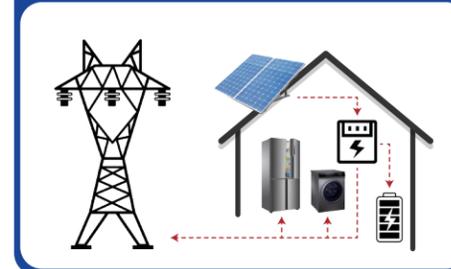
When charging:

The inverter prioritizes the solar production to recharge the battery. User need to configure the start time and the end time when using the AC CHG function otherwise the battery can only be recharged by the solar power.

When discharging:

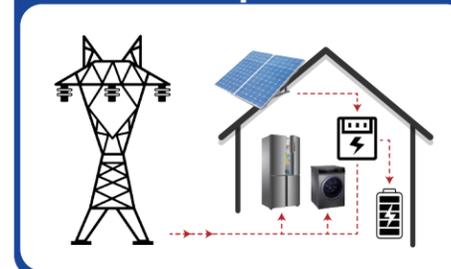
Allows to configure the start time, the end time and the SOC of the battery, and battery will discharge to the grid.

Feed In Mode



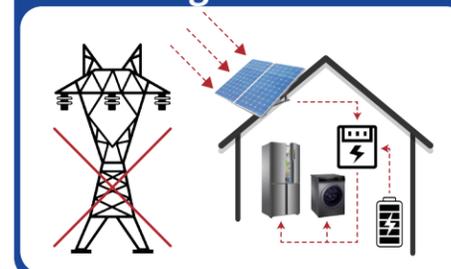
When the solar array is producing more energy than the AC loads has consumed, the inverter is able to feed excess power produced back in the utility grid.

Back up mode



The inverter will force battery charging from PV power and grid power within the setting time and the battery will not discharge when connected with the grid.

Off-grid Mode



Using excess solar to charge the battery and power the loads without a grid-connection.

Specification

MODEL	EHS-3000-BH	EHS-3600-BH	EHS-4000-BH	EHS-4600-BH	EHS-5000-BH
INPUT (BATTERY)					
Battery type	Lithium-ion				
Nominal battery voltage(V)	300				
Battery voltage range (V)	170~460				
Max. continuous charging current (A)	25				
Max. continuous discharging current (A)	25				
Max. charging power (W)	3000	3600	4000	4600	5000
Max. discharging power (W)	3000	3600	4000	4600	5000
INPUT (PV)					
Max. input power (W)	4000	4800	5350	6150	6650
Max. input voltage (V)	570				
MPPT operating voltage range (V)	80~550				
Start-up voltage (V)	125				
Nominal input voltage (V)	360				
Max. input current per MPPT (A)	13.5				
Max. short circuit current per MPPT (A)	16.5				
Number of MPP trackers	2				
String per MPP trackers	1				
AC OUTPUT (ON-GRID)					
Nominal apparent power (VA)	3000	3600	4000	4600	5000
Max. apparent power (Output to utility grid) (VA)	3000	3600	4000	4600	5000
Max. apparent power (Output from utility grid) (VA)	6000	7200	8000	9200	10000
Nominal output voltage (V)	230/220				
Nominal grid frequency (Hz)	50/60				
Max.AC current (Output to utility grid) (A)	13.6	16.3	18.2	21	22.7
Max. AC current (Output from utility grid) (A)	27.2	32.6	36.4	42	45.4
Power factor	Configurable from 0.8 leading to 0.8 lagging				
Max. total harmonic distortion(%)	<3				
AC OUTPUT (BACK-UP)					
Nominal apparent power (VA)	3000	3600	4000	4600	5000
Max. output apparent power (VA)	3000	3600	4000	4600	5000
Max. output current (A)	13.6	16.3	18.2	21	22.7
Nominal output voltage (V)	230/220				
Nominal output frequency (Hz)	50/60				
THDv (@Linear Load)	<2				

