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Uhome Smart Energy

ENERGY STORAGE SOLUTIONS

OUR ENVIRONMENT, OUR ENERGY, OUR FUTURE

www.uhomeenergy.com

Who we are

10 Years
10 Years Warranty

100+
Technology Patents

10%
Continuous R&D investment

50+
Engineers

70+
Countries Business Areas

80000+
PCS Shipped Quantity

Safe and Reliable Top-tier cells

- Pioneer in semi solid state ESS with higher safety
- Built-in electrical protections and fire safety system
- 10 year warranty

One-stop ESS solution and Intelligent System

- Wide range of products for one-stop ESS solution
- Monitor and optimise your system 24/7 via cloud-based platform
- On time remote maintenance and technical support

Proven Track Records and Local Service

- Vast installations in Europe, Africa, Southeast Asia, and other regions
- Local service offered through affiliates

ABOUT US

Uhome is a leading energy storage solutions provider. The Company has established a comprehensive product portfolio for a wide range of applications including residential and small commercial & industrial (C&I) by leveraging its proprietary technology and robust R&D capabilities. Uhome has extensive expertise in battery management system (BMS), energy management system(EMS), system integration and remote monitoring.

With its headquarter in Wuxi China, Uhome has provided safe, reliable, and high-quality products and services to users over 70 countries and regions. Its products have obtained UL, IEC, CEC and other international certifications. At Uhome, customer satisfaction is always our top priority. Uhome is committed to build a low-carbon environment, promote efficient use of renewable energy and make a better future.

2018
Established Uhome
Smart Energy R&D Team

2019
Developed BMS, EMS
and APP

2020
1st generation
ESS products launched

2021
Achieved sales
of 10,000+ units

2022
Achieved sales of
40,000+ units in 50+
countries around
the world

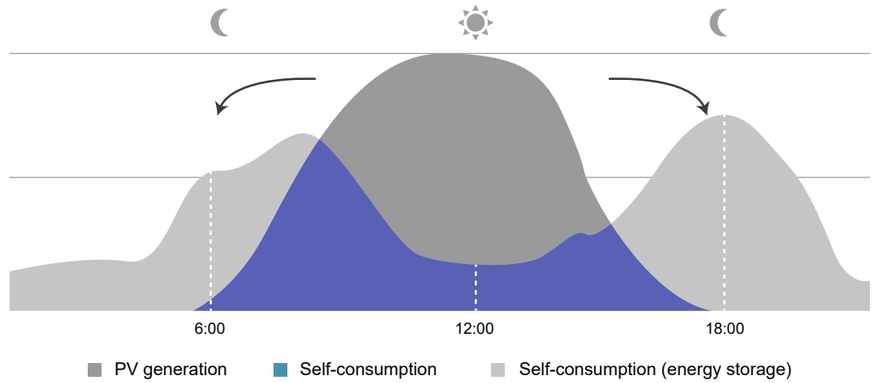
2023
Independently
developed
inverter with sales
exceeding
60,000+ units

2024
Products sold across 70
countries and regions

2025
Strategic cooperation with industry
leading brands, expanding and
upgrading production scale

Residential Energy Storage Solution

Residential ESS stores energy generated by solar or from the grid. You can use this energy to power your home day andight, during outages or when you want to go off-grid, and tooptimize your energy use for electricity bill saving and more.



Strengths

More Usable Energy
Cell and Pack level balancing
Up to 93% DOD

Scalability and Flexibility
Module design,
Fexible expansion, up to 128pcs

Safe & Reliable
Pioneer in solid-state battery ESS
Top-tier cells

Easy and flexible installation
Rack-mounted, wall-mounted,
stackable, ground

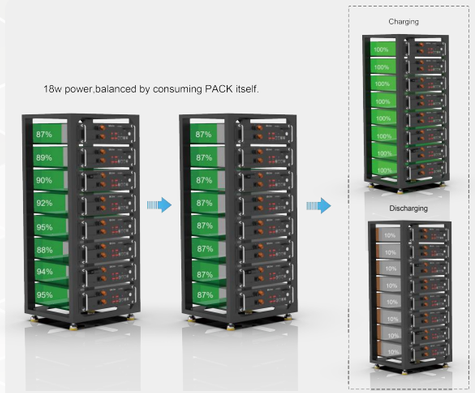
Intelligent Monitoring
Monitor, control and optimize
anytime anywhere

Wide Compatibility
Compatible with wide
range of inverters

10 CORE ADVANTAGES

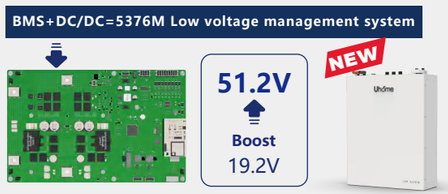
1 Voltage Balancing Between the Batteries

Automatic balancing voltage difference between battery packs.Voltage balance can be achieved in series or parallel.



2 Battery boost technology: boost from 19.2V to 51.2V

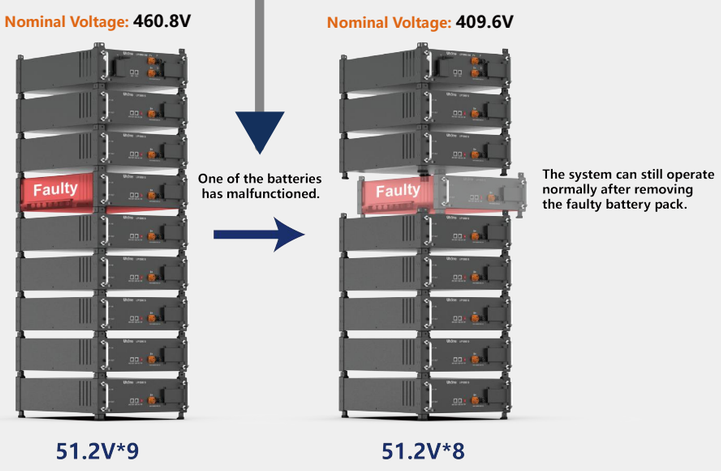
Can reduce battery energy consumption, improve charging efficiency, achieve fast charging and recovery of braking energy, etc.



In addition, the boost technology can also extend battery life and expand the application range of the battery.

3 Bypass Module technology

By adding a bypass module,removing or replacing a faulty battery in any pack will not affect the overall operation of the system.



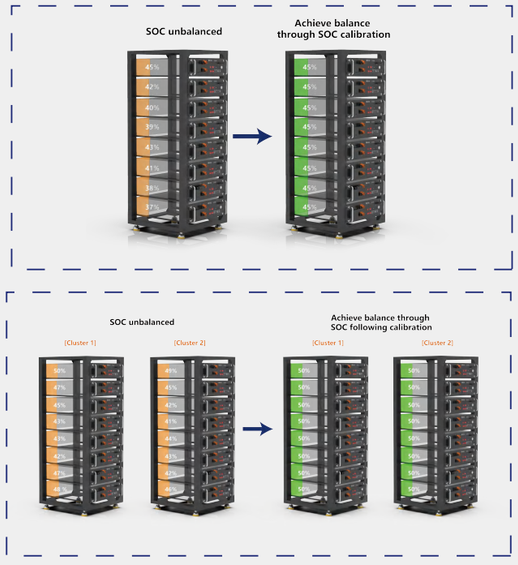
4 Parallel Strategy(The new batteries and used batteries can be used together)

With our products, after adding a new battery of the same type to the original system, it can be used normally. Uhome's BMS has designed a parallel strategy to prevent large current shocks caused by paralleling. Reduce installation worker wait, operation time and improve operational safety.

The new batteries and used batteries can be used together.

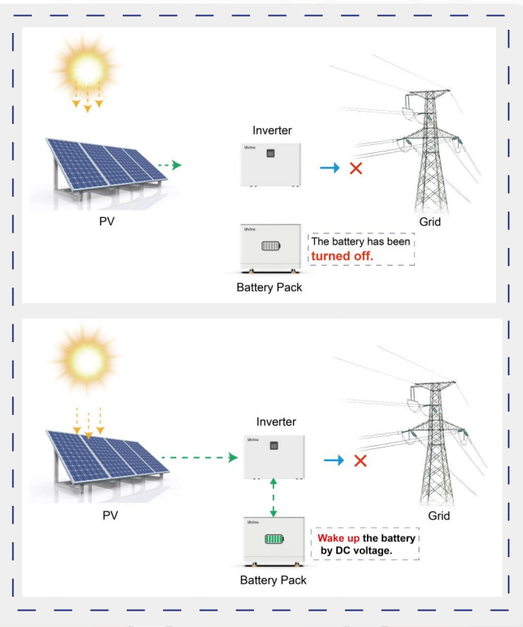
5 SOC Dynamic Calibration

Sophisticated strategy allows SOC to calibrate itself and make it more precise.



6 On/off Management Including Automatic Wake-up Function

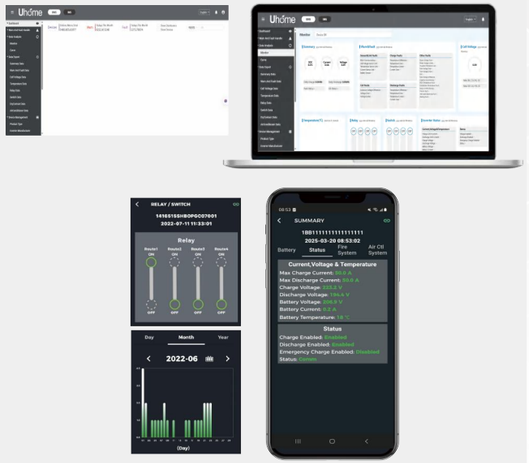
The battery is likely to run out of power and be in dormant due to the complex operating conditions under the off-grid system. Our technology can automatically wake up the battery into operation.



10 CORE ADVANTAGES

7 Remote Monitoring

Our products support both Web-side and App-side data monitoring.

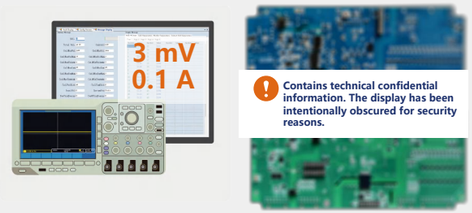


By leveraging AI-powered optimization algorithms and synchronizing real-time data from grid operators, the system automatically adjusts inverter settings to maximize customer benefits and deliver greater cost savings on electricity bills.

8 Accurate Acquisition of Battery's Information

Accurate acquisition and precise control, free from the EMC interference of the inverter.voltage monitoring can be accurate to within 3 mV, and current can be accurate to within 0.1 A, making SOC more precise.

Far Ahead of The Tndustry



9 Series and Parallel Connection

Products of the same model can be installed in series or in parallel.

