



ESY SUNHOME

Your Expert in Energy Storage Solutions

www.esysunhome.com



ESY SUNHOME emerged as a pioneer in the lithium battery industry, driven by cutting-edge battery protection systems and a dedicated Research & Development team. Recognizing the global gap in energy storage choices for households, the company envisioned integrating photovoltaic energy storage solutions with lithium batteries. Aligned with this vision, our team diligently engaged in the development and rigorous testing of PV home energy storage products.

Our cohesive team, comprising highly qualified professionals in Research and Development, manufacturing, and quality control, boasts distinguished backgrounds in various technological fields. After two years of dedicated effort, we achieved a significant milestone with the successful development and testing of PV home energy storage products. This culminated in the official launch of the HM6 series storage system products on January 14th, 2023.

ESY SUNHOME has expanded its reach, establishing branches in Sydney, Australia, and Munich, Germany. Our long-term objective is to evolve into a globally recognized brand, committed to advancing energy storage solutions and contributing to sustainable practices on a global scale.

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➤ Core Values

- Collaborative Spirit
- Down-to-Earth Practicality
- Forward-thinking Innovation
- Rigorous Scientific Craftsmanship
- Delivering Value for Clients
- Making a Positive Impact on Society

➤ Mission

To deliver safe and reliable renewable energy solutions to our customers.

Production Management



ESY SUNHOME operates from its dedicated production facility, featuring a comprehensive product manufacturing chain. Our integrated management systems, including ERP, MES, and WMES, ensure a seamless and high-precision approach to information management across production, material traceability, and warehousing processes.

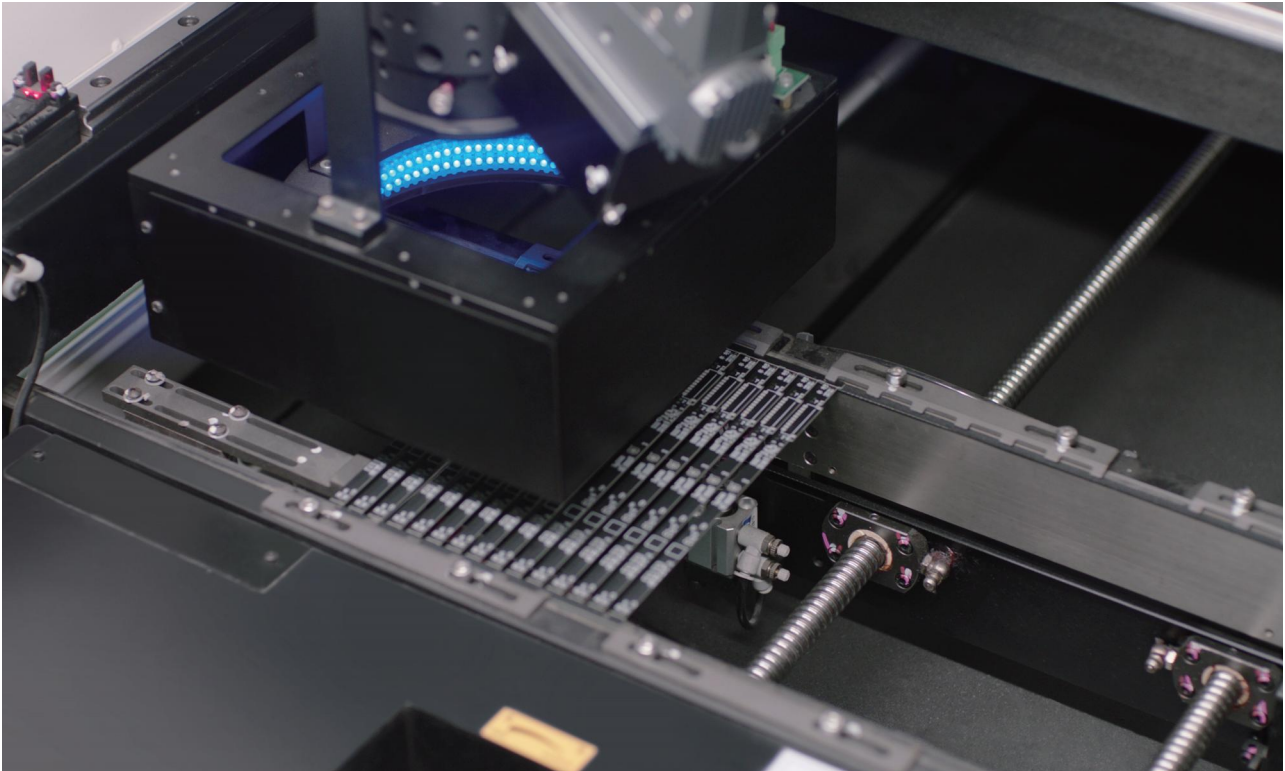
Quality Control



Every product model undergoes meticulous testing, encompassing aging, drop, waterproof, radiation, and other assessments, prior to shipping, ensuring the utmost quality, performance, and safety of the product. ESY SUNHOME maintains a steadfast commitment to strict quality control measures throughout the entire production process.

