



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

10 Year Warranty

Global Leader in Quality Products and Distribution

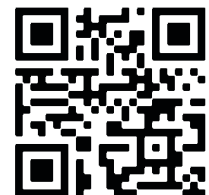
24/7 App Monitoring Software

Product Installation Support

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

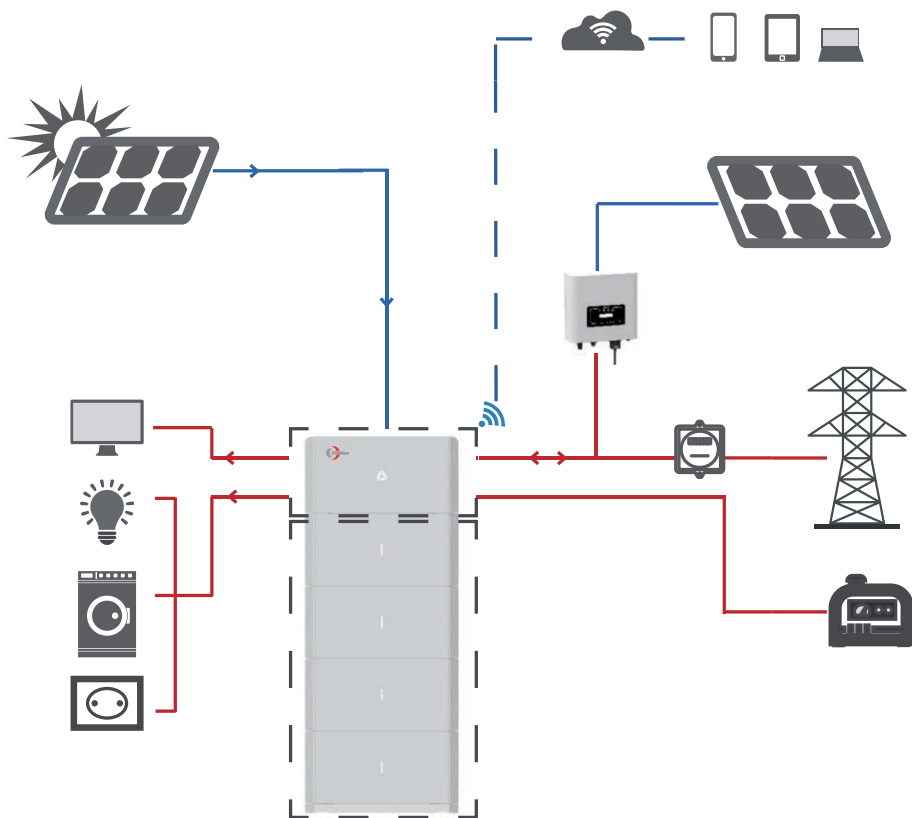
Intelligent monitoring

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, UL9540, UL9540A,UL1973, UL1699B, UL1998,UL60730, UL1741 SA,UN38.3, *UL certification expected in Q1 of 2023		

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 <small>*UL certification expected in Q1 of 2023</small>	UL1973, UL60730, UN38.3
<small>*Specifications are subject to change without prior notice.</small>	

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.



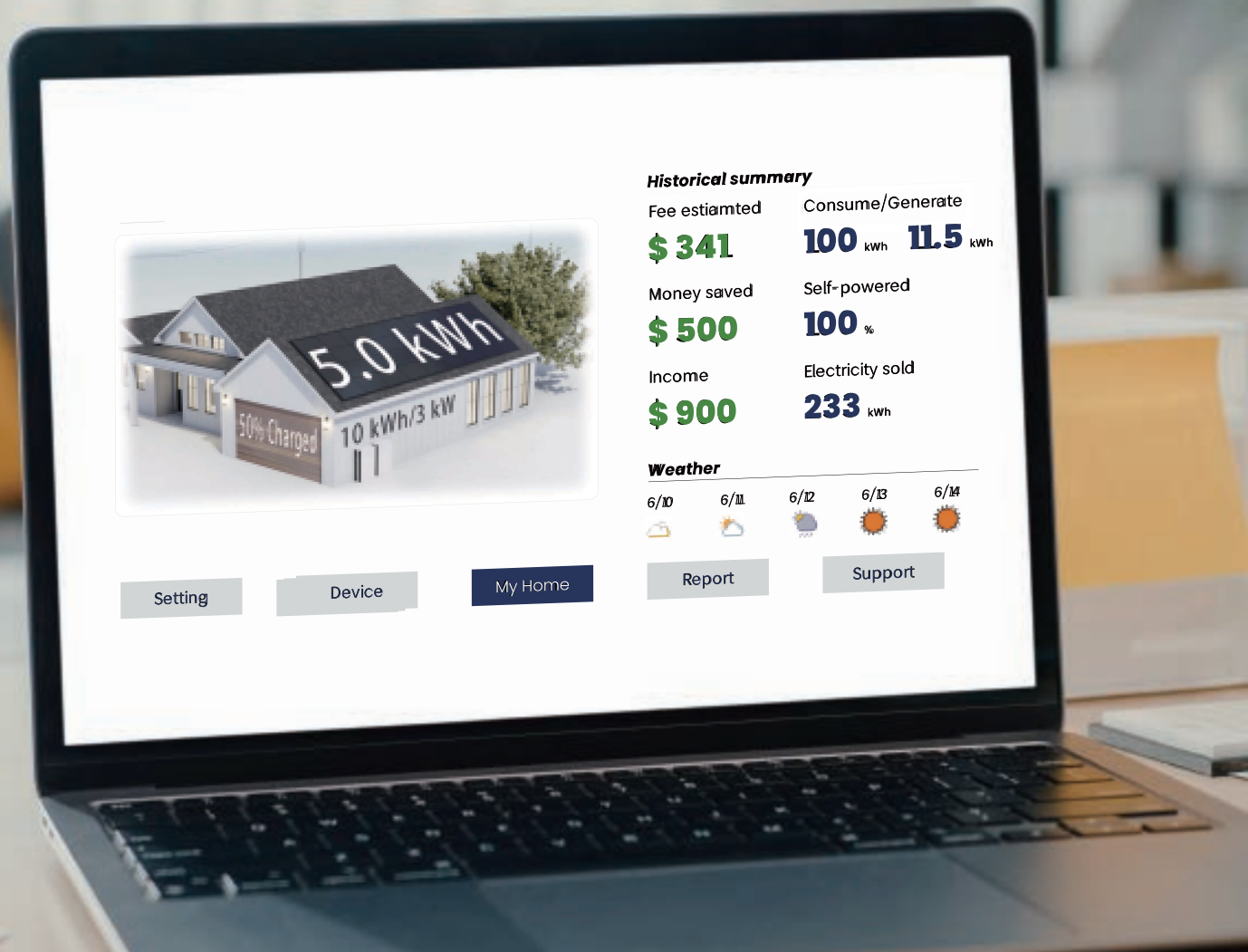
User-defined energy goals and timeline periods can be set



Connects to a wide range of existing modules and infrastructure



Optimized performance by using local and big data



Historical summary

Fee estimated	Consume/Generate
\$ 341	100 kWh 11.5 kWh
Money saved	Self-powered
\$ 500	100 %
Income	Electricity sold
\$ 900	233 kWh

Weather

6/10	6/11	6/12	6/13	6/14

Setting

Device

My Home

Report

Support



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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