MODEL	EHS-3000-BH	EHS-3600-BH	EHS-4000-BH	EHS-4600-BH	EHS-5000-BH
EFFICIENCY					
Max. efficiency (%)	97.8				
European efficiency (%)	97				
Battery charge/discharge efficiency (%)	98.5 (PV-BAT)/97.0 (BAT-AC)				
MPPT efficiency (%)	99.9				
PROTECTION					
PV insulation resistance detection	Integrated				
Residual current monitoring	Integrated				
Battery reverse polarity protection	Integrated				
Anti-islanding protection	Integrated				
AC over current protection	Integrated				
AC short circuit protection	Integrated				
AC over voltage protection	Integrated				
GENERAL					
Operating temperature range(°C)	-20~+60 (derating at +45)				
Humidity	4~100(Condensing)				
Max. operating altitude(M)	2000				
Cooling method	Natural				
Display	LCD, APP				
Communication with BMS	RS485,CAN				
Communication with meter	RS485				
Communication interfaces	Wi-Fi/Ethernet/DRM/ISO alarm/CT				
Weight (kg)	23				
Dimension (W×H×D)(mm)	420×480×185				
Topology	Non-isolated				
Standby consumption (Night)(W)	<15 for hot standby, <3 for cold standby				
IP rating	IP65				
Mounting method	Wall mounted				

eLith Block Series Battery

The eLith Block series is an advanced high-tech energy storage battery featuring integrated HVC box and BMS unit. Equipped with a robust 4-tier protection strategy, the system supports parallel use of 2-6 battery modules. Its stack-based installation streamlines setup and operations, making it ideal for applications such as household emergency backup during power disruptions, peak and off-peak price arbitrage, self-generation and consumption, and grid dispatching subsidies.



Features

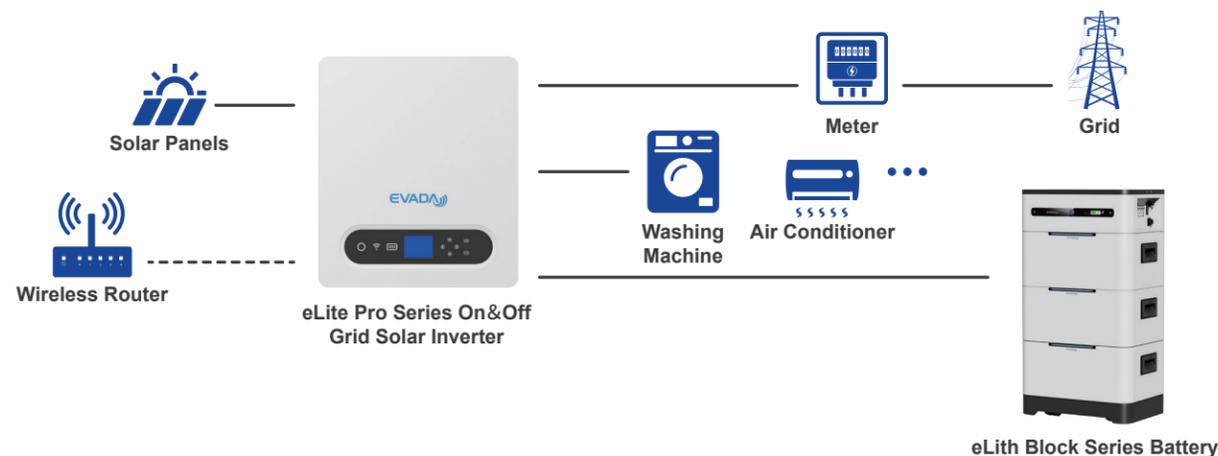
- Homely style, elegant and beautiful
- With high voltage stack-based design, the backup energy can be expanded flexibly
- Multiple electrical protections, safe and reliable
- Adopting LFP cells, safe and stable
- Single battery 5.12kWh, it can be expanded to 30.72KWh