Series Connection

Parallel Connection

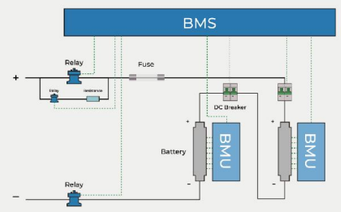
World's only Industry-first Technology

▼**Strong compatibility:**
Applicable to 95% of inverter brands on the market
▼**Multiple application scenarios:**
Suitable for both household and commercial use

10 Multiple Electrical Safety Protection

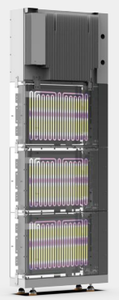
More product safety, more product protection

Triple Safety Protection Equipment



Fire Protection Equipment

Low Temperature Protective Heating Device



PRODUCTS PORTFOLIO

OUR ENVIRONMENT, OUR ENERGY, OUR FUTURE

A.Power Station

- **Low-voltage**

1) LFP 5000DM
2) 5120M/5120MPro/10240M(Solid State Battery)
3) LFP 2560M/5120MP
4) LFP 16076M/16076MPlus
5) LFP 6028M

- **High-voltage**

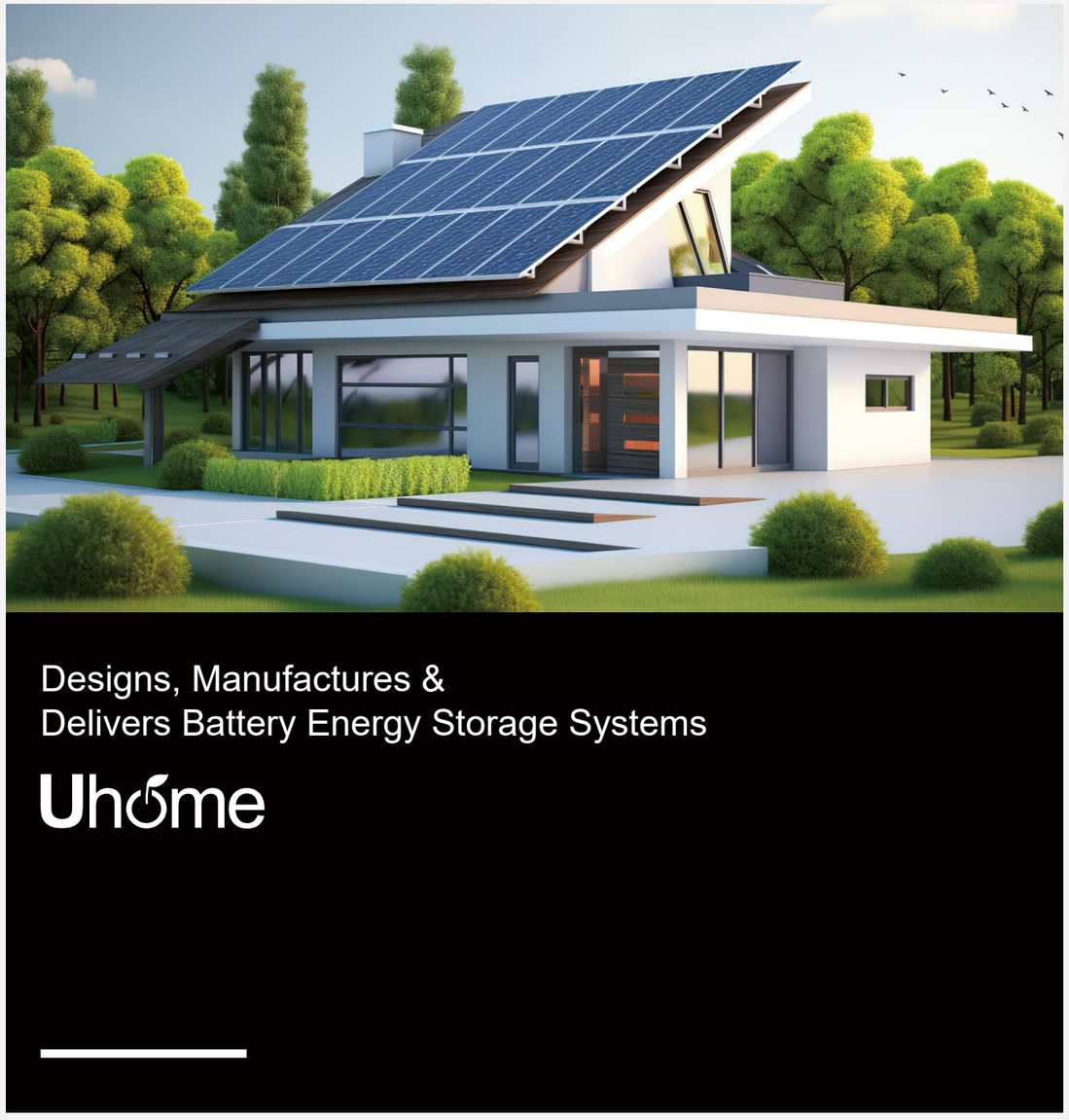
1) LFP 5000B
2) 6140SM/S(Solid State Battery)
3) LFP 16076
4) 16076SM/S(Solid State Battery)

B.PCS

1) 2.0kW Single-phase Inverter
2) 3.6kW AC Coupled Inverter
3) 3.6kW Single Phase Inverter
4) 6.2kW Single Phase Off-grid Inverter
5) 5-12kW Three Phase Inverter
6) All-in-one Blacony ESS

C.Commercial and Industrial

1) Uhome-CIS 60kWh
2) Uhome-CIS 120kWh
3) Uhome-CIS 240kWh



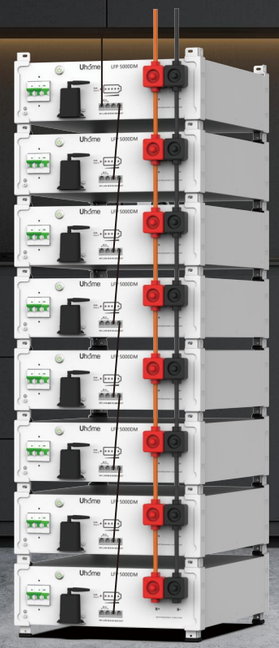
Designs, Manufactures &
Delivers Battery Energy Storage Systems

Uhome

LFP 5000DM

$LiFePO_4$ Battery ESS

Front Interfaces



Parallel Connection(MAX 16P)

PRODUCT FEATURES

1C
Discharge Rating

Multiple Safety Protection
MOS, DC Breaker

Smart BMS
Intelligent management & maintenance of battery systems

Parallel
Supports parallel connection of 16 units

Voltage Wake-up
Under off-grid System Environment

New&Old Batteries can be used in together
Connect in Parallel

Remote Monitoring
Real time monitoring of power usage and battery pack operation

No Dip Switch
Easy for commission

Technical Specifications

Product Image		
Model		**LFP 5000DM**
Battery Type		$LiFePO_4$ Prismatic
Nominal Energy		5.1kWh
Usable Energy*		4.7kWh
Nominal Capacity		100Ah
Nominal Voltage		51.2V
Operating Voltage		48~56V
Under Lead-acid Mode	Recommended Current	50A
	Recommended Voltage	48~55.2V
Max Charge/Discharge Current		60A/100A
Peak Discharge Current		120A(3S)
Peak Discharge Power		6kW(3S)
Recommended Depth of Discharge (DOD)		93%
Charging Temp. Range		From 0~55℃
Discharging Temp. Range		From -10~55℃
Cycle Life		⩾6000@25℃
Scalability		16 Parallel
WIFI Module		Uhome
Communication		CAN/ RS485
IP Rating		IP20
Recommended Humidity		5%~95%(No condensed water)
Cooling Type		Natural cooling
Color		White(optional)
Installation		Rack Mounted/Ground Mounted
Net Weight		44±1kg
Dimension(W*H*D)		442*135*500mm
Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature
Warranty		5/10 years*（optional）
Certification		UN38.3/CE/UL1973(Cell)

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%);

Technical Specifications

Product Image				
Model		**5120M**	**5120MPro**	**10240M**
Battery Type		Semi-solid state pouch		
Nominal Energy		5.12kWh	6.1kWh	10.24kWh
Usable Energy*		4.86kWh	5.80kWh	9.73kWh
Nominal Capacity		100Ah	120Ah	200Ah
Nominal Voltage		51.2V		
Operating Voltage		48~56V		
Under Lead-acid Mode	Recommended Current	50A		
	Recommended Voltage	48~55.2V		
Recommended Charge&Discharge Current		50A/50A	60A/60A	100A/100A
Max Charge/Discharge Current		80A/100 A	80A/100 A	100A/120 A
Peak Discharge Current		150A(3S)		
Peak Discharge Power		7.68kW(3S)		
Recommended Depth of Discharge (DOD)		95%		
Charging Temp. Range		From 0~55℃		
Discharging Temp. Range		From -20~55℃		
Cycle Life		≥8000@25℃		
Scalability		16 Parallel		
WIFI Module		Uhome		
Communication		CAN/ RS485		
IP Rating		IP20	IP65	IP20
Recommended Humidity		5%~95%(No condensed water)		
Cooling Type		Natural cooling		
Color		White(optional)		
Installation		Wall/Ground mounting	Wall/Ground mounting	Ground mounting
Net Weight		46kg	57±1kg(Top Cover optional)	88kg
Dimension(L*W*H)		535*442*165mm	440*588*165mm	442*920*165mm
Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature		
Warranty		5/10 years*（optional）		
Certification		UN38.3/CE/IEC62619		

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from Uhome 0.2C CC-CV and based on recommended DOD(93%);

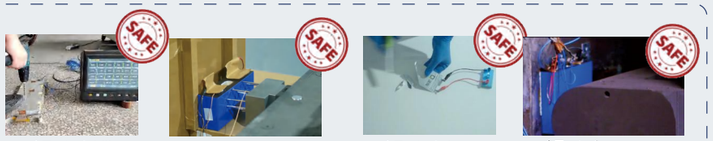
Semi-Solid State Battery Introduction

What is Semi-Solid State Battery

In solid-state lithium-ion batteries, lithium ions travel between electrodes through a solid electrolyte during the charging and discharging processes. However, full solid-state batteries encounter challenges related to limited contact efficiency between the electrodes and the electrolyte. To overcome this issue, a promising solution is to incorporate small amounts of liquid electrolytes, which can optimize battery performance and extend lifespan.

Semi-solid state batteries, the 1st generation of all solid state, offer enhanced safety compared to traditional LFP batteries, as the solid components significantly reduce the risk of leakage. Additionally, the special small amounts inclusion of liquid electrolytes improves ion conductivity, thereby enhancing overall battery performance.

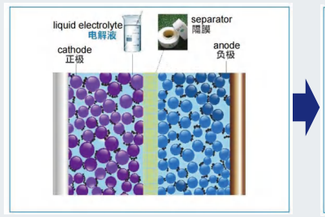
The core and barrier of solid-state LIBs is the innovative development of materials.

