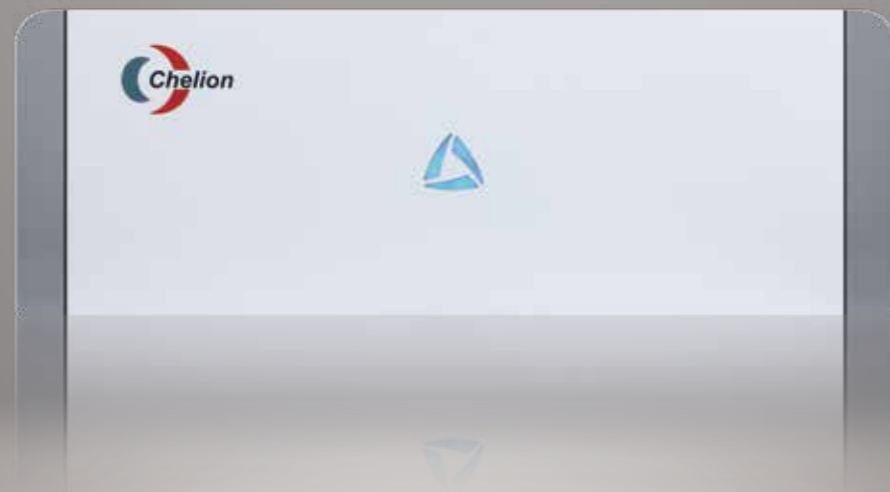


iHome-INV-HD1H01 Series

Single Phase Hybrid Inverter

The Chelion iHome-INV-HD1H01 Series of hybrid energy storage inverter comes in a smaller and lighter form than its predecessor does. Its advanced design maximises energy flexibility. Compatible with both on-and-off-grid PV systems, it can intelligently balance use from the grid or battery to ensure energy consumption is always within economic or user-defined thresholds.



UPS with a transfer time < 10 ms
Stronger back-up power up to 7.8kW



Dual-isolation protection design
Integrated modular fire suppression system
Advanced AFCI function and detection of current leakage



Built-in EMS function with multi-mode operation
Active equalisation and utilises strategy for battery charge and discharge



Standardized modular design
Easy installation, operation, maintenance and expand

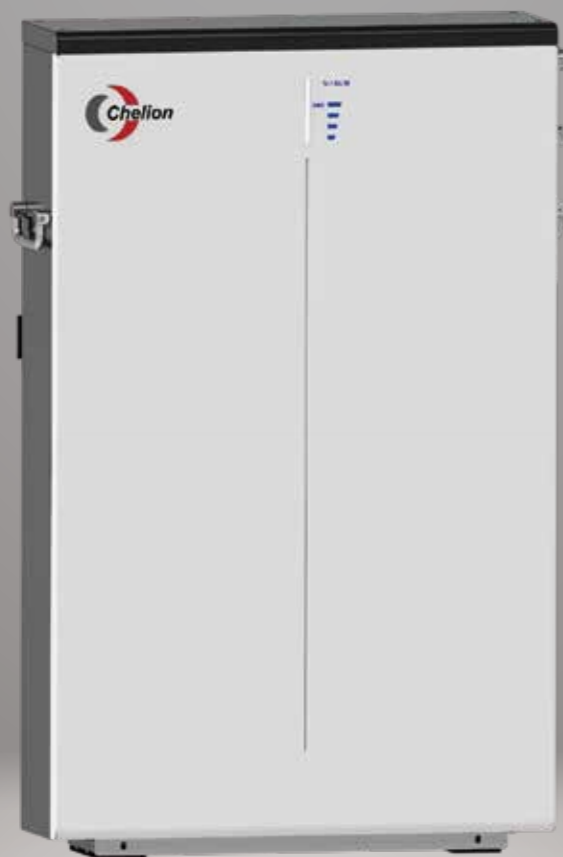
Items	iHome-INV5K-H1H01	iHome-INV6K-H1H01
DC Input (PV)		
Recommended Max. PV input power	9.0kWp	
Max. PV input voltage	580Vdc	
Max. PV input current	15Adc+15Adc	
Max. short current	18.75Adc+18.75Adc	
No. of MPPT / Strings per MPPT	2 / 1+1	
MPPT voltage range	100~550Vdc	
Starting voltage	100Vdc	
DC (PV) switch	Yes	
DC Input (BAT)		
Battery type	LFP(LiFePO4)	
Battery voltage range	360-500Vdc	
Max. charge / discharge current	25Ad.c	25Ad.c
Max. charge / discharge power	5000W	6000W
External temperature sensor	Yes	
Charging curve	3 Stages / Equalization	
Charging strategy for Li-ion battery	Self-adaption to BMS	
AC Input and Output (On-grid)		
Battery voltage range	360~500Vdc	
Rated AC output power	5.0kW	6.0kW
Rated AC output voltage	230Vac	
Grid voltage range	180~270Vac	
Max. output current	21.7Aac	26.1Aac
Max. input current	43.4Aac	52.2Aac
Rated grid frequency	50Hz	
Grid frequency range	45~55Hz	
Power factor	>0.99 (rated power)	
Adjustable power factor	0.8 (leading) ~0.8(lagging)	
THDi	<3 %(rated power)	
AC Output (Back-up)		
Rated AC output voltage	230Vac	
Rated output frequency	50Hz	
Rated output power	5.0kW	6.0kW
Peak output power	6.5kW, 60s 7.5kW, 30s	7.8kW, 60s
Switch time	<10ms	
Efficiency		
Max. efficiency	97.70%	
European efficiency	97.10%	
General		
Dimension(W*H*D)	31.49*11.02*9.13inch (800*280*232mm)	
Weight	39.68b (18kg)	
Ingress protection	IP65	
Country of Manufacture	PRC	
Noise level	<25dB@1m	
Cooling type	Passive cooling	
Altitude	6561 ft (2000m)	
Operating temperature	-13°F~-140°F (-25°C~60°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)	
Transformer type	Transformerless	
Communication interface	Portal-WiFi(standard)/4G(optional), Meter-RS485	
Certification	AS/NZS 4777.2, NTs type A, UNE 217001, UNE 217002, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-2, IEC/EN 61000-6-3, IEC/EN 61000-3-11, IEC/EN 61000-3-12	