Specification

Model	ES-10-H	ES-15-H	ES-20-H	ES-25-H	ES-30-H
Stacking capacity (KWh)	10.24	15.36	20.48	25.6	30.72
Number of batteries in series	2 pcs	3 pcs	4 pcs	5 pcs	6 pcs
Rated voltage (V)	204.8V	307.2V	409.6V	512V	614.4V
Voltage range (V)	179.2~227.2	268.8~340.8	358.4~454.4	448~568	537.6~681.6
Rated capacity (Ah)	50				
Continuous charge current (A)	12.5A (recommended)/25A (max)				
Continuous discharge current (A)	25A (recommended)/50A (max)				
Communication	RS485/CAN				
Protection	Over/under voltage, over/low temperature, over current, short circuit				
Size (mm)	550*370*737	550*370*973	550*370*1209	550*370*1445	550*370*1682
Weight (kg)	119	169	220	270	321
Protection class	IP20				
Installation condition	Indoor installation				
Operating temperature range	-10°C~55°C				
Optimum operating temperature range	20°C~30°C				
Storage temperature	-30°C~60°C				
Humidity	5%~95%				
Altitude	≤2000m				
Cooling method	Natural cooling				

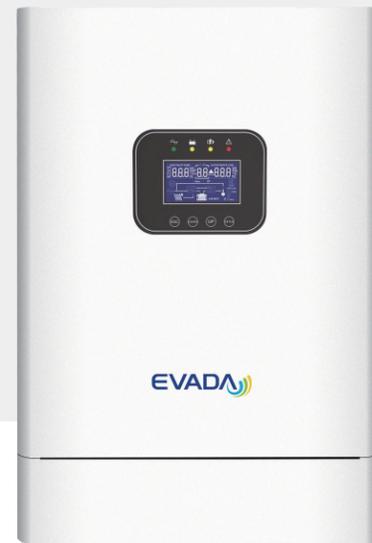
*Specifications subject to change without notice.

eLith Block Series Battery Storage System



eLite Series Off Grid Solar Inverter

The 3-5kW Single-phase off grid inverter is an all-in-one system for supplying solar power at home. It can be flexibly configured to single-phase or three-phase and has multiple system integration features. It's a combination of pure sine wave solar inverter and integrated MPPT charger, making it the most cost-effective option for home and office use.



Features

Power Up+

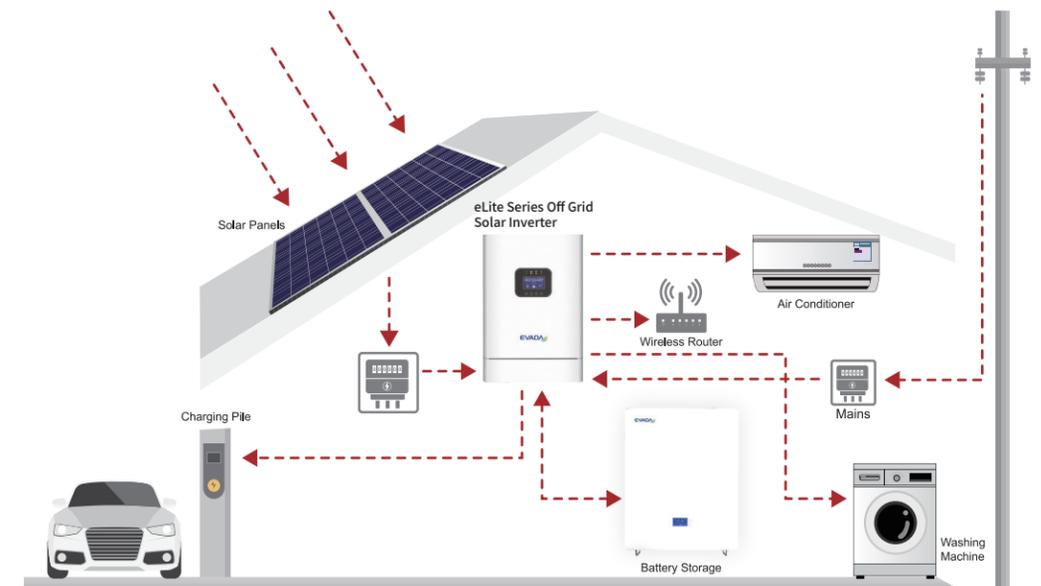
- Parallel operation: maximum 9 units
- Single-phase / DC-coupled
- Built-in integrated MPPT charger
- Lithium/VRLA battery compatible
- 150% DC oversizing
- Compatible with generator and utility grid