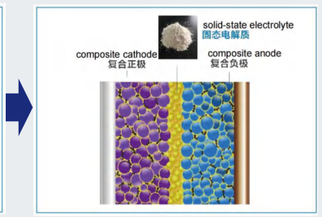


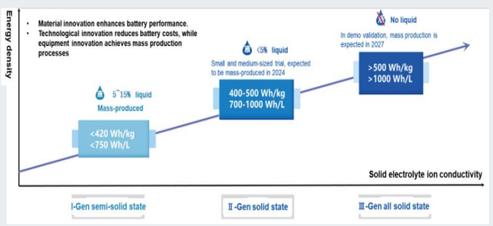
✓ Test of drill ✓ Test of needling ✓ Test of shear ✓ Test of squeeze

Our products have undergone multiple rigorous tests.

Core Advantages



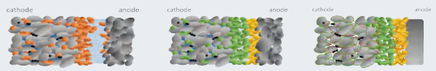




MUCH SAFER: The liquid electrolyte content of semi-solid state batteries is reduced to 5% -10%, and the semi-solid structure significantly reduces the risk of leakage. The solid-state electrolyte layer suppresses lithium dendrite growth and reduces the probability of thermal runaway.

LONGER SPAN LIFE: Solid electrolytes slow down the corrosion and volume expansion of electrode materials, improving long-term stability.

HIGHER COST-EFFECTIVENESS: The semi-solid state battery adopts in-situ solidification technology, and only requires partial modification of the liquid battery production line to achieve mass production, greatly reducing equipment investment costs.

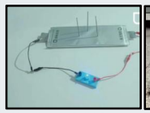


Energy density ↑ Liquid content ↓

Process steps ↓ Unit cost ↓

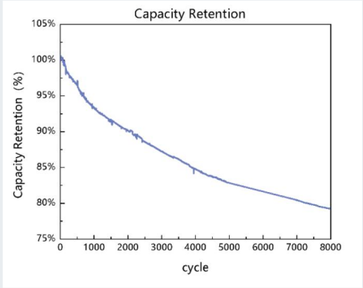

Thermal runaway traditional battery


Traditional battery after ARC test


Needle test Solid State Battery


Punch test on Solid State Battery

300℃ ARC Test (Accelerating Rate Calorimeter)		
Items	**Solid state LFP Battery**	**Traditional LFP**
Max. temperature rise rate (dT/dt)max(℃/S)	0.235	2.129
Temperature point Tmax (℃)	No thermal runaway	471.4
Note: Definition conditions for thermal runaway, temperature rise rate dT/dt ≥ 1℃/S		



High Safety

Long Battery Life

More affordable

LFP 2560M/5120MP

$LiFePO_4$ Battery ESS

Remote Monitoring&Wireless Upgrade

USB upgrade can also be done when there is no network

PRODUCT FEATURES

⩾6000
Cycle Life@25°C

USB upgrade
USB upgrades are available, allowing for preservation of fault data

Smart BMS
Intelligent management &maintenance of battery systems

Remote Monitoring
Real time monitoring of power usage and battery pack operation

Multiple Safety Protection
MOS, DC Breaker

New&Old Batteries can be used in together
Connect in Parallel

Parallel
Supports parallel connection of 16 units

Voltage Wake-up
Under off-grid System Environment

Technical Specifications

Product Image			
Model		**LFP 2560M**	**LFP 5120MP**
Battery Type		$LiFePO_4$ Prismatic	
Nominal Energy		2.56kWh	5.1kWh
Usable Energy*		2.3kWh	4.7kWh
Nominal Capacity		100Ah	100Ah
Nominal Voltage		51.2V	
Operating Voltage		24~28V	48~56V
Under Lead-acid Mode	Recommended Current	50A	50A
	Recommended Voltage	24~27.6V	48~55.2V
Recommended Charge&Discharge Current		50A/50A	
Max Charge/Discharge Current		100A/100 A	
Peak Discharge Current		150A(3S)	
Peak Discharge Power		4kW(3S)	8kW(3S)
Recommended Depth of Discharge (DOD)		93%	
Charging Temp. Range		From 0~55℃	
Discharging Temp. Range		From -10~55℃	
Cycle Life		⩾6000@25℃	
Scalability		16 Parallel	
WIFI Module		Uhome	
Communication		CAN/ RS485	
IP Rating		IP20	
Recommended Humidity		5%~95%(No condensed water)	
Cooling Type		Natural cooling	
Color		White(optional)	
Installation		Ground Mounted	
Net Weight		35kg	50kg
Dimension(L*W*H)		400*450*160mm	560*450*160mm
Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature	
Warranty		5/10 years*(optional)	
Certification		CE/UN38.3	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%);

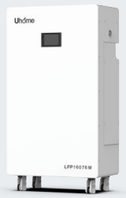
LFP 16076M/LFP 16076MPlus

$LiFePO_4$ Battery ESS

PRODUCT FEATURES

- **≥8000** — Cycle Life@25°C
- **Voltage Wake-up** — Under off-grid System Environment
- **Smart BMS** — Intelligent management & maintenance of battery systems
- **Remote Monitoring** — Real time monitoring of power usage and battery pack operation
- **Multiple Safety Protection** — MOS, DC Breaker
- **New&Old Batteries can be used in together** — Connect in Parallel
- **Parallel Connection** — Supports parallel connection of 16 units
- **Voltage Balancing** — Voltage Balancing between Battery Cells&Battery Pack

Technical Specifications

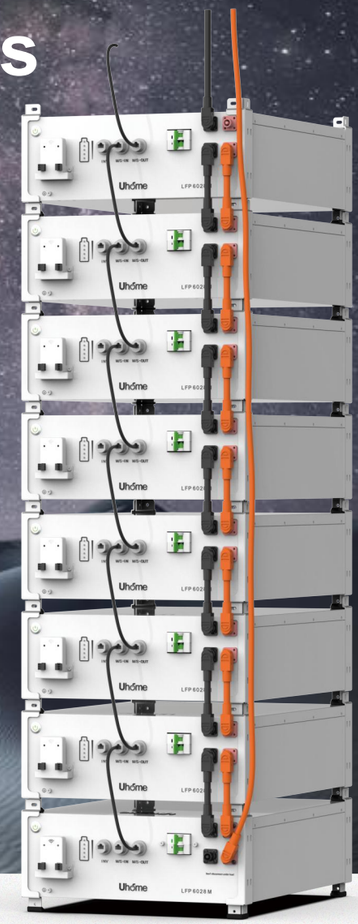
Product Image			
Model		LFP 16076M	LFP 16076MPlus
Battery Type		LiFePO4 Prismatic	
Nominal Energy		16.076kWh	
Usable Energy*		14.95kWh	
Nominal Capacity		314Ah	
Nominal Voltage		51.2V	
Operating Voltage		48~56V	
Under Lead-acid Mode	Recommended Current	100A	80A
	Recommended Voltage	48~55.2V	
Recommended Charge&Discharge Current		150A/150A	100A/100A
Max Charge/Discharge Current		150A/150 A	200A/200 A
Peak Discharge Current		200A(3S)	240A(3S)
Peak Discharge Power		10kW(3S)	12kW(3S)
Recommended Depth of Discharge (DOD)		93%	
Charging Temp. Range		From 0~55℃	
Discharging Temp. Range		From -10~55℃	
Cycle Life		⩾8000@25℃	
Scalability		16 Parallel	
WIFI Module		Uhome	
Fire Protection		Built-in aerosol(optional)	
Communication		CAN/ RS485	
IP Rating		IP20	IP65
Recommended Humidity		5%~95%(No condensed water)	
Cooling Type		Natural cooling	
Color		White(Optional)	
Installation		Floor-mounting	Floor-mounting/Stack-mounting
Net Weight		115kg	115±2kg
Dimension(L*W*D)		450*752*235mm	480*750*235mm
Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature	
Top Cover		/	Yes（Optional）
Heating Module		/	Yes（Optional）
Warranty		5/10 years*（optional）	
Certification		UN38.3/CE/IEC 62619(Cell)	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions from Uhome 0.2C CC-CV and based on recommended DOD(93%);

LFP 6028M

$LiFePO_4$ Battery ESS

The King of Cost-effectiveness



Parallel Connection（MAX 16P）

PRODUCT FEATURES

- **≥6000** Cycle Life@25°C
- **Voltage Balancing** Voltage balancing among battery packs
- **Smart Boost BMS** BMS+DC/DC=6028M Low voltage management system
- **Remote Monitoring** Real time monitoring of power usage and battery pack operation
- **0.6C** Discharging Rate
- **New&Old Batteries can be used in together** Connect in Parallel
- **Parallel** Supports parallel connection of 16 units
- **Voltage Wake-up** Under off-grid System Environment

Technical Specifications

Product Image	
Model	**LFP 6028M**
Battery Type	$LiFePO_4$ Prismatic
Nominal Energy	6.028kWh
Usable Energy*	5.6kWh
Nominal Capacity	314Ah
Nominal Voltage	50V
Operating Voltage	48~52V
Recommended Charge&Discharge Current	30A/30A
Max Charge/Discharge Current	60A/60 A
Peak Discharge Current	80A(3S)
Peak Discharge Power	4kW(3S)
Recommended Depth of Discharge (DOD)	93%
Charging Temp. Range	From 0~55℃
Discharging Temp. Range	From -10~55℃
Cycle Life	⩾6000@25℃
Scalability	16 Parallel
WIFI Module	Uhome
Communication	CAN/ RS485
IP Rating	IP20
Recommended Humidity	5%~95%(No condensed water)
Cooling Type	Natural cooling
Color	White(optional)
Installation	Rack Mounted/Ground Mounted
Net Weight	45±5kg
Dimension（W*H*D）	443*135*555mm
Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature
Fire Protection	Built-in aerosol(optional)
Warranty	5/10 years*（optional）
Certification	UN38.3

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%);

PRODUCT FEATURES

≥6000
Cycle Life@25°C

Voltage Wake-up
Under off-grid System Environment

Multiple Safety Protection
Relay, DC Breaker

New&Old Batteries can be used in together
Connect in Parallel

Smart BMS
Intelligent management & maintenance of battery systems

Remote Monitoring
Real time monitoring of power usage and battery pack operation

Parallel&Series
Supports parallel/series connection of 16 units

Voltage Balancing
Voltage Balancing between Battery Cells&Battery Pack

Technical Specifications

Product Image	

Model	LFP 5000B
Battery Type	$LiFePO_4$ Prismatic
Nominal Energy	5.1kWh
Usable Energy*	4.7kWh
Nominal Capacity	100Ah
Nominal Voltage	51.2V
Operating Voltage	48~56V
Recommended Charge&Discharge Current	50A/50A
Max Charge/Discharge Current	60A/60 A
Peak Discharge Current	120A(3S)
Peak Discharge Power	6kW(3S)
Recommended Depth of Discharge (DOD)	93%
Charging Temp. Range	From 0~55℃
Discharging Temp. Range	From -10~55℃
Cycle Life	⩾6000@25℃
Scalability	16 Parallel/16 Series
WIFI Module	Uhome
Communication	CAN/ RS485
IP Rating	IP20
Recommended Humidity	5%~95%(No condensed water)
Cooling Type	Natural cooling
Color	Black/White
Installation	Walling Mounted/Ground Mounted
Net Weight	45kg
Dimension(W*H*D)	442*133*520mm
Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature
Warranty	5/10 years*（optional）
Certification	UN38.3/UL1973/CE/IEC 62619/UL9540A