Research and Development

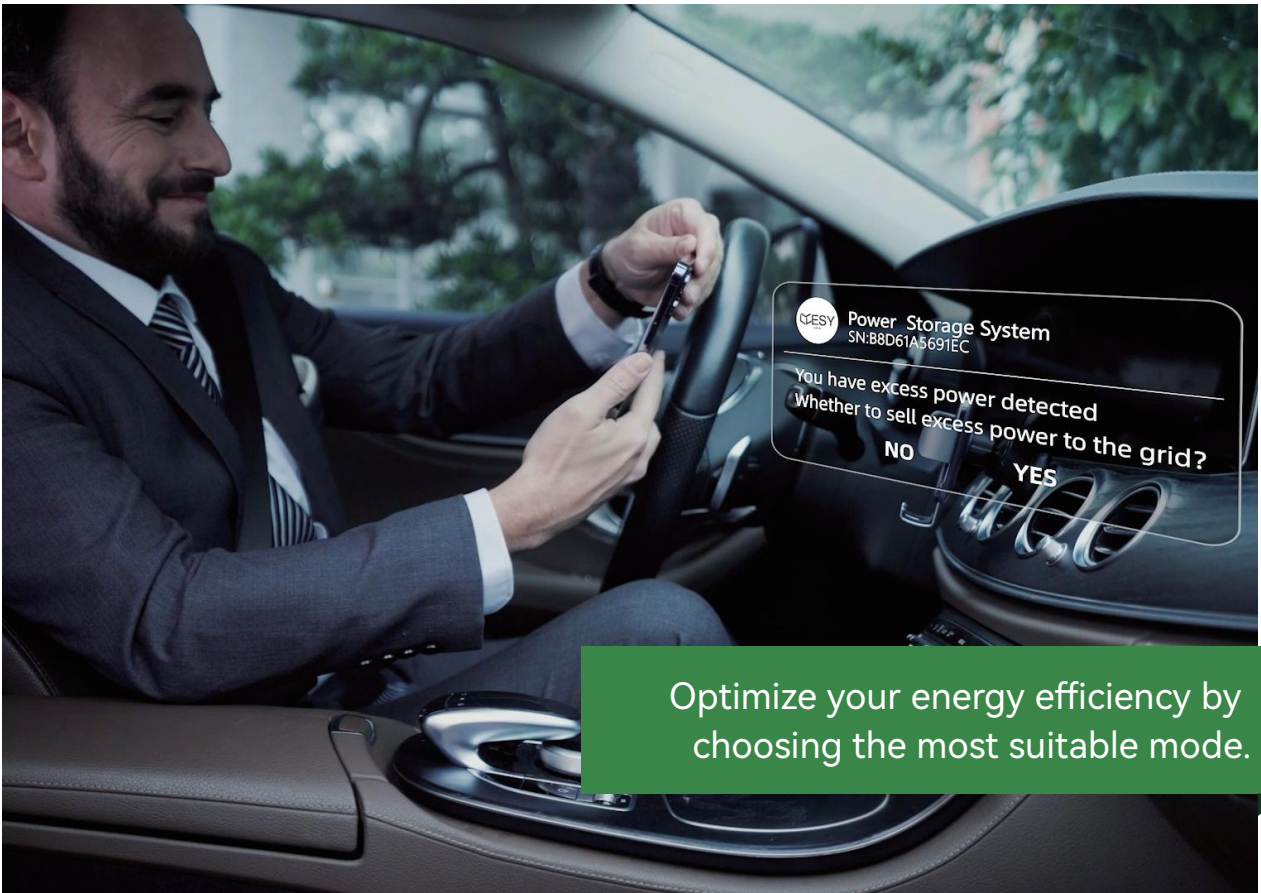
ESY SUNHOME is dedicated to independent research and development in the field of integrated Solar Energy Storage Systems. This includes the development of key components such as inverters, energy storage batteries, and IoT technology. Each crucial technology within this system is meticulously crafted by our professional R&D team.