Smart Life

- Intelligent wifi monitoring APP
- Colour LED screen
- Plug & Play installation
- Compact and light weight design
- Supports RS232/ Dry contact/ USB/ GPRS&WIFI/ RS485

Assured and Safe

- DC soft start
- Overload, overheat and short circuit protection
- Significantly lower capital expenditure
- IP20 Dust-proof
- THDi<3%, low harmonic distortion against grid



Working Modes



Battery Mode

Solar energy provides power to the loads as first priority. If there is insufficient solar power available, battery will be used to power the loads. Utility is only used when solar is insufficient and the battery drops to low SoC.



PV Mode

Solar energy provides power to the loads as first priority. The photovoltaic directly supplies power to the loads while charging the battery. Once the solar power is insufficient, the grid will power the load.



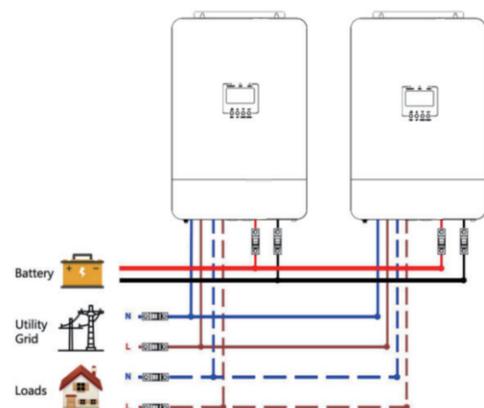
Utility Mode

Utility provides power to the loads as first priority. The Utility and solar will both charge the battery. When there is no utility available, solar and battery will be used to power the loads.

