



Energy Storage Solutions **Re-Defined**

Residential Energy Storage Solutions

Chelion America

CHELION.US

Enjoy Green Energy

With iHome Energy Storage and PV solutions, managing your home solar systems has never been easier. iHome's products have added blackout protection and flexibility to join a virtual power plant, providing customers with a future proofed and complete residential energy solution for all situations.

Residential Energy Storage Solutions



iHome Series



Safety

Lithium iron phosphate, the safest chemistry of all lithium battery types



Compatibility

Compatible with both new installations and retrofits (AC- or DC-coupled)



Reliability

Superb performance and long lifespan

- Outdoor
- AFCI & Rapid Shutdown
- 4 MPPTs



Multi-Functionality

Multiple operation modes available

- 24/7 Monitoring
- WIFI Module Integrated

Installer Partner Program

Join our Residential Installer Program with our proven expertise



Preferred pricing



Strong availability



Top-tier energy storage solutions



Integrated support for our entire installer network

Marketing Assistance

Global Leader in Quality Products and Distribution

Product Installation Support

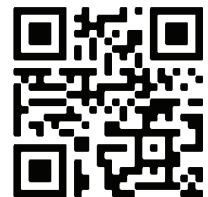


10 Year Warranty

24/7 App Monitoring Software

Single Point of Contact for Support

Scan the QR code below to learn more, and sign up for the program.





Residential Energy Storage System Solutions

Easy

Easy installation

Easy O&M

Easy capacity expansion

Smart

Smart energy management

Automatic back-up switch

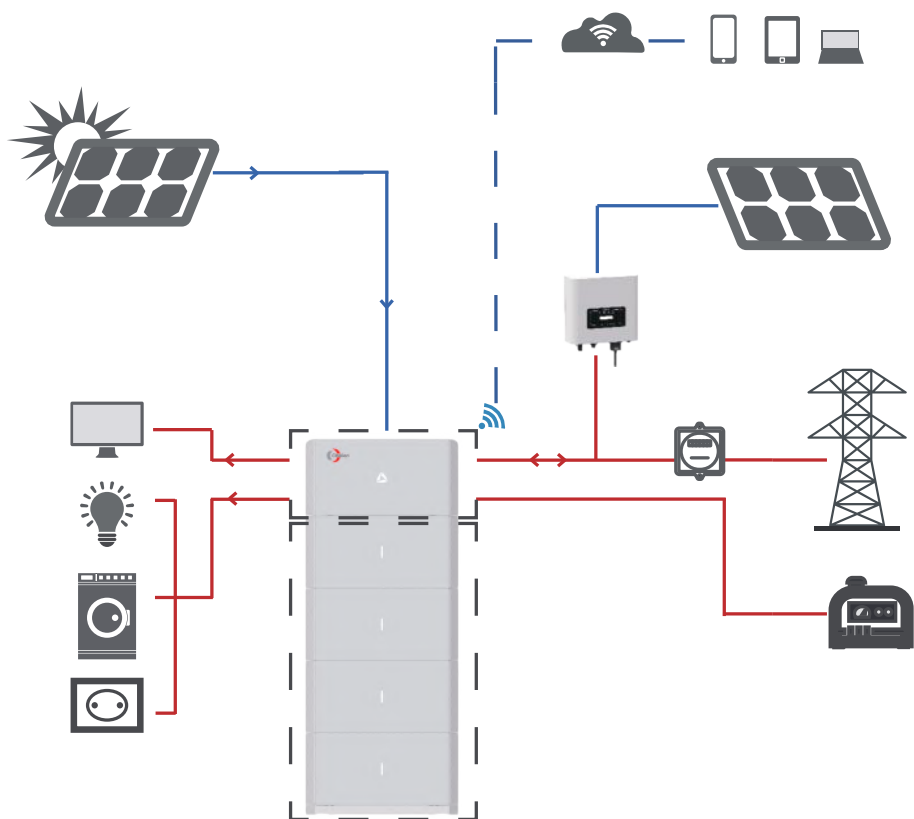
Intelligent monitoring

Investable

Reliable power protection

More flexible

Long service life and more available capacity



iHome-S-HD1H02 Series

Single Phase HV Residential Energy Storage System

Chelion's iHome-S-HD1H02 Series is an all-in-one solar and storage solution. The system comes pre-assembled for a seamless installation experience and is complemented with a modular battery design. Each battery module has a built-in DC/DC converter and is pre-optimized to perform at the highest levels safely. In addition, it's more flexible and easily configured in new battery augmentation, allows mixed usage of both new and old batteries and completely utilizes the full battery capacity.



