

Uhome Smart Energy

Leading Inverter Manufacturer



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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



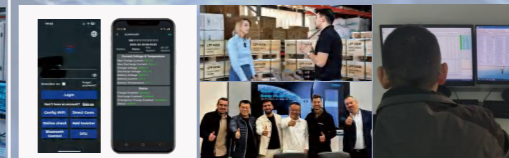
Safe and Reliable Top-tier cells

- 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

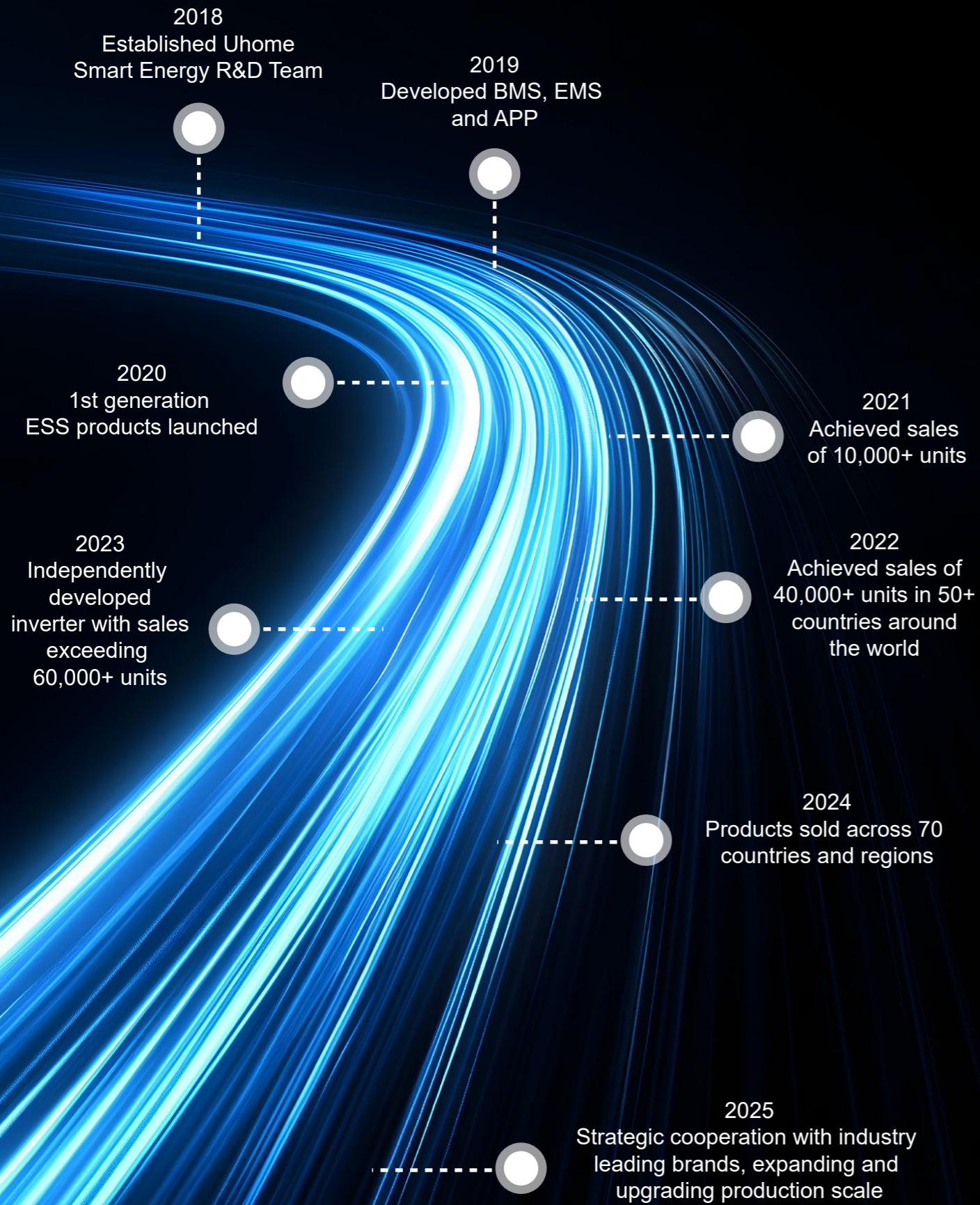
- Vast installations in Europe, Africa, Southeast Asia, and other regions
- Local service offered through affiliates