Proprietary technologies, such as advanced BMS, EMS management systems, IoT APP platform, and AI intelligent algorithms, collectively form ESY SUNHOME's core competitive edge in the realm of renewable energy storage.

Professional Team

ESY SUNHOME not only possesses scientific manufacturing capabilities, experienced independent R&D teams, strict production processes, and quality control procedures but also has established an outstanding overseas marketing and brand operation team. This team is fully equipped with end-to-end operational capabilities, seamlessly connecting production to marketing endeavors.



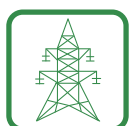
ESY SUNHOME Residential Energy Storage System



Experience uninterrupted power with our stand-by emergency power supply featuring seamless switching capabilities for immediate detection and response to power failures.



Harness the power of sunlight with your advanced photovoltaic panels, seamlessly converting sunlight into eco-friendly electricity. This independent household power station efficiently stores energy, providing a sustainable and reliable source for your personal use.



Effortlessly switch between off-grid and grid-connected modes, intelligently adjusting to varying conditions, with AI mode preferences for stable power supply and efficient energy storage tailored to your needs.



Optimize energy efficiency with photovoltaic power generation, leverage lower electricity prices, and extend battery lifespan through peak-to-valley adjustments. Harmonizing these integrated features maximizes energy consumption, lowers costs, and generates significant value for you.



Effortlessly control and monitor your system in real-time with the ESY SUNHOME APP. Stay connected, informed, and in control by monitoring power generation and system operations wherever and whenever needed, all at your fingertips.



Charge and store power strategically during low consumption periods, not only realizing cost savings but also making a positive impact on the environment by reducing carbon emissions. Embrace our solution to support your commitment to carbon neutrality.



At its core, the ESY SUNHOME Residential Energy Storage System seamlessly integrates light, storage, and charging, transcending your role from a mere 'consumer' to a prosumer. Empowering you to effortlessly engage in both electricity consumption and generation within the smart energy ecosystem, ESY SUNHOME elevates your energy experience. Embrace the future of energy with us.

Advantages of HM Series

Easy Installation

The HM Series stands as a plug-and-play energy storage system, designed for seamless integration and capable of supporting multiple battery expansions. Experience flexibility and scalability with our user-friendly solution.

Temperature Resistance

Enhanced with cell heating films, our system operates effectively even under variable weather conditions. Experience reliable performance and optimal functionality regardless of the climate, ensuring continuous operation when you need it most.

IP66 Certificate

Boasting a Waterproof & Dustproof IP66 certificate, a distinction achieved by only a select few manufacturers, our product ensures exceptional durability and resilience. Trust in its robust design to withstand challenging environmental conditions, providing you with long-lasting performance.

24-hour Monitoring System

With its 24-hour monitoring system, the HM Series offers proactive early warnings in the event of abnormalities, ensuring timely intervention by local installation service providers. Experience peace of mind with our vigilant system that prioritizes your safety and the optimal performance of your energy storage solution.

Expandable Capacity

Enjoy unparalleled flexibility with our system, offering a customizable configuration that allows for battery capacity expansion from 5kWh up to 30kWh. This adaptability caters to diverse scenarios and evolving requirements, ensuring your energy storage solution grows with your needs.

Artificial Intelligence (AI) Operation

Leverage the power of Artificial Intelligence (AI) Operations on our cloud platform, recommending the optimal operation mode tailored to your preferences. Experience intelligent decision-making that enhances efficiency and aligns seamlessly with your unique requirements.



Monitor and Control with Our Mobile APP

The ESY SUNHOME APP presents a cloud-based platform for residential energy storage, meticulously developed by our Internet of Things Research & Development team through years of dedicated effort. This commitment to excellence is motivated by our aspiration to furnish each household with a secure energy storage application system, delivering user-friendly simplicity, operational convenience, heightened safety, and unwavering stability.



iOS



Android

Advantages of **ESY SUNHOME APP**

Dynamic Analysis

Diverging from traditional dashboards designed for parameter viewing and adjustment, our app provides a seamless interface for complete control over the operational status of your home energy storage system, offering unparalleled ease and efficiency.

Revenue Monitoring

Intelligent charts allow users to track the latest power generation and revenue. Empower your financial gains through real-time monitoring of electricity purchase and sale data, maximizing revenue for our users.

Safety Warning

In the event of an anomaly within the residential energy storage system, our advanced early warning system promptly alerts the local installation service provider, ensuring swift and proactive operation and maintenance.