*Specifications are subject to change without prior notice.

iHome-B6.5-L01 Series

Low Voltage Battery

The Chelion iHome-B-L01 Series is a top-class low voltage lithium battery designed with the home experience in mind. The battery will automatically recognise connected modules for an easier, faster, and safer installation. In addition to delivering unparalleled performance with an unprecedented ten-year service life.



Items	iHome-B6.5-L01
Battery type	LFP
Energy capacity	6.5kWh
Cell configuration in pack	16S2P
Total capacity pack	128Ah
DOD	94.50%
Rated capacity	118Ah
Rated energy	6.0kWh
Rated voltage	51.2V
Voltage range	44.8~57.6V
Max. charge / discharge current	104.2A
Max. charge / discharge power	5kW
Peak charge / discharge power(@3S)	6.9kW
Dimensions(W*H*D)	18.7*30.1*5.7inch (475*765*145mm)
Weight	127.9±2.2lb (58±1kg)
Operating temperature	-14°F~122°F (-10~50°C)
Storage conditions	-4°F~113°F (-20~45°C); Within 6 month after each charge
Operating humidity	5%-95%RH
RTE	95%
Altitude	≤6561.7 ft (2000m)
Cooling type	Passive cooling
Room temperature calendar life(25°C±2°C)	10 years/60% SOH
Room temperature cycle life(25°C±2°C)	6000 cycles/60%SOH
Connection method	Floor or Wall mounted
Communication interface	CAN; RS485
Parallel connection	Max 8 PACKs
Ingress protection	IP55
Cell safety certification	IEC62619/IEC62040
Pack safety certification	IEC62040 /IEC 62619/CE/RCM /CE
UN transportation test standard	UN38.3+PI965 (Sea)



Top-class lithium iron phosphate battery with a long lifespan



Easy installation and capacity expansion



Automatically recognise modules



Multiple safety protection measures

iHome-INV-L1H02 Series

Single Phase Hybrid Inverter

The Chelion iHome-INV-L1H02 Series of hybrid energy storage inverter comes in a smaller and lighter form than its predecessor does. Its advanced design maximises energy flexibility. Compatible with both on-and-off-grid PV systems, it can intelligently balance use from the grid or battery to ensure energy consumption is always within economic or user-defined thresholds.