ABOUT US

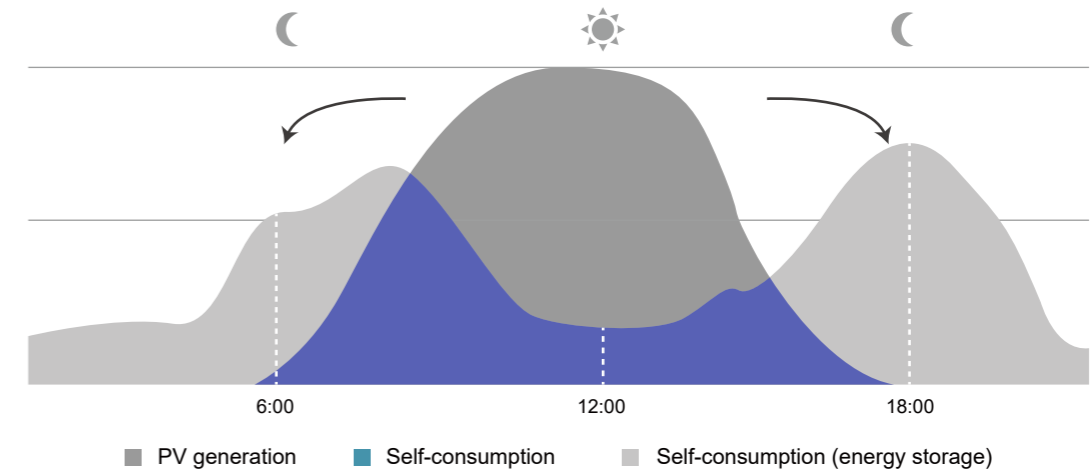
Uhome is a leading energy storage solutions provider. The Company has established a comprehensive product portfolio for a wide range of applications including residential and small commercial & industrial (C&I) by leveraging its proprietary technology and robust R&D capabilities. Uhome has extensive 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.



● 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 and night, during outages or when you want to go off-grid, and to optimize 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,
Flexible 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

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 current 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 input 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 input power	2000W
Max. AC input 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 input 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 years: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 current per MPPT tracker	21A
PV Reverse - Injected Current	0A
Types of DC overvoltage	Category II
Output data(AC)	
AC nominal power	3680W
Max. AC input 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 input power	3680W
Max. AC input 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 Continuous 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 Continuous 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 Frequency	6200VA/6200W
Waveform	Pure sine wave
Voltage Harmonic Distortion	≤3%(linear 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 Charging/Discharging 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...0.8lagging				
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 C				
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

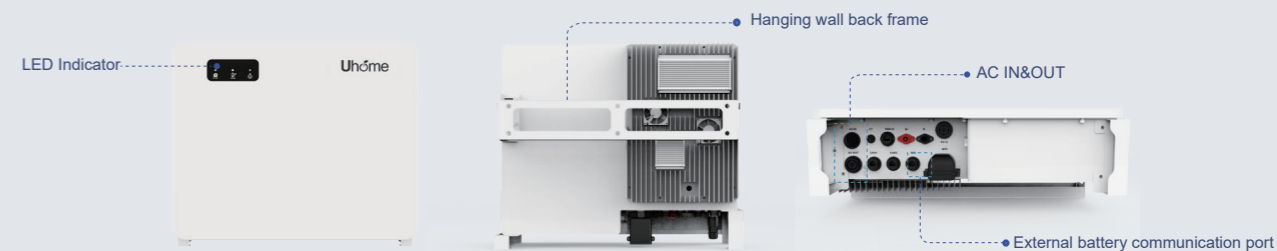
<10ms

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)	<p>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;</p> <p>B/When the photovoltaic energy is insufficient, the battery will be prioritized for compensation, followed by the supply of mains electricity.</p> <p>Notes:</p> <p>A/ Self-consumption mode (allow feeding, prohibit feeding - enable feeding);</p> <p>B/ When two modes are used together ,in case of conflict between self-consumption mode and time-of-use mode , the latter takes priority).</p> <p>The selection of feeding countries corresponds to different feeding power levels in different countries.</p>
Off-grid Mode(UPS)	<p>Grid supplies the power to loads directly, automatically switchover UPS supply when the grid outage(<10ms).</p> <p>A/ Discharge: Photovoltaic priority, insufficient photovoltaic energy, battery compensation, followed by grid supplementation;</p> <p>B/ Charging: Photovoltaic priority, insufficient photovoltaic energy, compensation for mains charging.</p> <p>Germany has a feeding power of 800W, while other countries have a feeding power of 1600W.</p>

● 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.

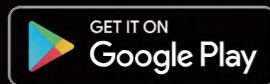
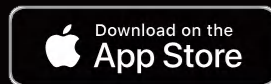
Intelligent Monitoring System

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!



Delivering Smart, Clean Energy !

Case Collection: C €