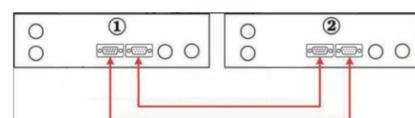
Parallel Operation

Single-Phase Parallel System

System Connection

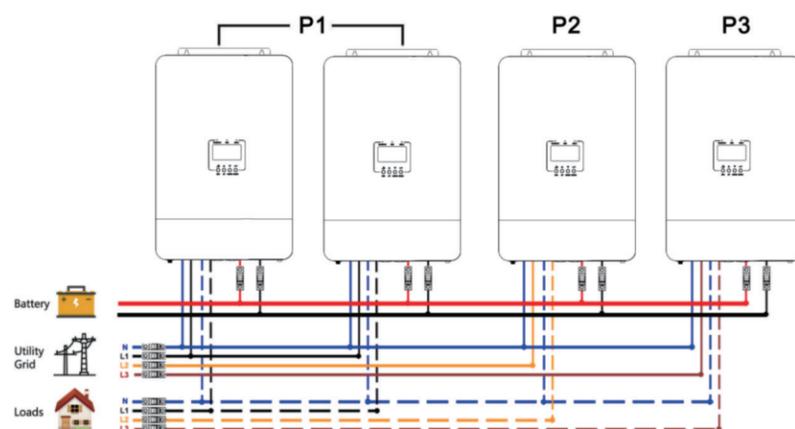


Communication Connection

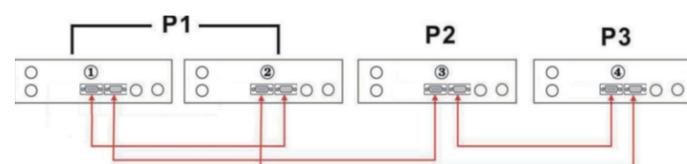


Three-Phase Parallel System

System Connection



Communication Connection



Specification

MODEL	EVS3024L	EVS3024H	EVS5048H
Rated power	3000W	3000W	5000W
Peak power	6000VA	6000VA	10000VA
INPUT			
AC input	170~280V/40-70Hz (For computers) ;90~280V /40-70Hz(For household appliances)		
OUTPUT			
Output voltage	208VAC/220VAC/230VAC/240VAC		
Transfer time	10 ms (For computers); 20 ms (For household appliances)		
Overload (battery mode)	1min@ 102 %~ 110 % Load ; 1 0 s@ 110 %~ 130 % Load ; 3s@ 130 % ~ 150 % Load		
Efficiency(peak) (battery mode)	> 94 %		
Power factor	1		
THD	≤3% (Linear load rate), ≤5% (Non-linear load rate)		
Waveform	Pure sine wave		
BATTERY&CHARGER			
Battery voltage	24VDC		48VDC
Battery type	Lead Acid	Lead Acid /Lithium Battery	
Charging way	MPPT		
Maximum PV power input	1500W	4000W	6000W
Maximum PV voltage input	145VDC	500VDC	500VDC
MPPT tracking range	30~115VDC	120~430VDC	120~430VDC
Charging current	10-120A (Adjustable)		2-80A (Adjustable)
Maximum mains charging current	60A	80A	80A
Maximum PV charging current	60A	120A	80A
DISPLAY&INTERFACE			
LCD display	Working modes/ Loads/ Input/ Output		
Communication interface	RS232/ Dry contact/ USB/ GPRS&WIFI/RS485 optional		
Parallel interface (optional)	/		Parallel card
OPERATING ENVIRONMENT			
Operating temperature & Humidity	0~ 50°C; 20 %~ 95 % (Non-condensing)		
Noise	≤50dB		
Storage temperature	- 15 ~ 60C		
Cooling method	Fans		
Ingress protection rating	IP20		
Altitude	1000 Meters no derate. >1000 Meters derating, and with maximum altitude 4000 meters		
PHYSICAL			
Dims. L/W/H (mm)	445*300*124mm		
Net weight (kgs)	9		
Gross weight (kgs)	11		
STANDARD			
Standards & Certifications	EN IEC 61000-6-3:2021 , EN IEC 61000-6-1:2019 , EN IEC 61000-3-2:2019+A1:2021, EN 61000-3-3:2013+A2:2021 , EN 62109-1:2010 , EN 62109 -2:2011		

eLith Rack Series Battery

Specification

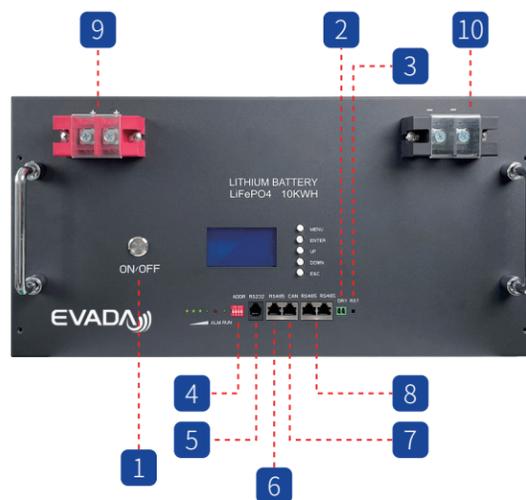


Features

- High-quality LFP battery
- Independent BMS for battery management
- Supports parallel connection of multiple battery packs
- Support RS485/CAN
- Rack-mounted design for easy installation
- 6000 cycle lifetime
- Wide temperature range: -20°C~60°C
- Versatile application for home, store, and office use