Artificial Intelligent Control

Our Artificial Intelligence (AI) mode provides real-time, optimal solutions by seamlessly integrating factors such as user electricity consumption, weather conditions in the living environment, and prevailing electricity prices, ensuring an intelligent and responsive energy management experience.



HM5 (Single-Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Battery Capacity	Dimensions (LxWxH)	Weight
HM5-05	1	5 kW	5.12 kWh	600x305x778 mm	93 kg
HM5-10	2	5 kW	10.24 kWh	600x305x998 mm	143 kg
HM5-15	3	5 kW	15.36 kWh	600x305x1218 mm	193 kg
HM5-20	4	5 kW	20.48 kWh	600x305x1438 mm	243 kg
HM5-25	5	5 kW	25.60 kWh	600x305x1658 mm	293 kg
HM5-30	6	5 kW	30.72 kWh	600x305x1878 mm	343 kg

Parameters	
Battery Type	IFpP
Cycle Life	≥6000 Times 25 °C
Max. Efficiency	97.8%
MPPT Efficiency	99.9%
Mounting	Modular Stacking/Ground
Communication	WiFi/Bluetooth/RS485
Application Software Support System	iOS/Android/Web
Cooling Method	Natural Cooling
Operating Temperature Range	-25~60 °C (Derating above 45 °C)
Optimum Operating Temperature Range	25±2 °C
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤25 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

PV Input	
Max. Input Power	8000 W
Rated Input Voltage	360 Vd.c.
Max. Input Voltage	550 Vd.c.
Starting Voltage	150 Vd.c.
MPPT Voltage Range	100 Vd.c.~540 Vd.c.
PV Max. Input Current	15 Ad.c./15 Ad.c.
Max. Short Circuit Current	20 Ad.c./20 Ad.c.

Backup	
Rated Output Power	5000 W
Max. Apparent Output Power	5000 VA
Rated Output Voltage	230 Va.c. L/N/PE
Rated Output Current	21.7 Aa.c.
Rated Output Frequency	50 Hz

Battery	
Rated Voltage	51.2 Vd.c.
Voltage Range	40.8 Vd.c.~57.6 Vd.c.
Rated Charge Current	100 Ad.c.
Rated Discharge Current	120 Ad.c.

Protection	
Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Overvoltage Category	II (for PV/Battery) III (for AC Grid Mains)
Battery Reverse Polarity Protection	Yes

AC Grid	
Rated Input Power	5000 W
Rated Output Power	5000 W
Max. Output Apparent Power	5000 VA
Rated Voltage	230 Va.c. L/N/PE
Rated Current	21.7 Aa.c.
Rated Output Frequency	50 Hz
Power Factor Range	0.8 leading~0.8 lagging

* Parameters are subject to changes and regulations.

Applicable Standards

Grid Connection:

AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NAV/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3



HM6 (Single-Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Battery Capacity	Dimensions (LxWxH)	Weight
HM6-05	1	5 kW	5.12 kWh	600x305x778 mm	93 kg
HM6-10	2	6 kW*	10.24 kWh	600x305x998 mm	143 kg
HM6-15	3	6 kW*	15.36 kWh	600x305x1218 mm	193 kg
HM6-20	4	6 kW*	20.48 kWh	600x305x1438 mm	243 kg
HM6-25	5	6 kW*	25.60 kWh	600x305x1658 mm	293 kg
HM6-30	6	6 kW*	30.72 kWh	600x305x1878 mm	343 kg

Parameters	
Battery Type	IFpP
Cycle Life	≥6000 Times 25 °C
Max. Efficiency	97.8%
MPPT Efficiency	99.9%
Mounting	Modular Stacking/Ground
Communication	WiFi/Bluetooth/RS485
Application Software Support System	iOS/Android/Web
Cooling Method	Natural Cooling
Operating Temperature Range	-25~60 °C (Derating above 45 °C)
Optimum Operating Temperature Range	25±2 °C
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤25 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

PV Input	
Max. Input Power	8000 W
Rated Input Voltage	360 Vd.c.
Max. Input Voltage	550 Vd.c.
Starting Voltage	150 Vd.c.
MPPT Voltage Range	100 Vd.c.~540 Vd.c.
PV Max. Input Current	15 Ad.c./15 Ad.c.
Max. Short Circuit Current	20 Ad.c./20 Ad.c.

Backup	
Rated Output Power	6000 W
Max. Apparent Output Power	6000 VA
Rated Output Voltage	230 Va.c. L/N/PE
Rated Output Current	26.09 Aa.c.
Rated Output Frequency	50/60 Hz
Waveform	Sine Wave

Battery	
Rated Voltage	51.2 Vd.c.
Voltage Range	40.8 Vd.c.~57.6 Vd.c.
Rated Charge Current	100 Ad.c.
Rated Discharge Current	120 Ad.c.