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%);

Typical Application Cases

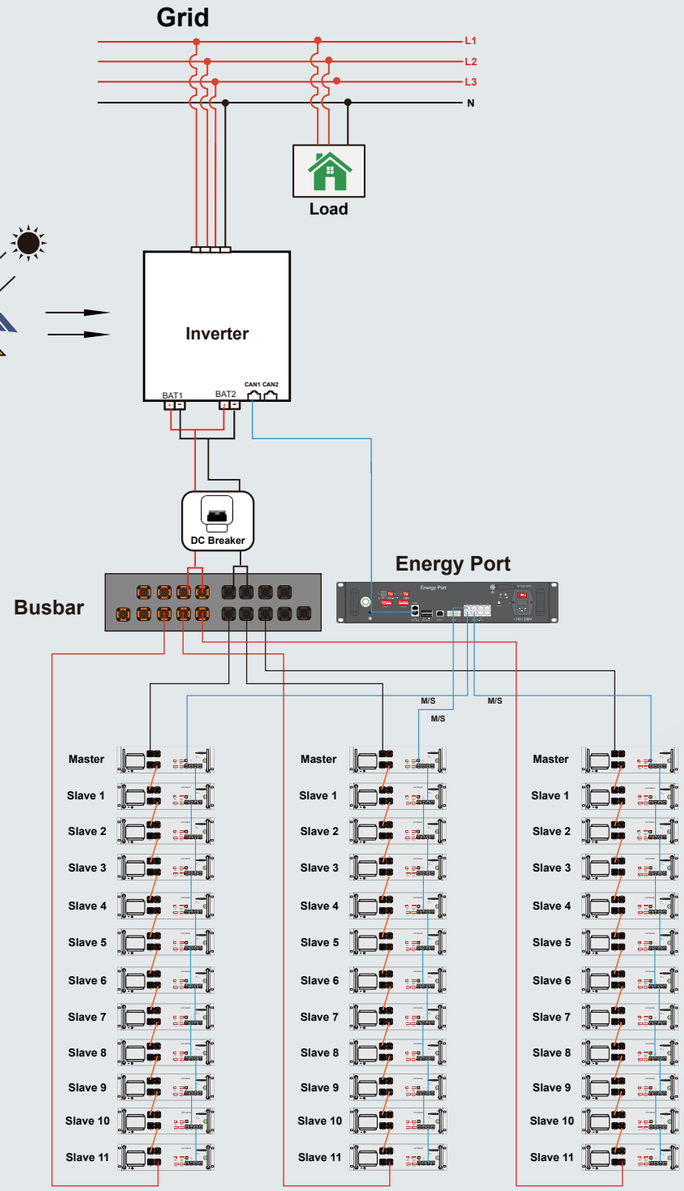
Reference Scheme	Compatible inverter brands
1P12S	**DEYE\SOLINTEG\SOLIS\LuxPower\Afore\Growatt\ Goodwe\Thinkpower\Sol-Ark\Hoymlies\AISWEI,etc.**
2P12S	**NOTE:** The above are only examples of compatible inverters.
3P12S	

Scheme 1: 1P12S

Scheme 2: 2P12S

Typical Application Cases

Scheme 3: 3P12S



Pioneer Solid-State
Lithium-ion Battery ESS

6140SM/S
24.56-79.82kWh

- High-performance high-voltage storage system.
- Modular design for ultimate flexibility.
- Suitable for a wide range of applications.
- Expandable up to 79.82 kWh capacity.
- Plug-and-play for quick installation

PRODUCT FEATURES

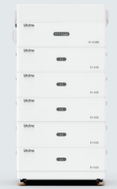
- Ultra safe with solid-state battery cells
- Built-in fire extinguishing system(optional)
- SOC balancing between packs & clusters
- Easy installation:save time and costs
- Flexible expansion: up to 8 clusters in parallel
- Built-in intelligent BMS
- WAN Port & WIFI

Technical Specifications

Battery Module Image			
Model		6140SM(Master)	6140S(Slave)
Battery Type		Semi-solid state Prismatic	
Nominal Energy		6.14kWh	
Usable Energy*		5.83kWh	
Nominal Capacity		120Ah	
Nominal Voltage		51.2V	
Operating Voltage		41.6~57.6V	
Under Lead-acid Mode	Recommended Current	50A	
	Recommended Voltage	48~55.2V	
Recommended Charge&Discharge Current		80A/100A	
Max Charge/Discharge Current		120A/120A	
Peak Discharge Current（2min 25℃）		125A	
Peak Discharge Power（2min 25℃）		6.144kW	
Recommended Depth of Discharge (DOD)		95%	
Charging Temp. Range(Cell)		From 0~55℃	
Discharging Temp. Range(Cell)		From -20~55℃	
Operating Ambient Temperature (Pack)		With heating module:-30~55℃ / No heating module:-20~55℃	
Cycle Life		⩾8000@25℃	
Scalability		1 Master series	Up to 12 Slave series
WIFI Module		Built-in	
Communication		CAN/ RS485	
IP Rating		IP65	
Recommended Humidity		5%~95%(No condensed water)	
Cooling Type		Natural cooling	
Color		White(optional)	
Installation		Stack-mounting	
Net Weight		59±1kg	56±1kg
Dimension（W*H*D）		620*170*400mm	
Protection		Over-current/Over-voltage/Short circuit/Under-voltage/Over temperature	
Heating Module		Yes	
Balancing Module		Yes	
Fire Protection		Built-in aerosol(optional)	
Warranty		5/10 years*（optional）	
Certification		CE/UN38.3/IEC62619/IEC62477	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(95%);

Technical Specifications

Product Image					
Model		24.56kWh	30.70kWh	36.84kWh	42.98kWh
Battery Type		Semi-solid state Prismatic			
Nominal Energy		24.56kWh	30.70kWh	36.84kWh	42.98kWh
Usable Energy*		23.33kWh	29.16kWh	34.99kWh	40.83kWh
Nominal Capacity		120Ah			
Nominal Voltage		204.8V	256V	307.2V	358.4V
Operating Voltage		166.4~230.4V	208~288V	249.6~345.6V	291.2~403.2V
Under Lead-acid Mode	Recommended Current	50A			
	Recommended Voltage	192~220.8V	240~276V	288~331.2V	336~386.4V
Recommended Charge&Discharge Current		80A/100A			
Max Charge/Discharge Current		120A/120A			
Peak Discharge Current（2min 25℃）		125A			
Peak Discharge Power（2min 25℃）		24.57kW	30.72kW	38.84kW	42.98kW
Recommended Depth of Discharge (DOD)		95%			
Charging Temp. Range(Cell)		From 0~55℃			
Discharging Temp. Range(Cell)		From -20~55℃			
Operating Ambient Temperature (Pack)		With heating module:-30~55℃ / No heating module:-20~55℃			
Cycle Life		⩾8000@25℃			
Scalability		4S	5S	6S	7S
WIFI Module		Built-in			
Communication		CAN/ RS485			
IP Rating		IP65			
Recommended Humidity		5%~95%(No condensed water)			
Cooling Type		Natural cooling			
Color		White(optional)			
Installation		Stack-mounting			
Net Weight		227±4kg	283±5kg	339±6kg	395±7kg
Dimension（W*H*D）		620*680*400mm	620*850*400mm	620*1020*400mm	620*1190*400mm
Protection		Over-current/Over-voltage/Short circuit/Under-voltage/Over temperature			
Warranty		5/10 years*（optional）			
Certification		CE/UN38.3/IEC62619/IEC62477			

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(95%);

Technical Specifications

Product Image				
Model		49.12kWh	55.26kWh	61.4kWh
Battery Type		Semi-solid state Prismatic		
Nominal Energy		49.12kWh	55.26kWh	61.4kWh
Usable Energy*		46.66kWh	52.49kWh	58.33kWh
Nominal Capacity		120Ah		
Nominal Voltage		409.6V	460.8V	512V
Operating Voltage		332.8~460.8V	374.4~518.4V	416~576V
Under Lead-acid Mode	Recommended Current	50A		
	Recommended Voltage	384~441.6V	432~496.8V	480~552V
Recommended Charge&Discharge Current		80A/100A		
Max Charge/Discharge Current		120A/120A		
Peak Discharge Current（2min 25℃）		125A		
Peak Discharge Power（2min 25℃）		49.12kW	55.26kW	61.4kW
Recommended Depth of Discharge (DOD)		95%		
Charging Temp. Range(Cell)		From 0~55℃		
Discharging Temp. Range(Cell)		From -20~55℃		
Operating Ambient Temperature (Pack)		With heating module:-30~55℃ / No heating module:-20~55℃		
Cycle Life		⩾8000@25℃		
Scalability		8S	9S	10S
WIFI Module		Built-in		
Communication		CAN/ RS485		
IP Rating		IP65		
Recommended Humidity		5%~95%(No condensed water)		
Cooling Type		Natural cooling		
Color		White(optional)		
Installation		Stack-mounting		
Net Weight		451±8kg	507±9kg	563±10kg
Dimension（W*H*D）		620*1360*400mm	620*1530*400mm	620*1700*400mm
Protection		Over-current/Over-voltage/Short circuit/Under-voltage/Over temperature		
Warranty		5/10 years*（optional）		
Certification		CE/UN38.3/IEC62619/IEC62477		

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(95%);

Technical Specifications

Product Image				
Model		67.54kWh	73.68kWh	79.82kWh
Battery Type		Semi-solid state Prismatic		
Nominal Energy		67.54kWh	73.68kWh	79.82kWh
Usable Energy*		64.16kWh	69.99kWh	75.82kWh
Nominal Capacity		120Ah		
Nominal Voltage		563.2V	614.4V	665.6V
Operating Voltage		457.6~633.6V	499.2~691.2V	540.8~748.8V
Under Lead-acid Mode	Recommended Current	50A		
	Recommended Voltage	528~607.2V	576~662.4V	624~717.6V
Recommended Charge&Discharge Current		80A/100A		
Max Charge/Discharge Current		120A/120A		
Peak Discharge Current（2min 25℃）		125A		
Peak Discharge Power（2min 25℃）		67.54kW	73.68kW	79.82kW
Recommended Depth of Discharge (DOD)		95%		
Charging Temp. Range(Cell)		From 0~55℃		
Discharging Temp. Range(Cell)		From -20~55℃		
Operating Ambient Temperature (Pack)		With heating module:-30~55℃ / No heating module:-20~55℃		
Cycle Life		⩾8000@25℃		
Scalability		11S	12S	13S
WIFI Module		Built-in		
Communication		CAN/ RS485		
IP Rating		IP65		
Recommended Humidity		5%~95%(No condensed water)		
Cooling Type		Natural cooling		
Color		White(optional)		
Installation		Stack-mounting		
Net Weight		619±11kg	675±12kg	731±13kg
Dimension（W*H*D）		620*1870*400mm	620*2040*400mm	620*2210*400mm
Protection		Over-current/Over-voltage/Short circuit/Under-voltage/Over temperature		
Warranty		5/10 years*（optional）		
Certification		CE/UN38.3/IEC62619/IEC62477		

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(95%);

PRODUCT FEATURES

MODULAR DESIGN

Free combination of solutions, suitable for both INDUSTRIAL, COMMERCIAL, and household use.