Model	ESS-2560	ESS-5120	ESS-10240
Nominal voltage	51.2V		
Nominal capacity	50Ah	100Ah	200Ah
Nominal capacity @ 25°C	50Ah	100Ah	200Ah
Nominal capacity @ 0°C	40Ah	80Ah	160Ah
Nominal capacity @ -20°C	25Ah	50Ah	100Ah
Cell type	LiFePO4		
Standard charge voltage	58.4V (configurable)		
Max. charge current	50A	100A	80A
Discharge cut-off voltage	40V (configurable)		
Max. discharge current	50A	100A	100A
Display	LCD (optional)		
Communication	RS485, RS232, CAN (optional)		
Cycle life	> 6000 Cycles (80%DOD)		
Cycle life @100% DOD*	> 4000 Cycles		
Cycle life @80% DOD*	> 6000 Cycles		
Cycle life @50% DOD*	> 10,000 Cycles		
Charge temperature range	0~65°C		
Discharge temperature range	-20~65°C		
Storage Temperature	-25~45°C		
Humidity	Max. 95% (Non-condensing)		
Expansion	Support 10 units in parallels	Support 10 units in parallels	Support 15 units in parallels
Dimensions (mm)	442X400X133	440*440*132(3U)	442X520X320
Weight (kg)	26	47.5	82
Installation method	Rack mounted		

*Test conditions: 0.2C charge & discharge @25°C
 *Specifications subject to change without notice.



- 1 Power Switch
- 2 Dry Contact
- 3 Reset
- 4 DIP Switch
- 5 RS232
- 6 RS485
- 7 CAN
- 8 Parallel Communication Port
- 9 Positive Terminal
- 10 Negative Terminal

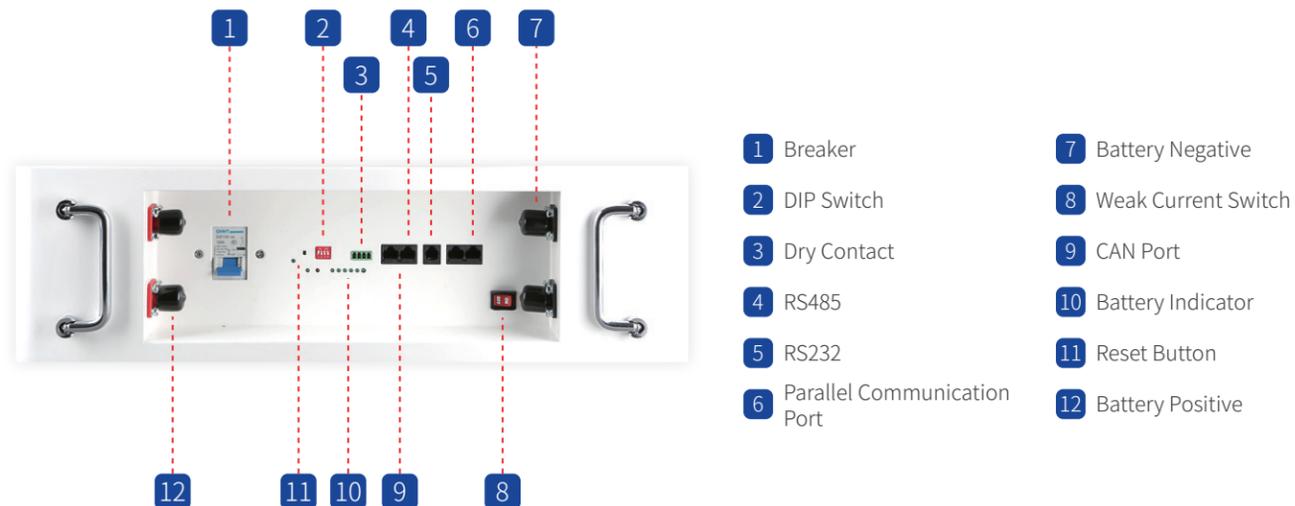
eLith Wall Series Battery

All battery cells undergo intelligent sorting, ensuring accurate and reliable voltage and current; a specialized BMS board is employed to safeguard the battery pack. The battery exhibits high energy density, long lifespan, and is characterized by safety, reliability, and suitability for a wide temperature range.