Easy O&M



More available capacity in the life cycle



Flexible expansion



Can operate in parallel under off-grid condition



Built-in UPS function



AFCI & RSD function integration

Technical Data

Items	iHome-SXX**/10K-HD1H02		iHome-SXX**/11.4K-HD1H02		iHome-SXX**/12K-HD1H02	
Inverter model	iHome-INV10K-H1H02		iHome-INV11.4K-H1H02		iHome-INV12K-H1H02	
Number of Inverter	1					
Battery system model	iHome-B5-HD01					
Number of battery module	3~8					
Battery type	LFP					
System capacity	5kWh per unit, scalability up to 8 units(40KWh)					
Continuous system power	10kW		11.4kW		12kW	
Peak system power	24kW, 10s					
Round Trip Efficiency (AC to Battery to AC, at beginning of life)	88.70%					
Round Trip Efficiency (PV to Battery to AC, at beginning of life)	90.00%					
Dimension (W*H*D)	31.5*80.5*9.4inch (800*2045*240mm) (4 battery modules, with foundation) 31.5*17.7*7.9inch (800*450*200mm) (inverter), 31.5*15*7.9inch (800*380*200mm) (battery module)					
Weight	77.2lb (35kg) (inverter), 121.3lb (55kg) (battery module)					
Ingress protection	NEMA Type 3R					
Noise level	<40dB					
Cooling type	Passive cooling					
Altitude	≤6561 ft (2000m)					
Operating temperature	-4°F~122°F (-20~50°C)					
Recommended operating temperature	59°F~86°F (15~30°C)					
Storage temperature	14°F~113°F (-10~45°C)					
Operating humidity	0~100%RH					
Display	LED+APP					
Installation method	Floor or Wall-mounted (optional)					
Communication interface	Portal-WiFi (standard)/4G (optional), Meter-RS485, EMS-RS485 (sunspec)					
Certification	IEEE1547, IEEE1547.1, California Rule 21, HECO Rule 14H,FCC Part 15 Class B, CEC,					
*UL certification expected in Q1 of 2023	UL9540, UL9540A, UL1973, UL1699B, UL1998,UL60730, UL1741 SA,UN38.3					
Hybrid Inverter Specification						
Items	iHome-INV10K-H1H02		iHome-INV11.4K-H1H02		iHome-INV12K-H1H02	
DC Input (PV)						
Recommended Max. PV input power			18kWp			
Max. PV input voltage			500Vdc			
Max. PV input current			15A+15A+15A+15A (30A+30A)			
Max. short current			18.75A+18.75A+18.75A+18.75A (37.5A+37.5A)			
No. of MPPT / Strings per MPPT			4 / 1+1+1+1,2 / 2+2			
MPPT voltage range			100~500Vdc			
Starting voltage			125Vdc			
DC (PV) switch			Yes			
DC Input (BAT)						
Battery voltage range			360~500Vdc			
AC Input and Output (On-grid)						
Continuous AC output power	10kW		11.4kW		12kW	
Continuous AC output voltage			240Vac			
Grid voltage range			211.2~264Vac			
Max. output current	41.7A		47.5A		50A	
Max. iutput current			83.3A			
Continuous grid frequency			60Hz			
Grid frequency range			55~65Hz			
Power factor			>0.99 (Continuous power)			
Adjustable power factor			0.85 (leading) ~0.85 (lagging)			
THDi			<3 % (Continuous power)			
Over current protection device			125A breaker			
Max. supply fault current			5kA			
AC Input (Generator)						
Continuous AC output power	10kW		11.4kW		12kW	
Over current protection device			63A breaker			
Max. supply fault current			5kA			
AC Output (Back-up)						
Continuous AC output voltage			240Vac/120Vac 2W/N/PE, Split Phase			
Continuous output frequency			60Hz			
Continuous output power	10kW		11.4kW		12kW	
Peak output power			24kW, 10s			
Peak output current			100A, 10s			
Switch time			<20ms (without parallel), <300ms (parallel)			
Over current protection device			63A breaker			
Max. supply fault current			5kA			
Support the unbalanced load			Yes			
Efficiency						
Max. efficiency			97.50%			
CEC efficiency			96.80%			
*Specifications are subject to change without prior notice. **XX indicates the battery capacity, such as 10, 15, or 20.						

iHome-B5-HD Series

Battery with DC/DC Converter

Chelion's iHome-B5-HD Series is a top-class lithium battery module. There is a built-in DC/DC converter in the module that is preoptimized to perform most safely. The DC/DC converter facilitates module maintenance and battery replacement. It is flexible to add new batteries in the future without causing the "Buckets effect". And it is able to make the most of battery capacity.