Protection	
Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Overvoltage Category	II (for PV/Battery) III (for AC Grid Mains)
Battery Reverse Polarity Protection	Yes

AC Grid	
Rated Input Power	6000 W
Rated Output Power*	6000 W
Max. Output Apparent Power	6000 VA
Rated Voltage	230 Va.c. L/N/PE
Input Voltage Range	184 Va.c.~276 Va.c.
Rated Current	26.09 Aa.c.
Rated Output Frequency	50/60 Hz
Power Factor Range	0.8 leading~0.8 lagging

* Feed-in power can be configured to 5kW according to local DNSP export limit requirements.

Applicable Standards

Grid Connection:

AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NAV/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3



HM10 (Single-Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Battery Capacity	Dimensions (LxWxH)	Weight
HM10-05	1	5 kW	5.12 kWh	600x305x778 mm	93 kg
HM10-10	2	10 kW	10.24 kWh	600x305x998 mm	143 kg
HM10-15	3	10 kW	15.36 kWh	600x305x1218 mm	193 kg
HM10-20	4	10 kW	20.48 kWh	600x305x1438 mm	243 kg
HM10-25	5	10 kW	25.60 kWh	600x305x1658 mm	293 kg
HM10-30	6	10 kW	30.72 kWh	600x305x1878 mm	343 kg

Parameters

Battery Type	IFpP
Cycle Life	≥6000 Times 25 °C
Conversion Efficiency	≥98 %
MPPT Efficiency	99.9%
Mounting	Modular Stacking/Ground
Communication	WiFi/Bluetooth
Application Software Support System	iOS/Android/Web
Cooling Method	Air Cooling
Operating Temperature Range	-25~60 °C
Optimum Operating Temperature Range	25±2 °C
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤45 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

PV Input	
Max. Input Power	13 kW
Rated Input Voltage	360 Vd.c.
Max. Input Voltage	550 Vd.c.
Starting Voltage	150 Vd.c.
MPPT Voltage Range	100 Vd.c.~540 Vd.c.
PV Max. Input Current	30 Ad.c./30 Ad.c.
Max. Short Circuit Current	40 Ad.c./40 Ad.c.

Backup	
Rated Output Power	10 kW
Rated Output Voltage	230 Va.c. L/N/PE
Rated Output Frequency	50/60 Hz
Waveform	Sine Wave

Battery	
Rated Voltage	51.2 Vd.c.
Voltage Range	40.8 Vd.c.~57.6 Vd.c.
Rated Charge Current	100 Ad.c.
Rated Discharge Current	120 Ad.c.

Protection	
Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Overvoltage Category	II (for PV/Battery) III (for AC Grid Mains)
Battery Reverse Polarity Protection	Yes

AC Grid	
Rated Voltage	230 Va.c. L/N/PE
Input Voltage Range	184 Va.c.~276 Va.c.
Rated Current	43.47 Aa.c.
Rated Grid Frequency	50/60 Hz

* Parameters are subject to changes and regulations.

Applicable Standards

Grid Connection:

AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NA/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3



HM10-H (3-Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Battery Capacity	Dimensions (LxWxH)	Weight
HM10-H-20	2	10 kW	21.08 kWh	660x270x1698 mm	213 kg
HM10-H-30	3	10 kW	31.62 kWh	660x270x2098 mm	298 kg
HM10-H-60	6	10 kW	63.24 kWh	(660x270x2098 mm) + (660x270x1408 mm)x1	558 kg
HM10-H-90	9	10 kW	94.86 kWh	(660x270x2098 mm) + (660x270x1408 mm)x2	818 kg

Parameters	
Battery Type	IFpP
Cycle Life	≥6000 Times 25 °C
Conversion Efficiency	98.20%
MPPT Efficiency	99.90%
Mounting	Modular Stacking/Ground
Communication	WiFi/Bluetooth
Application Software Support System	iOS/Android/Web
Cooling Method	Natural Cooling
Operating Temperature Range	-25~60 °C
Optimum Operating Temperature Range	25±2 °C
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤25 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

PV Input	
Max. Input Power	15 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 Vd.c.
Starting Voltage	180 Vd.c.
MPPT Voltage Range	160 Vd.c.~1000 Vd.c.
PV Max. Input Current	15 Ad.c./15 Ad.c.
Max. Short Circuit Current	20 Ad.c./20 Ad.c.
MPPT	2