16 Up to 16 inverters in parallel even under off-grid condition

IP65 IP65 and fanless design with a long lifespan

Flexible applications and alternative energy sources input

Built-in UPS function with 4ms automatic switching time

	iHome-INV5K-L1H02	iHome-INV6K-L1H02
DC Input (PV)		
Recommended Max. PV input power	6.5kW	7.8kW
Max. PV input voltage	500Vdc	
Max. PV input current	13+13A	
Max. short current	19.5+19.5A	
No. of MPPT / Strings per MPPT	2 / 1+1	
Full load DC voltage range	300~425Vdc	
MPPT voltage range	150~425Vdc	
Starting voltage	125Vdc	
DC Input (BAT)		
Battery type	Lead-acid or Li-Ion	
Battery voltage range	40~60Vdc	
Max. charge / discharge current	120A	135A
External temperature sensor	Yes	
Charging curve	3 Stages / Equalization	
Charging strategy for Li-ion battery	Self-adaption to BMS	
AC Output		
Rated AC output and UPS power	5.0kW	6.0kW
Max. AC output and UPS power	5.0kW	6.0kW
Rated AC current	21.7A	26.1A
Max. AC current	23.9A	28.7A
Max. continuous passthrough	35A	40A
Max. apparent power	5000VA	6000VA
Rated Apparent Output Power	5000VA	6000VA
Peak power(off grid)	2 time of rated power, 10 S	
Adjustable power factor	0.8 leading to 0.8 lagging	
Output frequency and voltage	50Hz/45Hz-55Hz; L/N/PE 230V/ 195.5V-253V, 240V/204V-264V	
Grid type	Split phase	
THDi	<3% (of nominal power)	
DC current injection	<0.5% In	
Efficiency		
Max. efficiency	97.60%	
European efficiency	97.00%	
MPPT efficiency	99.90%	
Protection		
Protection Level	Class I	
Integrated	PV Input Lightning Protection, Anti-islanding Protection, PV String Input Reverse Polarity Protection, Insulation Resistor Detection, Residual Current Monitoring Unit, Output Over Current Protection, Output Shorted Protection, Surge protection	
Surge protection	DC Type II/AC Type III	
General		
Dimensions(W*H*D)	12.99*17.05*9.37 inch (330*433*238mm)	
Weight	33.1lb (15kg)	
Ingress protection	IP65	
Country of Manufacture	PRC	
Noise level	<30dB	
Cooling type	Passive cooling	
Operating temperature	-40°F~140°F (-40~60°C), >113°F (45°C) derating	
Installation method	Wall-mounted	
Communication interface	RS485; CAN	
Warranty	5 years	
Transformer type	Transformerless	
Certification	AS/NZS 4777.2:2020, IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN 61000-6-1, IEC/EN 61000-6-3, IEC/EN 61000-3-2, IEC/EN 61000-3-3,	

iHome-B5-HD03 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 optimised 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.



Built-in DC/DC



More available capacity in the life cycle



Flexible expansion



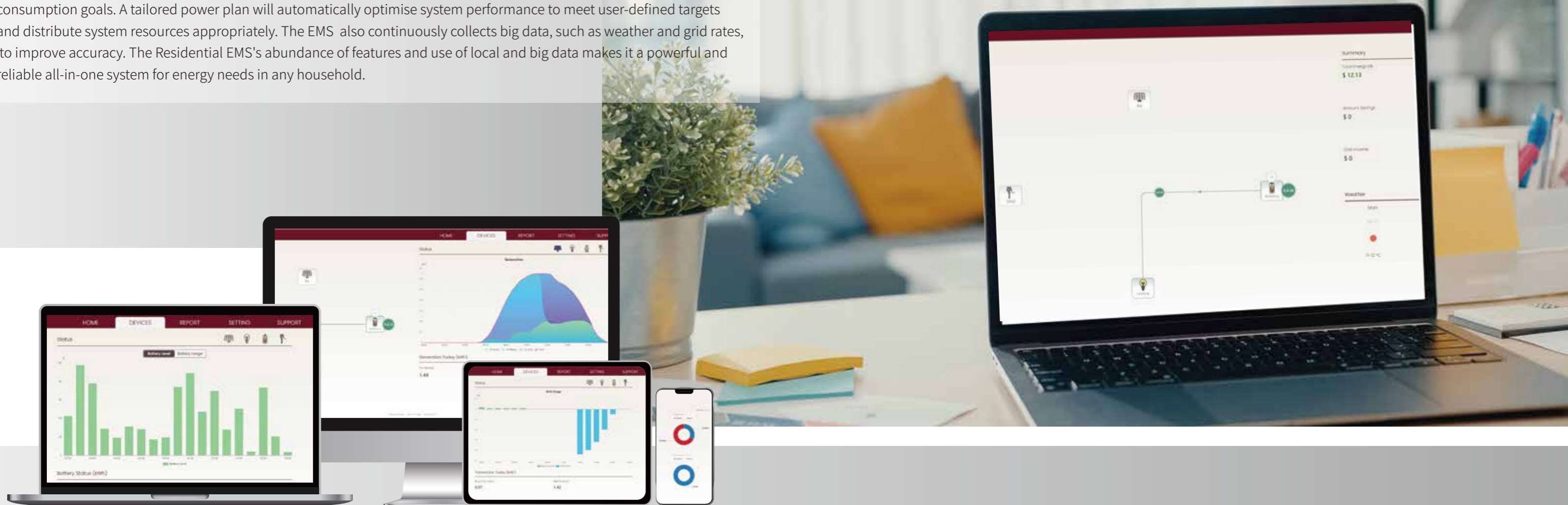
Excellent safety and optimisation performance

Items	iHome-B5-HD03
Battery type	LFP
Energy capacity	5kWh
Scalability	8
Scalable capacity range	5~40kWh
DOD	100%
Rated power	4kW
Voltage range	650~900Vdc
Max. charge current	6.15A
Max. discharge current	6.15A 7.38A, 10s
Dimensions(W*H*D)	31.49*14.96*7.87inch (800*380*200mm)
Weight	121.25lb(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	IEC 62619, IEC 60730, UN38.3

*Specifications are subject to change without prior notice.

Chelion Residential EMS

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 optimise 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



Uses local and big data to optimise performance



Will continuously adapt the energy profile to identify energy saving opportunities



Provides recommendations to enhance longevity and profitability



Integrated management and diagnostic tools sustain high performance