Flexible expansion



More available capacity in the life cycle



Built-in DC/DC



Excellent safety and optimization performance

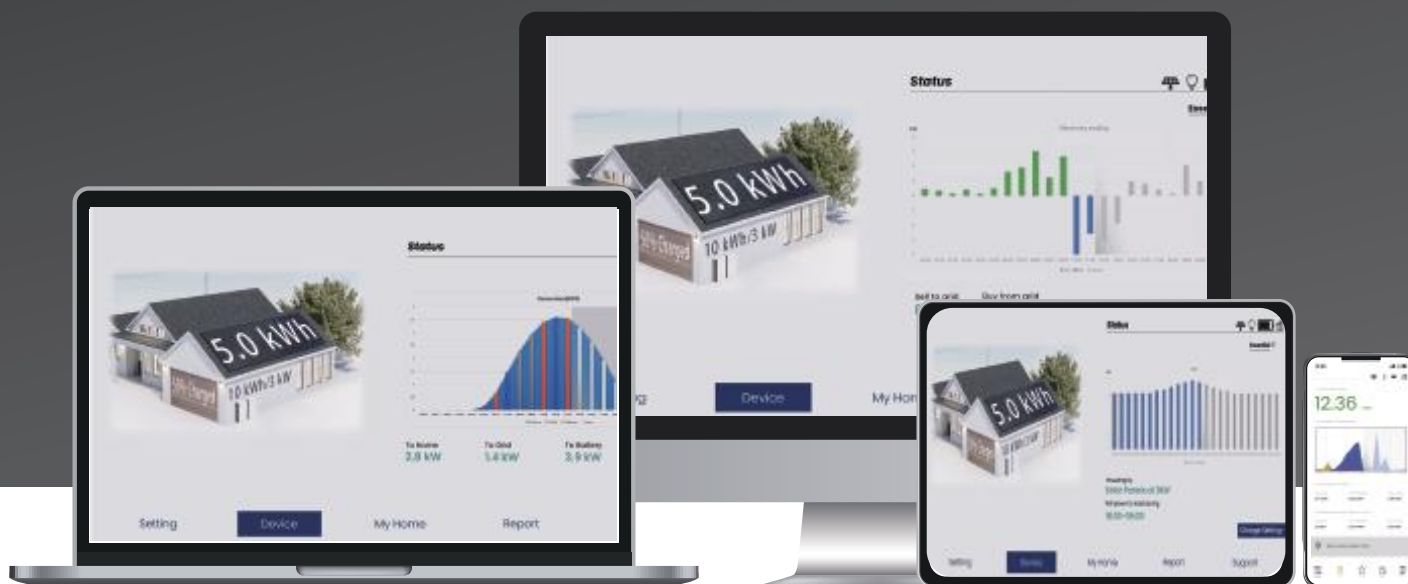
Technical Data

Items	iHome-B5-HD01
Battery type	LFP
Energy capacity	5kWh
Usable capacity	5kWh
Scalability	8
Scalable capacity range	5~40kWh
DOD	100%
Continuous power	2.5kW
Continuous range	360~500Vdc
Max. charge current	6.94A
Max. discharge current	6.94A 8.3A, 10s
Dimensions(W*H*D)	31.5*15*7.9inch (800*380*200mm)
Weight	121.3lb(55kg)
Cooling type	Passive cooling
Altitude	≤6561 ft (2000m)
Operating temperature	-4°F~122°F (-20~50°C)
Recommended operating temperature	59°F~86°F (15~30°C)
Storage temperature	14°F~113°F (-10~45°C)
Humidity	0~100%RH
Display	LED
Communication interface	RS485, CAN
Topology	Isolated
Connection method	Floor or Wall mounted (optional)
Certification	UL1973, UL60730, UN38.3
*UL certification expected in Q1 of 2023	
*Specifications are subject to change without prior notice.	