Features

- High-quality LFP battery
- Independent BMS for battery management
- Supports parallel connection of multiple battery packs
- Support RS485/CAN
- Wall-mounted design for easy installation
- 6000 cycle lifetime
- Wide temperature range: -20°C~60°C
- Versatile application for home, store, and office use



Specification

Model	ESW-3000L	ESW-5120
Rated battery voltage	25.6V	51.2V
Nominal capacity	120Ah	100Ah
Combination	8S8P	16S1P
Cycle life	≥6000 cycles @80%DOD @25°C	
Monthly self-discharge	3%/month	
Charge efficiency	≥97%	
Discharge efficiency	≥98%	
Charging voltage	28.8V	57.6V
Charging current	20A	
Max. charging voltage	29.2V	58.4V
Max. charging current	120A	100A
Discharge current	50A	
Max. discharge current	100A	
Discharge cut-off voltage	21.6V	43.2V
Dimensions W*D*H (mm)	505*480*190	
Package size W*D*H (mm)	563*558*286	
Net weight (kg)	35.5kg	47kg
Gross weight (kg)	41.5kg	51kg
IP rating	IP30	
Shell material	Metal	
Optional functions	Anti-theft, LCD	
Charging temperature range	0°C~45°C	
Operating temperature range	-20°C~60°C	
Storage temperature	0°C~40°C	
Humidity	10% to 85% RH (Non-condensing)	

*Specifications subject to change without notice.

eLith Wall Series Battery



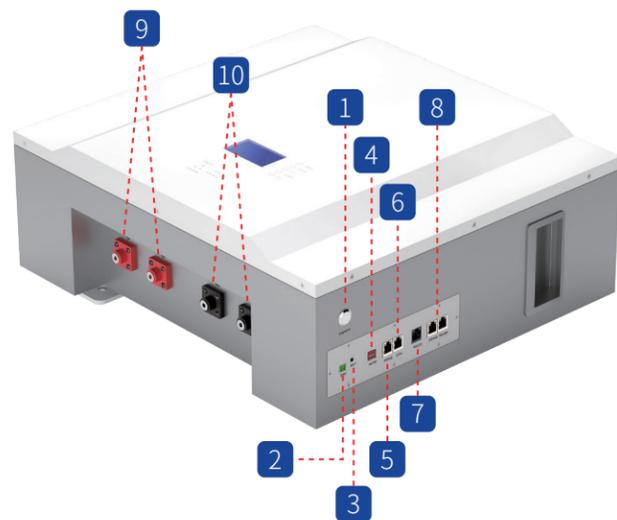
Features

- High specific energy
- Wall mount design for effortless installation
- Long lasting 6000 cycle life at 80% DOD
- Supports parallel operation, up to 15 units
- Environmentally friendly with no pollution
- Offers flexibility for deep customization

Specification

Model	ES-BOX4
Nominal voltage	51.2V
Nominal capacity	200Ah
Cell type	LiFePO4
Standard charge voltage	58.4V (configurable)
Max. charge current	100A
Discharge cut-off voltage	40V (configurable)
Max. discharge current	100A
Display	LCD (optional)
Expansion	Support 15 units in parallel
Communication	RS485, RS232, CAN (optional)
Cycle life	≥6000 Cycles (80%DOD)
Charge temperature range	0~65°C
Discharge temperature range	-20~65°C
Dimension W*H*D (mm)	670*710*188
Weight (kg)	85
Installation method	Wall mounted

*Test Condition: 80% DOD, 0.2C charge & discharge @25°C
 *Specifications subject to change without notice.