AC Output (Backup)	
Rated Output Power	10 kW
Max. Output Power	10 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Frequency	50/60 Hz
Rated Output Current	14.4 Aa.c.
Max. Output Current	14.4 Aa.c.
THDI (rated power)	≤3% (Linear Load)
Switching Time	≤10 ms

Battery	
Rated Operating Voltage	400 Vd.c.
Voltage Range	380 Vd.c.~410 Vd.c.
Protection	BMS/Software/Hardware/Fuse

Protection	
Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Battery Reverse Polarity Protection	Yes

AC Input (Grid)	
Max. Apparent Power	15 kVA
Grid type	400 Va.c. 3L/N/PE
Max. Input Current	21.7 Aa.c.
Input Voltage Range	320Va.c.~480 Va.c.
Input Frequency	50/60 Hz

AC Output (Grid)	
Rated Output Power	10 kW
Max. Output Power	11 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Current	14.4 Aa.c.
Max. Output Current	15.8 Aa.c.
Rated Output Frequency	50/60 Hz
THDI (rated power)	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

* Parameters are subject to changes and regulations.

Applicable Standards

Grid Connection:

AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NAV/EEA-NE7-CH:2020; FR: DIN VDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3



HM15 (3-Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Battery Capacity	Dimensions (LxWxH)	Weight
HM15-20	2	13.6 kW	21.08 kWh	660x270x1698 mm	213 kg
HM15-30	3	15 kW	31.62 kWh	660x270x2098 mm	298 kg
HM15-60	6	15 kW	63.24 kWh	(660x270x2098 mm) + (660x270x1408 mm)x1	558 kg
HM15-90	9	15 kW	94.86 kWh	(660x270x2098 mm) + (660x270x1408 mm)x2	818 kg

Parameters

Battery Type	IFpP
Cycle Life	≥6000 Times 25 °C
Conversion Efficiency	98.20%
MPPT Efficiency	99.90%
Mounting	Modular Stacking/Ground
Communication	WiFi/Bluetooth
Application Software Support System	iOS/Android/Web
Cooling Method	Air Cooling
Operating Temperature Range	-25~60 °C
Optimum Operating Temperature Range	25±2 °C
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤45 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

PV Input	
Max. Input Power	22.5 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 Vd.c.
Starting Voltage	180 Vd.c.
MPPT Voltage Range	160 Vd.c.~1000 Vd.c.
PV Max. Input Current	15 Ad.c./30 Ad.c.
Max. Short Circuit Current	20 Ad.c./40 Ad.c.
MPPT	2

AC Output (Backup)	
Rated Output Power	15 kW
Max.Output Power	15 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Frequency	50/60 Hz
Rated Output Current	21.7 Aa.c.
Max. Output Current	21.7 Aa.c.
THDI (rated power)	≤3% (Linear Load)
Switching Time	≤10 ms

Battery	
Rated Operating Voltage	400 Vd.c.
Voltage Range	380 Vd.c.~410 Vd.c.
Protection	BMS/Software/Hardware/Fuse

Protection	
Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Battery Reverse Polarity Protection	Yes

AC Input (Grid)	
Max. Apparent Power	22.5 kVA
Grid type	400 Va.c. 3L/N/PE
Max. Input Current	32.5 Aa.c.
Input Voltage Range	320 Vd.c.~480 Va.c.
Input Frequency	50/60 Hz

AC Output (Grid)	
Rated Output Power	15 kW
Max. Output Power	16.5 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Current	21.7 Aa.c.
Max. Output Current	23.8 Aa.c.
Rated Output Frequency	50/60 Hz
THDI (rated power)	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

* Parameters are subject to changes and regulations.

Applicable Standards

Grid Connection:

AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NA/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3



HM20 (3-Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Battery Capacity	Dimensions (L*W*H)	Weight
HM20-20	2	13.6 kW	21.08 kWh	660x270x1698 mm	213 kg
HM20-30	3	20 kW	31.62 kWh	660x270x2098 mm	298 kg
HM20-60	6	20 kW	63.24 kWh	(660x270x2098 mm) + (660x270x1408 mm)x1	558 kg
HM20-90	9	20 kW	94.86 kWh	(660x270x2098 mm) + (660x270x1408 mm)x2	818 kg

Parameters

Battery Type	IFpP
Cycle Life	≥6000 Times 25 °C
Conversion Efficiency	98.20%
MPPT Efficiency	99.90%
Mounting	Modular Stacking/Ground
Communication	WiFi/Bluetooth
Application Software Support System	iOS/Android/Web
Cooling Method	Air Cooling
Operating Temperature Range	-25~60 °C
Optimum Operating Temperature Range	25±2 °C
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤45 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