Chelion Residential EMS

Three Phase HV Residential Energy Storage System

Chelion's Residential EMS is an all-round intelligent system designed to monitor variables and meet electric or financial consumption goals. A tailored power plan will automatically optimize system performance to meet user-defined targets and distribute system resources appropriately. The EMS also continuously collects big data, such as weather and grid rates, to improve accuracy. The Residential EMS's abundance of features and use of local and big data makes it a powerful and reliable all-in-one system for energy needs in any household.



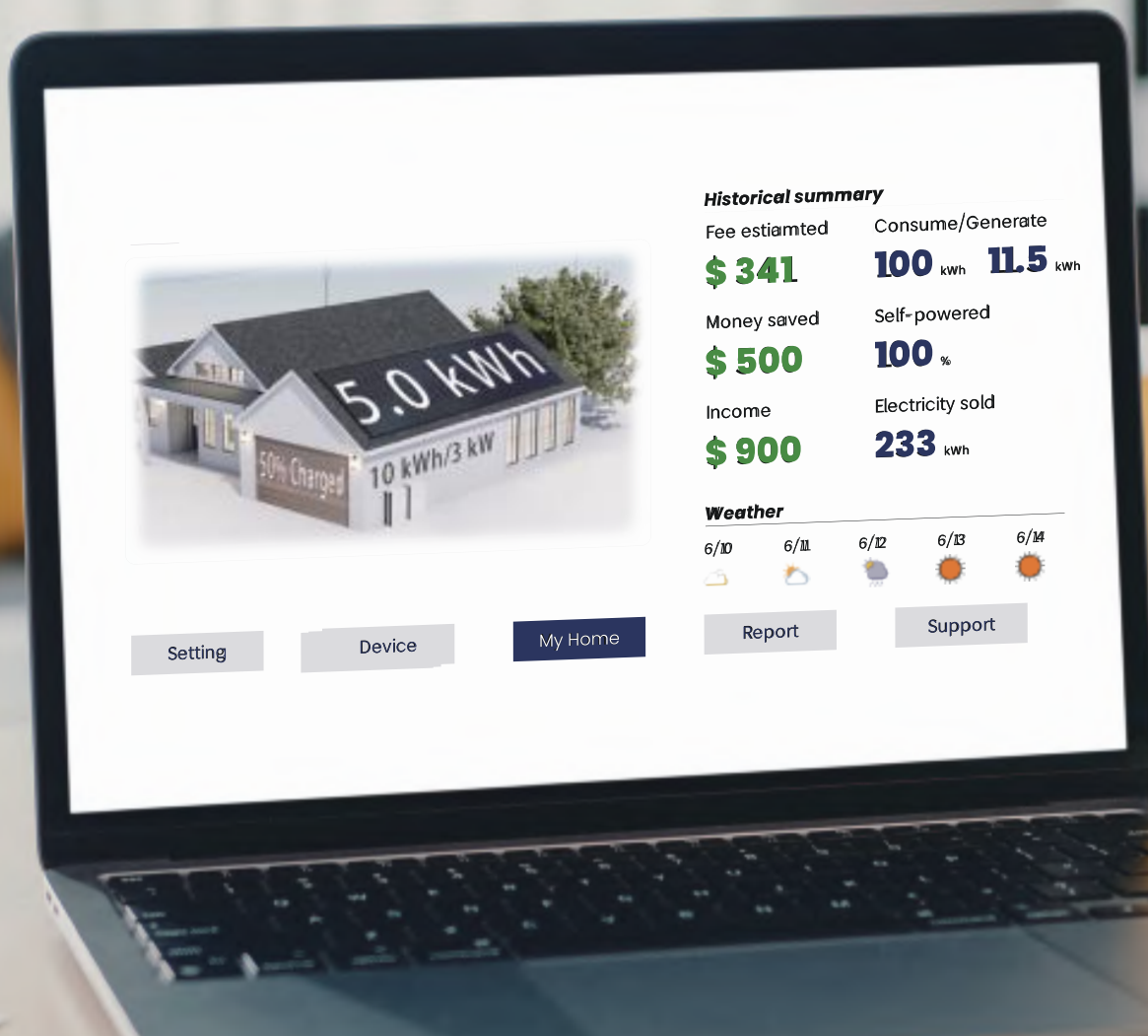
User-defined energy goals and timeline periods can be set



Connects to a wide range of existing modules and infrastructure



Optimized performance by using local and big data



Will continuously adapt the energy profile to identify energy saving opportunities



Provides recommendations to enhance longevity and profitability



Integrated management and diagnostic



We are a **Global Leader** in **Energy Solutions**



www.chelion.us

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