- | | |
|----------------|-------------------------------|
| 1 Power Switch | 6 CAN |
| 2 Dry Contact | 7 RS232 |
| 3 Reset | 8 Parallel Communication Port |
| 4 DIP Switch | 9 Positive Terminal |
| 5 RS485 | 10 Negative Terminal |

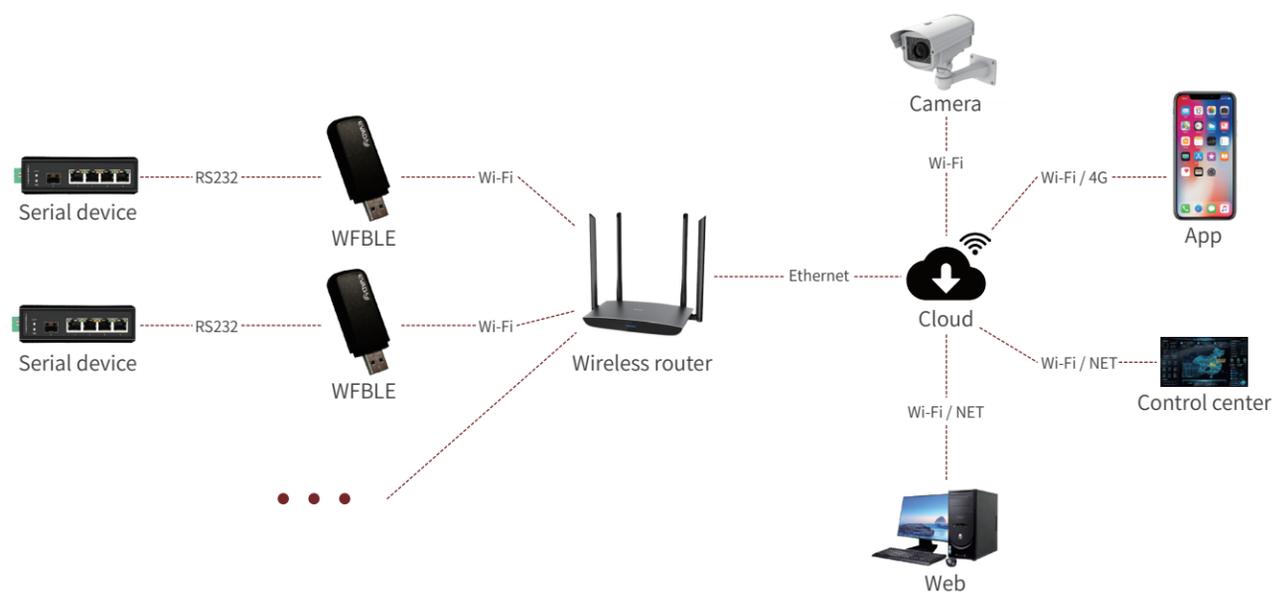
Monitoring Solution

WFBLE



Features

- Easy visualization of information via remote device
- Plug&Play functionality
- Encryption mode to secure wireless connection
- Remote debug and wireless upgrade ensure an efficient experience
- USB autosensing above protocols
- Industrial-grade components to work in -35°C~+85°C environment



Specification

Model	WFBLE RTU Bar-01	
Hardware	Dimensions(D/W/H)	64*25.8*12mm
	Weight	11±3g
	Protection class	IP21
	Rated voltage	DC5V±5%
	Max.current	500mA (DC5V)
	Operating temperature	-35°C~+85°C
	Storage temperature	-40°C~+90°C
	Host interface	USB
	Input communication interface	RS232
	Output communication interface	Wi-Fi
Wireless	Transmission rate	1200bps-115200bps (9600bps by default)
	Dongle	Automatic logout in 30s
	Bluetooth	BLE 5.0, 10m
	Working frequency	2.4GHz
Software	Standard	802.11b/g/n
	Bluetooth	BLE 5.0
	Antenna	Built-in PCB
	Working mode	Transparent transmission
Others	Wireless working mode	STA/AP/AP+STA
	Protocol	WEP/WPA-PSK/WPA2-PSK
	Configuration setting	Remote server, bluetooth, AT command
Others	Certification	CE, RoHS Compliant

Reference Project



Bulgaria Industrial&Commercial Energy Storage System



Oilfield Energy Storage System



South Africa Residential Energy Storage System



Indonesia Residential Energy Storage System



Partial Installations