- **≥8000**
  Cycle Life@25°C
- **Voltage Wake-up**
  Under off-grid System Environment
- **Voltage Blancing**
  Voltage Balancing between Battery Cells&Battery Pack
- **New&Old Batteries can be used in together**
  Connect in Parallel
- **Smart BMS**
  Intelligent management & maintenance of battery systems
- **Remote Monitoring**
  Real time monitoring of power usage and battery pack operation
- **Parallel& Series**
  Support 16 Parallel&12 Series Connection
- **Voltage Balancing**
  Voltage Balancing between Battery Cells&Battery Pack

Technical Specifications

Product Image		
Model		**LFP 16076**
Battery Type		$LiFePO_4$ Prismatic
Nominal Energy		16.076kWh
Usable Energy*		14.9kWh
Nominal Capacity		314Ah
Nominal Voltage		51.2V
Operating Voltage		48~56V
Under Lead-acid Mode	Recommended Current	100A
	Recommended Voltage	48~55.2V
Recommended Charge&Discharge Current		150A/150A
Max Charge/Discharge Current		200A/200 A
Peak Discharge Current		250A(3S)
Peak Discharge Power		12kW(3S)
Recommended Depth of Discharge (DOD)		93%
Charging Temp. Range		From 0~55℃
Discharging Temp. Range		From -10~55℃
Cycle Life		⩾8000@25℃
Scalability		16 Parallel/12 Series
WIFI Module		Uhome
Communication		CAN/ RS485
IP Rating		IP20
Recommended Humidity		5%~95%(No condensed water)
Cooling Type		Natural cooling
Color		White(Optional)
Installation		Rack Mounted/Ground Mounted
Net Weight		116kg
Dimension(L*W*D)		855*450*235mm
Protection		Over-current/Over-voltage/Short circuit/Under-voltage/Over temperature
Heating Module		Optional
Fire Protection		Built-in aerosol
Warranty		5/10 years*（optional）
Certification		CE/UN38.3

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%);

Pioneer Solid-State
Lithium-ion Battery ESS

16076SM/S

- High-performance high-voltage storage system.
- Modular design for ultimate flexibility.
- Suitable for a wide range of applications.
- Expandable up to 208.988kWh(13S) capacity.

PRODUCT FEATURES

Ultra safe with solid-state battery cells

Built-in fire extinguishing system(optional)

SOC balancing between clusters

Easy installation:save time and costs

Flexible expansion: up to 8 clusters in parallel

Built-in intelligent BMS

WAN Port in additon to WIFI

Technical Specifications

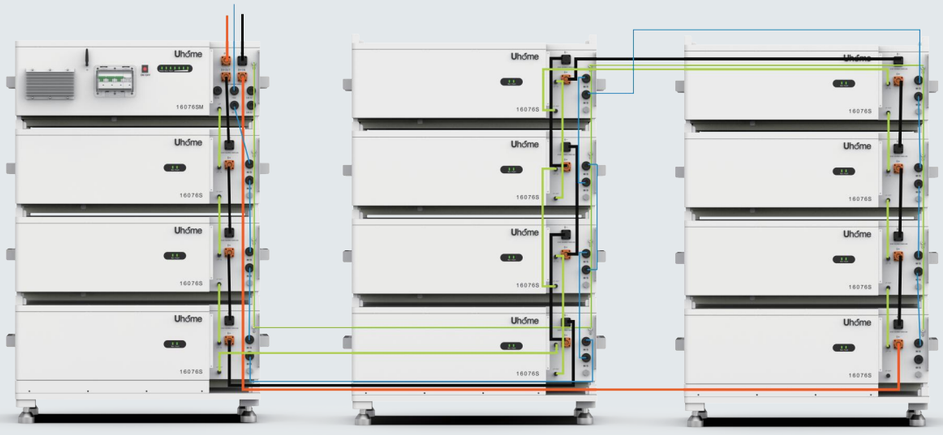
Battery Module Image		
Model	**LFP 16076SM**	**LFP 16076S**
Battery Type	Semi-solid state Prismatic	
Nominal Energy	16.076kWh	
Usable Energy*	14.95kWh	
Nominal Capacity	314Ah	
Nominal Voltage	51.2V	
Operating Voltage	48~56V	
Recommended Charge&Discharge Current	150A/150A	
Peak Discharge Current（2min 25℃）	175A	
Peak Discharge Power（2min 25℃）	8.96kW	
Recommended Depth of Discharge (DOD)	93%	
Charging Temp. Range	From 0~55℃	
Discharging Temp. Range	From -20~55℃	
Cycle Life	⩾8000@25℃	
Scalability	1 Master series	Up to 12Slave series
WIFI Module	Uhome	
Communication	CAN/ RS485	
IP Rating	IP65	
Recommended Humidity	5%~95%(No condensed water)	
Cooling Type	Forced cooling	
Color	White(optional)	
Installation	Stack-mounting	
Net Weight	125kg	
Dimension（W*H*D）	755*465*270mm	
Protection	Over-current/Over-voltage/Short circuit/Under-voltage/Over temperature	
Heating Module	Yes	
Balancing Module	Yes	
Fire Protection	Built-in aerosol(optional)	
Warranty	10 years*	
Certification	CE/UN38.3/IEC62619/IEC62477	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(95%);

Reference scheme wiring diagram

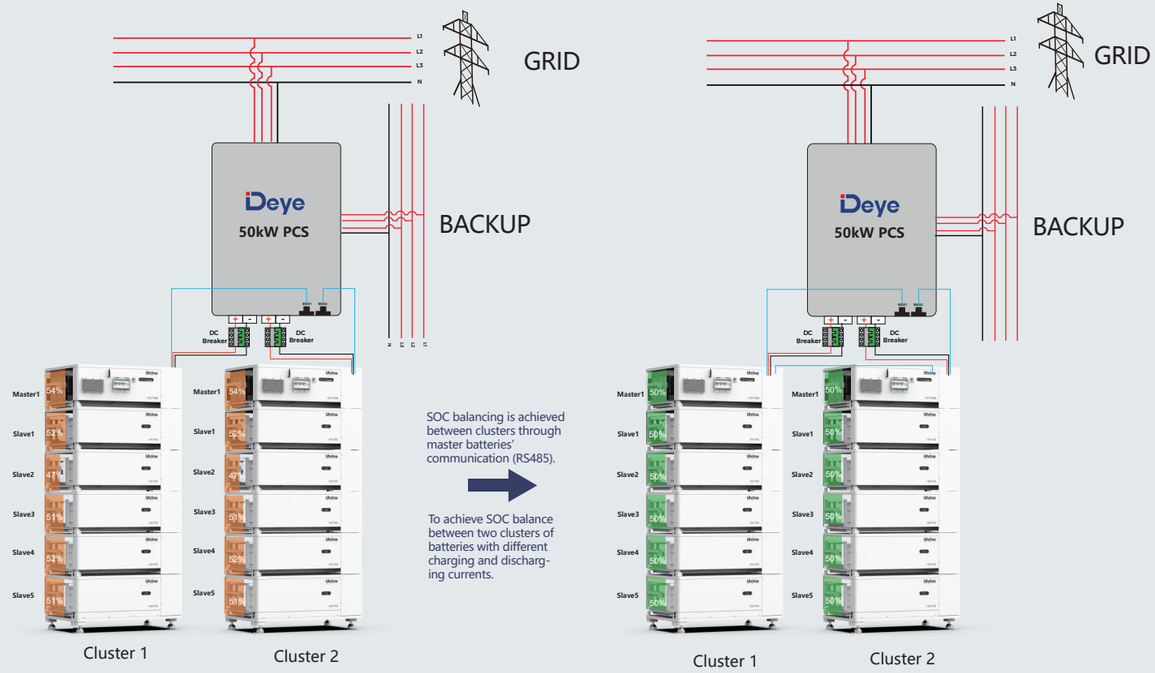
Wiring diagram for 12 units (divided into 2 piles)

Wiring diagram for 12 units (divided into 3 piles)



Product Advantages

SOC Balancing Between Clusters



NOTICE:

In the case of multiple cluster batteries, the universal wiring for parallel operation of the host is shown in the following figure:

2.0kW Single-phase Inverter

Uhome-HB-1P2K0L2

- IP65,suitable for outdoor use
- Single string current up to 18A
- 2kW, dual independent MPPT
- Supports parallel operation of up to 8 inverters
- Supports monitoring of electricity generation from older photovoltaic inverters
- Supports remote monitoring via app

NOTE:

Intelligent charge feature is only available in the UK for now, supporting regional customisation

Technical Specifications

Product Model	Uhome-HB-1P2K0L2
Input data（PV）	
Max. recommended PV power	2000W
Max. DC voltage	60VDC
Start voltage/Min. DC voltage	30V/10V
MPPT voltage range	30~60V
No. of MPPT trackers/No. of PV strings per MPPT tracker	2/1
Max. input current per MPPT tracker	18A×2
Max. short-circuit curent per MPPT tracker	21A
PV Reverse - Injected Current	0A
Types of DC overvoltage	Category II
PV module connection method	Detachable
Output data(AC)	
AC nominal power	2000W
Max. AC intput power	2000W
Max. AC output current	9A
Max. continuous input current	9A
Rated grid voltage / Grid voltage range	230Vac/180-270Vac
Rated grid frequency / Frequency range	50Hz(45~54Hz) / 60Hz(55~65Hz)
Type of AC output	Single phase(L、N、PE)
Power factor	≥0.99 (±0.8)
Current Harmonic Distortion	≤3%(Rated power)
Types of AC overvoltage	Category III
GEN Power(AC)	
AC nominal power	2000W
Max. AC intput power	2000W
Max. AC intput current	9A
Max. continuous input current	9A
Rated grid voltage / Grid voltage range	230Vac/180-270Vac
Type of AC output	Single phase(L、N、PE)
Power factor	≥0.99 (±0.8)
Types of AC overvoltage	Category III
Backup power(AC)	
AC short-circuit current protection	220Vac/230Vac/240Vac
Rate of recurrence	50Hz/60Hz
Rated current	9A
Max. output power	2000VA/2000W
Switching time between grid - connected and off - grid modes	10ms
Voltage Harmonic Distortion	≤3%(linear load)
Max. peak power / duration	200%/10S
Battery data(DC)	
Battery type	Lithium - ion battery / lead - acid battery
Current Harmonic Distortion	24V
Battery Voltage Range	20-30V
Max. charging current	100A
Max. discharge current	100A
Charging curve	Three - stage type
System	
Max. efficiency	94.50%
PV - AC European efficiency	93.20%
MPPT efficiency	99.90%
Isolation mode (PV side)	isolation
Isolation Mode (Battery Side)	High - frequency isolation
Protection Rating	IP65
Dimension（W*D*H）	365*500*210mm
Protection function	DC insulation monitoring, DC monitoring, power grid monitoring, anti - islanding protection, short - circuit protection, over - heat protection, PV anti - reverse connection protection
Operating Temperature Range	-20°C to +60°C
Cooling mode	Forced air cooling
Relative humidity	5~95%, Non - condensation
Display	LED/LCD
Telecommunications	RS485 （standard configuration）,Wifi (selectable),CAN-BUS(internal communication)
Warranty	5 year/(10 years optional)