PV Input	
Max. Input Power	30 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 Vd.c.
Starting Voltage	180 Vd.c.
MPPT Voltage Range	160 Vd.c.~1000 Vd.c.
PV Max. Input Current	15 Ad.c./30 Ad.c.
Max. Short Circuit Current	20 Ad.c./40 Ad.c.
MPPT	2

AC Output (Backup)	
Rated Output Power	20 kW
Max. Output Power	20 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Frequency	50/60 Hz
Rated Output Current	28.9 Aa.c.
Max. Output Current	28.9 Aa.c.
THDI (rated power)	≤3% (Linear Load)
Switching Time	≤10 ms

Battery	
Rated Operating Voltage	400 Vd.c.
Voltage Range	380 Vd.c.~410 Vd.c.
Protection	BMS/Software/Hardware/Fuse

Protection	
Anti-islanding Protection	Yes
PV Reverse Polarity Protection	Yes
Insulation Resistance Detection	Yes
Residual Current Detection	Yes
Output Overcurrent Protection	Yes
Output Short Circuit Protection	Yes
Battery Reverse Polarity Protection	Yes

AC Input (Grid)	
Max. Apparent Power	30 kVA
Grid Type	400 Va.c. 3L/N/PE
Max. Input Current	43.3 Aa.c.
Input Voltage Range	320 Va.c.~480 Va.c.
Input Frequency	50/60 Hz

AC Output (Grid)	
Rated Output Power	20 kW
Max. Output Power	22 kVA
Rated Output Voltage	400 Va.c. 3L/N/PE
Rated Output Current	28.9 Aa.c.
Max. Output Current	31.8 Aa.c.
Rated Output Frequency	50/60 Hz
THDI (rated power)	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

* Parameters are subject to changes and regulations.

Applicable Standards

Grid Connection:

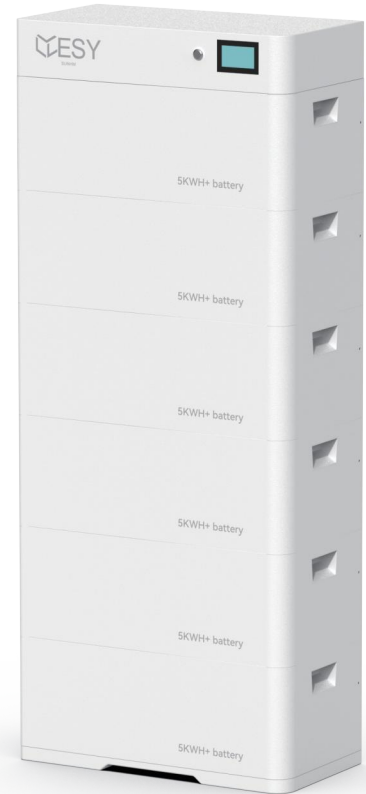
AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NA/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 217001; UNE 217002; PT: RfG + Portugal deviation

Safety:

Inverter: IEC 62109-1; IEC 62109-2 Battery: IEC 62619:2022; ISO 13849; IEC/EN 62040-1; VDE 2510-050:2017

EMC:

IEC 61000-6-1; IEC 61000-6-3



5KWH+ Household Energy Storage Battery

Model	No. of Modules	Battery Capacity	Dimensions (LxWxH)	Weight	Max. Discharge Power	Max. Discharge Current	Rated Capacity
5KWH+	1	5.12 kWh	600x305x343 mm	68 kg	5.76 kW	95 A	100*1 Ah
5KWH+2	2	10.24 kWh	600x305x563 mm	118 kg	11.52 kW	190 A	100*2 Ah
5KWH+3	3	15.36 kWh	600x305x783 mm	168 kg	13.82 kW	240 A	100*3 Ah
5KWH+4	4	20.48 kWh	600x305x1003 mm	218 kg	13.82 kW	240 A	100*4 Ah
5KWH+5	5	25.60 kWh	600x305x1223 mm	268 kg	13.82 kW	240 A	100*5 Ah
5KWH+6	6	30.72 kWh	600x305x1443 mm	318 kg	13.82 kW	240 A	100*6 Ah

Parameters

Rated Voltage	51.2 Vd.c.
Voltage Range	40.8 Vd.c.~57.6 Vd.c.
Depth of Discharge	100%
Measuring Accuracy	≤2%
Battery Type	IFpP
Battery Designation	IFpP49/175/134 [(16S)6P] M/-20+50/90
Cycle Life	≥6000 Times 25 °C
Mounting	Modular Stacking/Ground
Protection	BMS/Software/Hardware/Fuse
BMS Communication Protocol	RS485; CAN
Cooling Method	Natural Cooling
Operating Temperature Range	-20~58 °C
Optimum Operating Temperature Range	25±2 °C
Heating Up during Charging/ Discharging	Charging: T<5 °C, heating up to 20 °C±2 °C; Discharging: T<-5 °C, heating up to 5 °C±2 °C
Storage Temperature	0~40 °C ≤1 Year
Humidity	0~100% Relative Humidity
Noise Level at 1m	≤25 dB
Protection Rating	IP66
Warranty	10 Years
Country of Manufacture	China

Applicable Standards

Safety: IEC 62619:2022; ISO 13849; IEC/EN 62040-1
EMC: IEC 61000-6-1; IEC 61000-6-3



10KWH+H (High Voltage) Household Energy Storage Battery

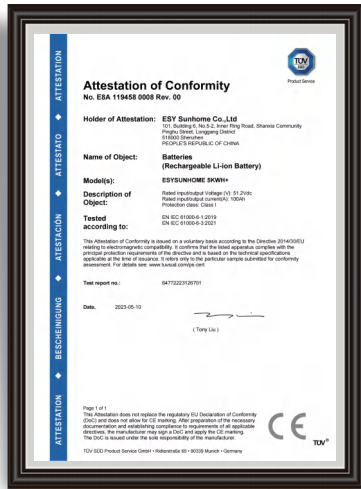
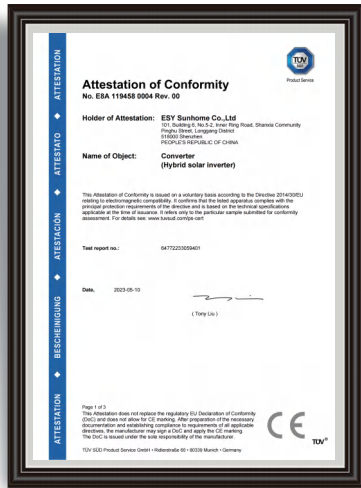
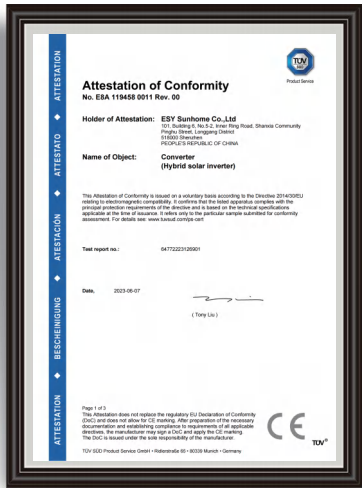
Model	No. of Modules	Battery Capacity	Dimensions (LxWxH)	Weight	Max. Discharge Power	Max. Discharge Current
10KWH+H	1	10.54 kWh	660x270x608 mm	90 kg	6.8 kW	18 A
10KWH+H2	2	21.08 kWh	640x270x1008mm	175 kg	13.6 kW	36 A
10KWH+H3	3	31.62 kWh	640x270x1408 mm	260 kg	20.4 kW	54 A
10KWH+H6	6	63.24 kWh	(640x270x1408mm)x2	520 kg	40.8 kW	108 A
10KWH+H9	9	94.86 kWh	(640x270x1408mm)x3	780 kg	61.2 kW	163 A

Parameters	
Rated Operating Voltage	400 Vd.c.
Working Voltage Range	380 Vd.c.~410 Vd.c.
Depth of Discharge	98%
Discharging Efficiency	≥97%
Battery Type	IFpP
Measuring Accuracy	≤2%
Cycle Life	≥6000 Times 25 °C
Optimum Operating Temperature Range	25±2 °C
Operating Temperature Range	-20~58 °C
Heating Up during Charging/ Discharging	Charging: T<5 °C, heating up to 20 °C±2 °C; Discharging: T<-5 °C, heating up to 5 °C±2 °C
Storage Temperature	0~40 °C ≤ 1 Year
Protection Rating	IP66
Humidity	0~100% Relative Humidity
Mounting	Modular Stacking/Ground
Protection	BMS/Software/Hardware/Fuse
BMS Communication Protocol	RS485; CAN
Cooling Method	Air Cooling
Warranty	10 Years
Country of Manufacture	China

Applicable Standards

Safety: IEC 62619:2022; ISO 13849; IEC/EN 62040-1
EMC: IEC 61000-6-1; IEC 61000-6-3







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