3.6kW AC Coupled Inverter

Uhome-ON1P3K6L1

- Retrofit existing on-grid/micro-grid system with energy storage system
- Battery charging/discharging current: 75A
- Octopus smart time of use and weather optimisation
- On/off grid seamless switch
- Support up to 8pcs in parallel
- Support diesel generator
- Separate backup port for flexible load management

NOTE:

Intelligent charge feature is only available in the

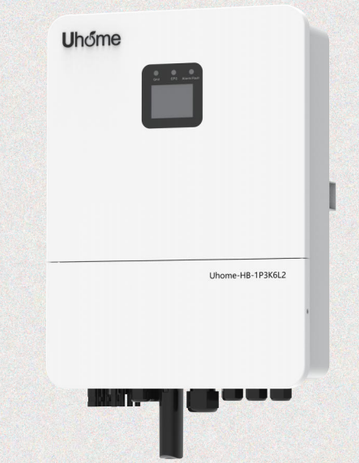
UK for now, supporting regional customisation

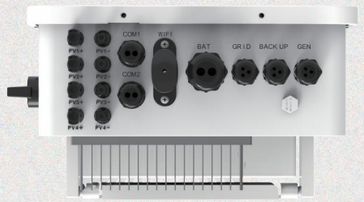
Technical Specifications

Product Model	Uhome-ON1P3K6L1
Battery	
Compatible battery type	Lithium-ion / Lead-Acid
Rated battery voltage (V)	48V
Battery voltage range (V)	40~60V
Max. charging voltage (V)	60V
Max. charging/discharging current	75A
Max. charging/discharging power	3600W
Force wake up battery from grid function(Y/N)	Yes
Grid	
Rated AC voltage	230V
Rated AC frequency	50/60Hz
Rated AC output current	16A
Rated AC output power	3600W
Max. AC intput current	26A
PF	0.99 (Adjustable from 0.8 leading to 0.8 lagging)
THDI	＜ 3%
Max. continuous AC passthrough current	40A
UPS	
Rated output power	3600W
Rated output voltage	230V
Rated output current	16A
Rated output frequency	50 / 60Hz
Surge power, duration	4500W, 30s
Switching time	20 ms
Wave form	Sine wave
THDV	＜ 3%
Parallel capacity	8
Efficiency	
Max. efficiency	97.3%
Max. charge / discharge efficiency	94.5%
Protection	
Over current/voltage protection	Yes
Anti-islanding protection	Yes
AC short-circuit current protection	Yes
Grid monitoring	Yes
AC surge protection	Type III
System Parameters	
Dimensions (W × H × D)	335*500*210mm
Weight	15kg
Ingress protection rating	IP65
Operating environment temperature range	-25 ~ 60°C
Storage temperature range	-40 ~ 65°C
Relative humidity	0 ~ 95%
Display & communication interface	LCD, RS485 / Wi-Fi / CAN
Warranty	5 years(10 yeas:Optional)
Cooling method	Natural Cooling
Topology	Transformer-less
Max. operating altitude	2000m
Noise emission	25db
AC connector	YES

3.6kW Single Phase Inverter

Uhome-HB-1P3K6L2

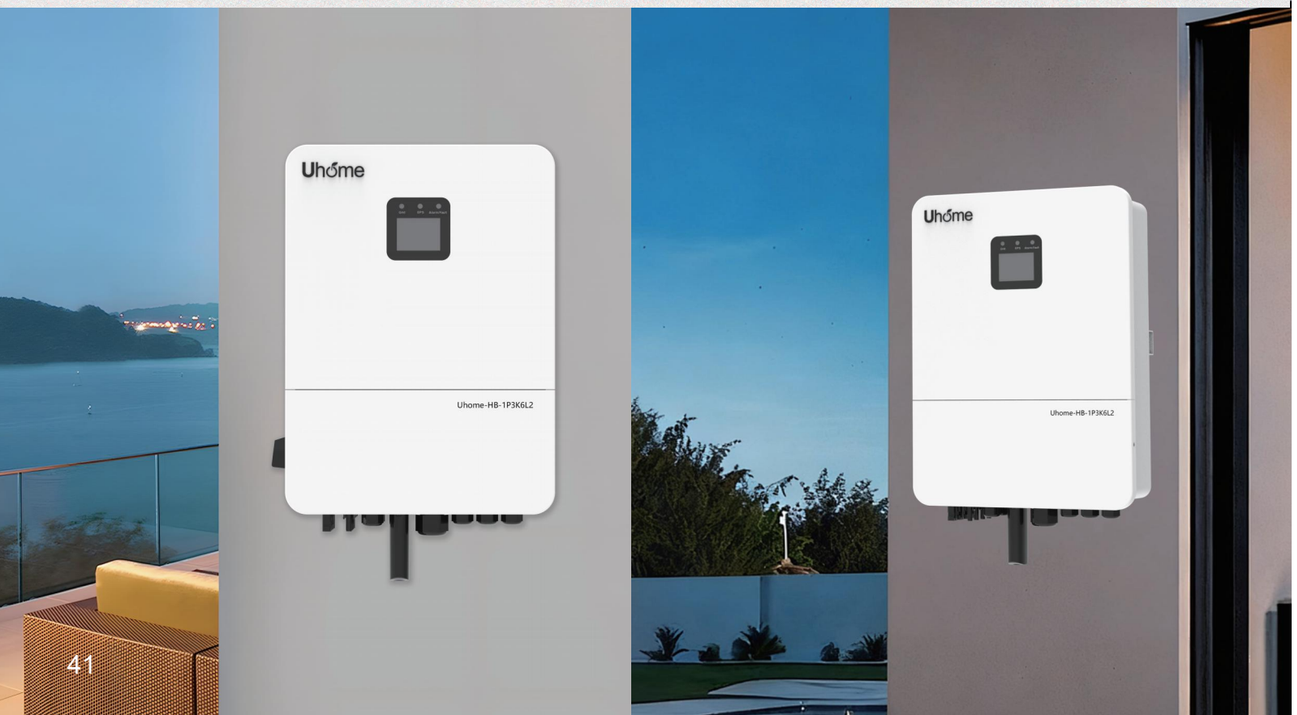




- Protection level of IP65 for outdoor use
- The current of a single string can reach up to 18A
- 3.6KW, 4 strings with 2-channel independent MPPT
- Supports the parallel operation of 8 inverters
- Support monitoring of the power generation of old photovoltaic inverters
- Support remote monitoring via remote APP

NOTE:

Intelligent charge feature is only available in the UK for now, supporting regional customisation



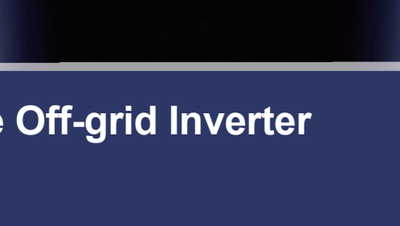
Technical Specifications

Product Model	Uhome-HB-1P3K6L2
Input data（PV）	
Max. recommended PV power	6000W
Max. DC voltage	100VDC
Start voltage/Min. DC voltage	50V/10V
MPPT voltage range	10~100V
No. of MPPT trackers/No. of PV strings per MPPT tracker	2/2
Max. input current per MPPT tracker	18A×4
Max. short-circuit curent per MPPT tracker	21A
PV Reverse - Injected Current	0A
Types of DC overvoltage	Category II
Output data(AC)	
AC nominal power	3680W
Max. AC intput power	3680W
Max. AC output current	16A
Max. continuous input current	16A
Rated grid voltage / Grid voltage range	230Vac/180-270Vac
Rated grid frequency / Frequency range	50Hz(45~54Hz) / 60Hz(55~65Hz)
Type of AC output	Single phase(L、N、PE)
Power factor	≥0.99 (±0.8)
Current Harmonic Distortion	≤3%(Rated power)
Types of AC overvoltage	Category III
GEN Power(AC)	
AC nominal power	3680W
Max. AC intput power	3680W
Max. AC intput current	16A
Max. continuous input current	16A
Rated grid voltage / Grid voltage range	230Vac/180-270Vac
Rated grid frequency / Frequency range	97.3%
Type of AC output	Single phase(L、N、PE)
Power factor	≥0.99 (±0.8)
Types of AC overvoltage	Category III
Backup power(AC)	
AC short-circuit current protection	220Vac/230Vac/240Vac
Rate of recurrence	50Hz/60Hz
Rated current	16A
Max. output power	3680VA/3680W
Switching time between grid - connected and off - grid modes	10ms
Voltage Harmonic Distortion	≤3%(linear load)
Max. peak power / duration	200%/10S
Battery data(DC)	
Battery type	Lithium - ion battery / lead - acid battery
Current Harmonic Distortion	48V
Battery Voltage Range	45-58V
Max. charging current	75A
Max. discharge current	75A
Charging curve	Three - stage type
System	
Max. efficiency	94.3%
PV - AC European efficiency	93.5%
MPPT efficiency	99.9%
Isolation mode (PV side)	isolation
Isolation Mode (Battery Side)	High - frequency isolation
Protection Rating	IP65
Dimension（W*D*H）	365*500*210mm
Protection function	DC insulation monitoring, DC monitoring, power grid monitoring, anti - islanding protection, short - circuit protection, over - heat protection
Operating Temperature Range	-20°C to +60°C
Cooling mode	Forced air cooling
Relative humidity	5~95%, Non - condensation
Display	LED/LCD
Telecommunications	RS485 （standard configuration）,Wifi (selectable),CAN-BUS(internal communication)
Warranty	5 year/(10 years optional)

6.2kW Single Phase Off-grid Inverter

Uhome-OF1P6K2L1

Bottom interfaces ↓



PRODUCT FEATURES

IP65 protection rating, suitable for outdoor scenarios

LCD touch color screen for better display

2x DC side overrating, 18A MPPT current, compatible with high-power modules

2 MPPT inputs to significantly increase power generation

High conversion efficiency, up to 99.9% MPPT efficiency

Compatible with lead-acid and lithium batteries, enhancing practicality

Diesel generator interface to ensure power supply continuity

Supports PV black start function

Technical Specifications

Product Model	Uhome-OF1P6K2L1
PV DC Input Parameters (PV Side)	
Maximum Input Power	12400W
Maximum Input Voltage	450V
Starting Voltage / Minimum Operating Voltage	100V
MPPT Voltage Range	120~450V
Number of MPPT Trackers/Number of Strings for Each MPPT	2/1
Maximum Input Current	18A*2
Maximum Short-Circuit Current	20A*2
Grid Input Parameters (AC Side)	
Rated AC Input Power	6200W
Maximum Continous Input Current	28A
Grid Rated Voltage / Grid Voltage Range	230Vac/90~270Vac
Rated Grid Frequency / Frequency Range	50Hz/60Hz(Adaptive)
AC Output Type	Single Phase(L,N,PE)
Diesel Generator Input Parameters(AC side)	
Rated AC Input Power	6200W
Maximum Continous Input Current	28A
Grid Rated Voltage / Grid Voltage Range	230Vac/90~270Vac
Rated Grid Frequency / Frequency Range	50Hz/60Hz(Adaptive)
AC Output Type	Single Phase(L,N,PE)
EPS Output Parameters	
Rated Output power	230Vac
Frequency	50/60Hz
Rated Current	28A
Maximum Output Freqency	6200VA/6200W
Waveform	Pure sine wave
Voltage Harmonic Distortion	≤3%(liner load)
Surge Capability	12400VA
Switch Time	Typical 10ms, Maximum 20ms
Battery	
Battery Type	Lithium Battery / Lead-Acid Battery
Battery Rated Voltage	48V
Battery Voltage Range	40~60V
Maximum Charging Current	135A
Maximum Discharging Current	135A
Communication	CAN/RS485
System Parameters	
Maximum Frequency	97.50%
PV-AC European Frequency	96.70%
MPPT Frequency	99.99%
Isolation Method (PV Side)	Non-isolation
Isolation Method (Battery Side)	High-frequency isolation
Protection Rating	IP65
Dimension(W*H*D)	460*405*228 mm
Weight	22kg
Operating Temperature Range	-10°C~60°C
Cooling Type	External Air Cooling
Relative Humidity	5~95%,Non-condensation
Display	LCD
Communication	RS485,CAN,WiFi(optional)
Certification	/
Warranty	5 year/(10 years optional)

5-12kW
Three Phase Inverter

FEATURES

1.6
DC side 1.6 times over matched, MPPT current up to 20A, suitable for high-power components

3
3 MPPT channels greatly increase power generation

1.1
The maximum output power off grid reaches 1.1 times

100%
Support 100% three-phase unbalanced output

50A
The maximum charging and discharging current of the battery can reach 50A

160-800v
Battery input of inverter 160V-800V

Technical Specifications

Product Model	Uhome-HB -3P5K0H1	Uhome-HB -3P6K0H1	Uhome-HB -3P8K0H1	Uhome-HB -3P10K0H1	Uhome-HB -3P12K0H1
Input Parameters(DC)					
Maximum Input Voltage	1100V				
Maximum MPPT Current	20A				
Maximum MPPT Short-Circuit Current	40A				
Starting Voltage	160V				
MPPT Voltage Range	160~1000V				
Number of MPPT Trackers	3				
Number of Strings for Each MPPT	1				
Battery Parameters(DC)					
Battery Type	Li-Ion/Lead-acid				
Battery Voltage Range	160-800V				
Maximum Charing/Discharing Current	50A				
Battery Communication	CAN/RS485				
Output Parameters(AC)					
Rated output power	5000W	6000W	8000W	10000W	12000W
Maximum Apparent Power	5500VA	6600VA	8800VA	11000VA	13200VA
Rated Voltage	3/N/PE,380/400v				
Rated Grid Frequency	50Hz/60Hz				
Maximum Output Current	8.3A	10A	13.3A	16.7A	20A
Power factor	0.8 leading...0.8laging				
Total Current Harmonic Distortion Rate	＜3%(Rated Power)				
Off-grid Parameters(AC)					
Rated output power	5000W	6000W	8000W	10000W	12000W
Maximum Apparent Power	5500VA	6600VA	8800VA	11000VA	13200VA
Rated Voltage	3/N/PE,380/400v				
Rated Grid Frequency	50Hz/60Hz				
Peak Power	10000W for 60s	12000W for 60s	16000W for 60s	20000W for 60s	20000W for 60s
Maximum Output Current	8.3A	10A	13.3A	16.7A	20A
THDv	＜2%(Rated Power)				
Efficiency					
Maximum Efficiency	>98.2%	>98.2%	>98.2%	>98.4%	>98.4%
European Efficiency	>97.6%	>97.6%	>97.6%	>97.8%	>97.8%
Charing/Discharging Efficiency	>97.6%	>97.6%	>97.6%	>97.8%	>97.8%
Safety and Protection					
DC Switch	Yes				
Isolated Island Protection/Overcurrent Protection	Yes				
PV/Battery Reverse Connection Protection	Yes				
DC Surge Protection/AC Surge Protection	II				
Insulation Resistance Testing	Yes				
Display and Communication					
Display	LCD				
RS485/CAN/WiFi/4G/LAN/Bluetooth	Yes				
General Parameters					
Dimension(W*H*D)	565*440*260 mm				
Weight	33kg				
Operation Temperature Range	-25~60℃				
Cooling Concept	Natural convection				
Maximum Operation Altitude	4000m				
Relative Humidity	0~100%				
IP Rating	IP 66				
Noise	<45 dB				
Topological Structure	Transformerless				

Balcony All-in-one
Energy Storage System

>94%
Discharging efficiency of battery's useable energy is over 94%

0W
Anti-reflux power accuracy is 0W

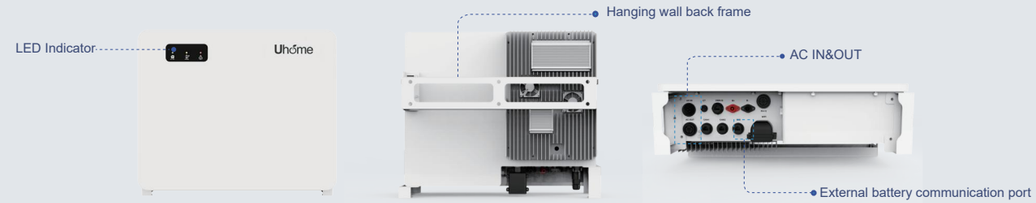
<30mins
Installation time is less than 30mins

2400W
Output of UPS is maximum 2400W

<10ms
The instantaneous UPS switch over less than 10ms, critical load never loses power

Balcony/RV/Camping
Multi scenarios

Technical Specifications



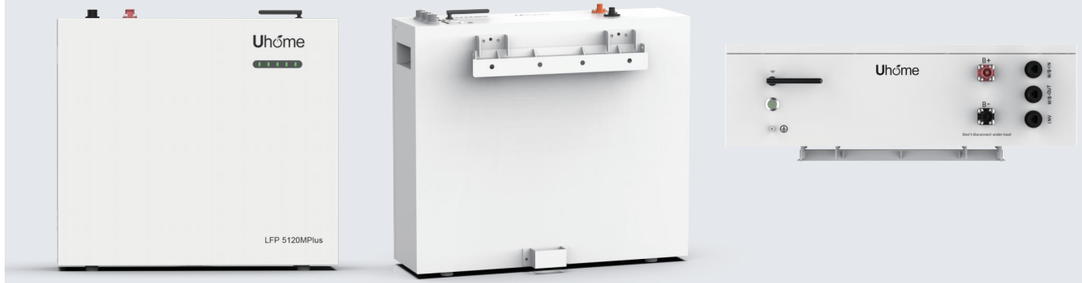
Model	Uhome DINV024-B3
Basic Parameters	
Nominal Power	2400W
Peak Power	4800W
Machine Architecture	Bidirectional AC/DC Inverter / Buck-boost MPPT
Number of Input and Output Phases	Single Phase Input/Output
AC Output	
AC Output Wiring	Single-phase, two-wire(L,N)+Ground wire
Output Nominal Voltage	230 V
Output Voltage Accuracy	±1%
Output Frequency	50/60Hz
Output Waveform	Pure Sine Wave
Output Distortion THDV	＜2%(Linear load)
	＜7%(Nonlinear load)
Overload Capacity	5 Min@105%~120%Rated Load
	10s@120%~150%Rated Load
	5s@>150%Rated Load
Efficiency	
Grid Charging	Max. 93% (Basic)
Battery Discharge	Max. 94% (Basic)
MPPT	99.9%
PV Charge	Max. 95%
Eco Mode	<13W(Dormancy,No Output); <30W(No Load)
Shutdown Leakage Current	<100uA
AC Output(On Grid)	
Output Wiring	Single-phase two-wire(L,N)+Ground wire
Output Voltage	230 Vac
Output Frequency	50/60Hz
Input Power Factor	≥0.95
Battery and Charge	
Nominal Capacity	2.56kWh
Max Dis/Charge Depth	90%
Nominal Battery Voltage	51.2V
Battery Type	$LiFePO_4$

Technical Specifications

Discharge Cut-off Voltage	49.6 V(Continuously Adjustable)
Charge Current	Maximum 50A ,Can Be Set Digitally,Default 25A
Protection Feature	Overload Protection, Over-Temperature Protection, Input Over-Voltage Protection, Input Under Voltage Protection, Over-Charge Protection, Over-Discharge Protection
Solar Charge	
PV Max Input Power	800W*2
PV Max Open-Circuit Voltage	100VDC
PV Operating Voltage Range	10-100VDC
PV Input Current	0-16A*2
General Parameter	
Grid-Connected Power	The grid-connected power can be set to 0~2400W (the default grid-connected power is less than 800W)
Parallel Connection Number	2-6pcs
Customer APP (WIFI Bluetooth Module Customer)	Mobile APP manages and controls grid-connected time and power, on-grid standard selection, etc
Communication Interface	WIFI/CAN
LED Indicator	Operating status: AC/OUT 、CHARGE、FAULT
Software Update	Remote/Local
Operating Temperature Range	Normal full power working environment temperature -10-45 ℃, above 45 ℃, the power will be derated to 55 ℃ before shutting down
Operating Humidity Range	0-98%(No Condensation)
Cooling Method	Forced air cooling
IP Rating	IP65
Dimension	569*460*165 mm
Weight	33KG
Safety and Electromagnetic Compatibility Standards	IEC62619/IEC63056/VDE2510-50/ICE/EN62109/EN300328/EN300386/ EN50549-1/VDE4105and Other Relevant European Standard
Work Mode	
Self-consumption Mode (allow feeding, prohibit feeding - enable feeding)	A/ PV priority: Priority is given to load supply, excess energy is used to charge the battery, and the remaining energy is fed back to the grid; B/When the photovoltaic energy is insufficient, the battery will be prioritized for compensation, followed by the supply of mains electricity. Notes: A/ Self-consumption mode (allow feeding, prohibit feeding - enable feeding); B/ When two modes are used together ,in case of conflict between self-consumption mode and time-of-use mode , the latter takes priority). The selection of feeding countries corresponds to different feeding power levels in different countries.
Off-grid Mode(UPS)	Grid supplys the power to loads directly, automatically switchover UPS supply when the grid outage(<10ms). A/ Discharge: Photovoltaic priority, insufficient photovoltaic energy, battery compensation, followed by grid supplementation; B/ Charging: Photovoltaic priority, insufficient photovoltaic energy, compensation for mains charging. Germany has a feeding power of 800W, while other countries have a feeding power of 1600W.

Recommended Battery Expansion Scheme

Uhome-5120MPlus(Solid-state battery)



Assembly Method

Customized expansion battery designed for balcony all-in-one ESS,
please consult our company if you need it.

Uhome-CIS 60kWh

Industrial & Commercial Storage Cabinet

Flexible Expansion

Maximum support for 8 machines in AC parallel,expand-able to 0.48MWh;

IP54

Resistant to outdoor installation with strong environmental adaptability;

Smart BMS

Automatic balancing between packs.

PRODUCT FEATURES

Safe&Reliable

Equipped with multiple protection mechanisms such as fire protection, surge protection, circuit breakers, relays, etc;

Economical

Pre-made machine delivered as a whole for easy transportation& installation& maintenance, saving up to 15% in costs.

Minimalist

Front and rear double door design, compact structure, clear and simple layout, resulting in high space utilization.

Intelligent

Platform supports remote monitoring& maintenance& intelligent balancing strategy for battery life cycle consistency& revenue improvement.

Usability

Integrated distribution box, easier to use and convenient for later maintenance.

Technical Specifications

Product Image		
Model	**60kWh/51.2V/100Ah(LFP 5000SM/M)**	**60kWh/614.4V/100Ah**
Battery Type	$LiFePO_4$ Prismatic	
Nominal Energy	5.12kWh	61.44kWh
Usable Energy*	4.7kWh	57.1kWh
Nominal Capacity	100Ah	
Nominal Voltage	51.2V	614.4V
Operating Voltage	48~56V	576~672V
Recommended Charge&Discharge Current	50A/50A	
Max Charge/Discharge Current	80A/80 A	
Peak Discharge Current	200A(3S)	
Peak Discharge Power	10kW(3S)	120kW(3S)
Recommended Depth of Discharge (DOD)	93%	
Charging Temp. Range	From 0~55℃	
Discharging Temp. Range	From -10~55℃	
Cycle Life	≥8000@25℃	
Scalability	1 Parallel/12 Series	8 Parallel
WIFI Module	Uhome	
Communication	CAN	CAN/RS485
IP Rating	IP20	IP54
Recommended Humidity	5%~95%(No condensed water)	
Cooling Type	Forced air cooling	Air Condition cooling
Color	White(optinal)	
Installation	Rack Installation	Ground Installation
Net Weight	56±2kg	950±2 kg
Dimension(L*W*H)	442*133*618mm	1000*850*2045mm
Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature	
Warranty	5/10 years(optional)*	
Certification	UN38.3/CE/IEC62619	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%).
It is recommended to configure the inverter by yourself and choose Solis 50kW three phase inverter as an option.

Uhome-CIS 120kWh

Industrial & Commercial Storage Cabinet

Flexible Expansion

Maximum support for 8 machines in AC parallel,expand-able to 0.96MWh;

IP54

Resistant to outdoor installation with strong environmental adaptability;

Smart BMS

Automatic balancing between packs.

PRODUCT FEATURES

Safe&Reliable

Equipped with multiple protection mechanisms such as fire protection, surge protection, circuit breakers, relays, etc;

Economical

Pre-made machine delivered as a whole for easy transportation& installation& maintenance, saving up to 15% in costs.

Minimalist

Front and rear double door design, compact structure, clear and simple layout, resulting in high space utilization.

Intelligent

Platform supports remote monitoring& maintenance& intelligent balancing strategy for battery life cycle consistency& revenue improvement.

Usability

Integrated distribution box, easier to use and convenient for later maintenance.

Technical Specifications

Product Image		
Model	**120kWh/64V/314Ah**	**120kWh/384V/314Ah**
Battery Type	$LiFePO_4$ Prismatic	
Nominal Energy	20.096kWh	120.576kWh
Usable Energy*	18.6kWh	112.1kWh
Nominal Capacity	314Ah	
Nominal Voltage	64V	384V
Operating Voltage	60~70V	360~420V
Recommended Charge&Discharge Current	100A/100A	
Max Charge/Discharge Current	150A/150 A	
Peak Discharge Current	200A(3S)	
Peak Discharge Power	12.8kW	75kW
Recommended Depth of Discharge (DOD)	93%	
Charging Temp. Range	From 0~55℃	
Discharging Temp. Range	From -10~55℃	
Cycle Life	⩾8000@25℃	
Scalability	6 Series	8 Parallel
WIFI Module	Uhome	
Communication	daisy-chain	CAN/ RS485
IP Rating	IP20	IP54
Recommended Humidity	5%~95%(No condensed water)	
Cooling Type	Forced air cooling	Air conditioning cooling
Color	White(Optional)	
Installation	Ground Mounting	
Net Weight	145±2kg	1400kg
Dimension(L*W*H)	893*387*243mm	1040*1335*1860mm
Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature	
Warranty	5/10 years(optional)*	
Certification	UN 38.3/CE/IEC62619	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%).
It is recommended to configure the inverter by yourself and choose Solis 50kW three phase inverter as an option.

Uhome-CIS 240kWh

Industrial & Commercial Storage Cabinet

Flexible Expansion

Maximum support for 8 machines in AC parallel,expand-able to 1.92MWh;

IP54

Resistant to outdoor installation with strong environmental adaptability;

Smart BMS

Automatic balancing between packs.

PRODUCT FEATURES

Safe&Reliable

Equipped with multiple protection mechanisms such as fire protection, surge protection, circuit breakers, relays, etc;

Economical

Pre-made machine delivered as a whole for easy transportation& installation& maintenance, saving up to 15% in costs.

Minimalist

Front and rear double door design, compact structure, clear and simple layout, resulting in high space utilization.

Intelligent

Platform supports remote monitoring& maintenance& intelligent balancing strategy for battery life cycle consistency& revenue improvement.

Usability

Integrated distribution box, easier to use and convenient for later maintenance.

Technical Specifications

Product Image		
Model	**240kWh/64V/314Ah**	**240kWh/768V/314Ah**
Battery Type	$LiFePO_4$ Prismatic	
Nominal Energy	20.096kWh	241.152kWh
Usable Energy*	18.6kWh	224.2kWh
Nominal Capacity	314Ah	
Nominal Voltage	64V	768V
Operating Voltage	60~70V	720~840V
Recommended Charge&Discharge Current	100A/100A	
Max Charge/Discharge Current	150A/150 A	
Peak Discharge Current	200A(3S)	
Peak Discharge Power	12.8kW	150kW
Recommended Depth of Discharge (DOD)	93%	
Charging Temp. Range	From 0~55℃	
Discharging Temp. Range	From -10~55℃	
Cycle Life	⩾8000@25℃	
Scalability	12 Series	8 Parallel
WIFI Module	Uhome	
Communication	daisy-chain	CAN/ RS485
IP Rating	IP20	IP54
Recommended Humidity	5%~95%(No condensed water)	
Cooling Type	Natural cooling	
Color	White(Optional)	
Installation	Forced air cooling	Air conditioning cooling
Net Weight	145±2kg	2340kg(Include Cabinet)
Dimension(L*W*H)	893*387*243mm	1370*1350*1860mm
Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature	
Warranty	5/10 years(optional)*	
Certification	UN38.3/CE/IEC62619	

Testing conditions based on temperature 25℃ at the beginning of life.
*Total Energy/Usable Energy measured under specific conditions by Uhome 0.2C CC-CV and based on recommended DOD(93%).
It is recommended to configure the inverter by yourself and choose Solis 125kW three phase inverter as an option.

Intelligent Monitoring System

The self-developed Uhome App is an energy storage monitoring and management system based on cloud computing technology. It allows users to monitor, control and optimize the operation of energy storage systems Anytime Anywhere. Users can download **UHOMEENERGY** from Apple store or Google Play store.

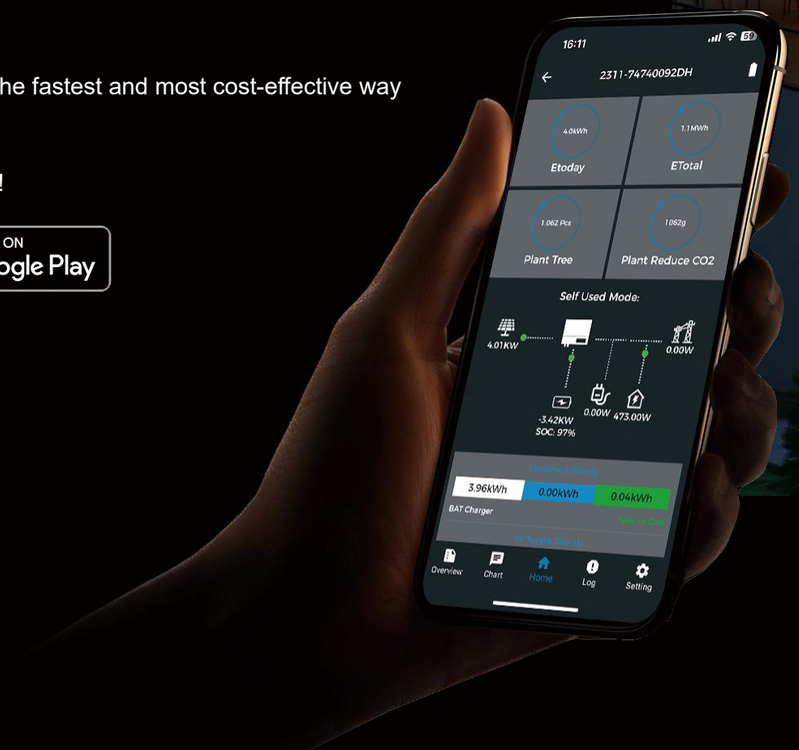
Key features

- User-friendly interface
  Easy to operate at your fingertips
- Real-time operation monitoring
  Show details of real-time status of devices
- Remote system upgrade
  The system can be remotely upgraded by Uhome while it is online
- Intelligent alarm
  Real-time fault alarm, analysis, reporting and troubleshooting
- Parameter setting
  Configure parameters remotely
- Proactive after-sales service
  Help user solving problems in the fastest and most cost-effective way

Experiencing the Smart App today!

Download on the App Store

GET IT ON Google Play



Delivering Smart, Clean Energy !

Case Collection:

Our Environment, Our Energy, Our Future