



ESY SUNHOME

A Professional Energy Storage Product Company

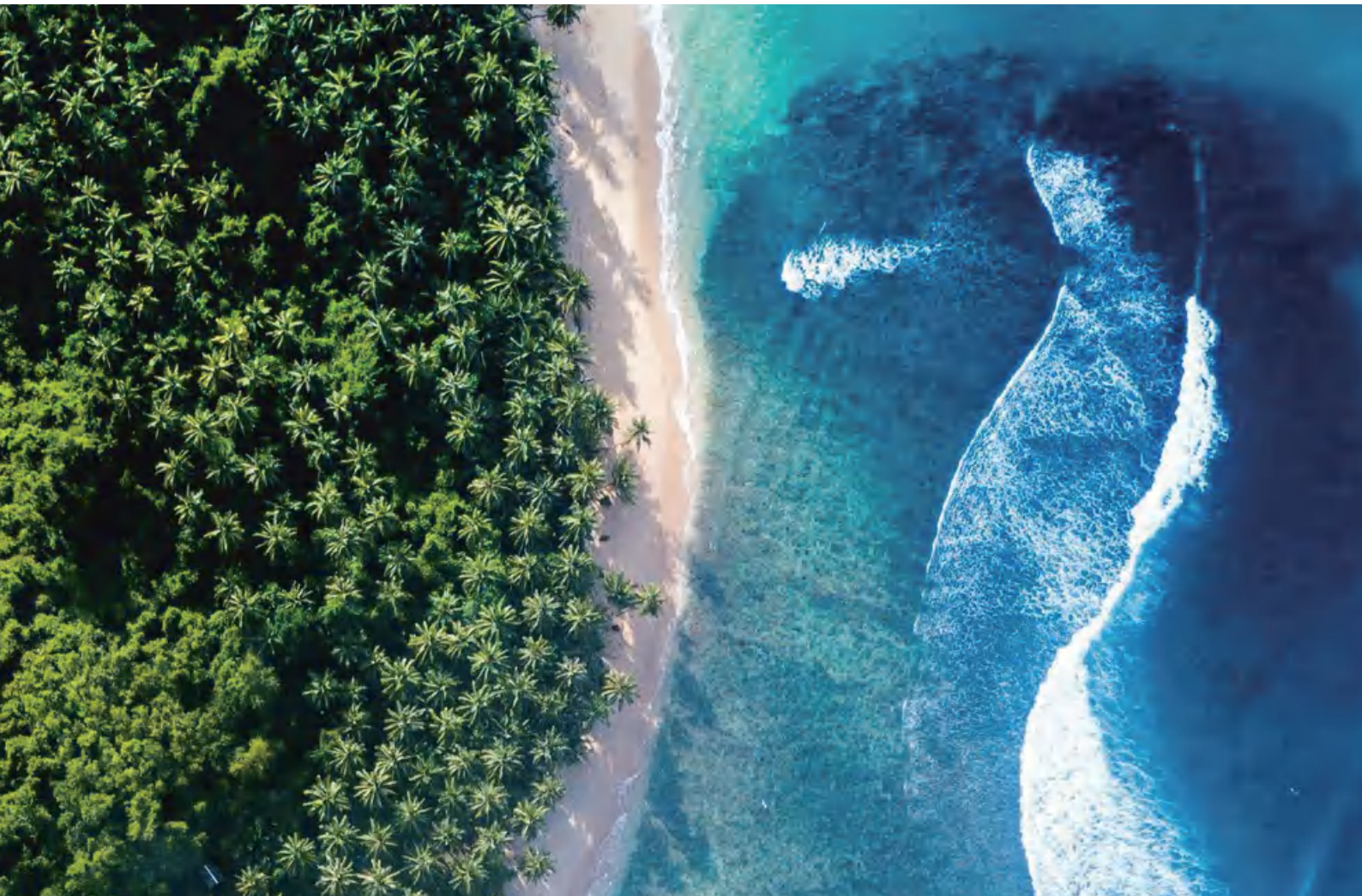
www.esysunhome.com



ESY SUNHOME started out as a lithium battery business, powered by cutting-edge battery protection systems and a proficient Research & Development team. The founder, Mr. Lee, recognized the absence of energy storage choices available to households worldwide and was enthusiastic about combining photovoltaic energy storage solutions with lithium batteries. With this vision in mind, the team embarked on the developing and testing of PV home energy storage products, forming an efficient, highly qualified team of Research and Development, manufacturing, and quality control professionals with distinguished backgrounds in various fields of technology. After two years of intensive effort, the team successfully developed and tested PV home energy storage products, resulting in the official launch of the HM6 series storage system products on January 14th, 2023. ESY SUNHOME now has branches in Sydney, Australia and Munich, Germany, with a long-term objective of becoming a global brand.

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Mission

To provide safe and high quality new energy products for every family.

Core Values

Unity and Hard Work

Pragmatic and Profound

Innovative Research and Development

Scientific and Intelligent Manufacturing

Creating Value for Customers

Creating Opportunities

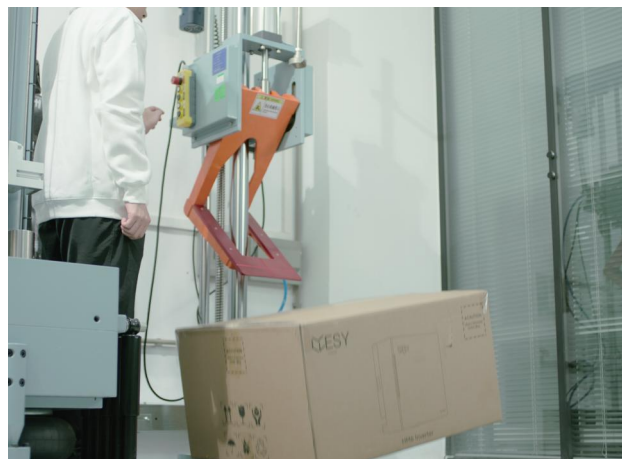
Contributing to Society

Production Management



ESY SUNHOME has its production bases and full-process production chain and integrates management systems such as ERP, MES, and WMES. It can also implement informatization precisely throughout the production, material traceability and warehousing management.

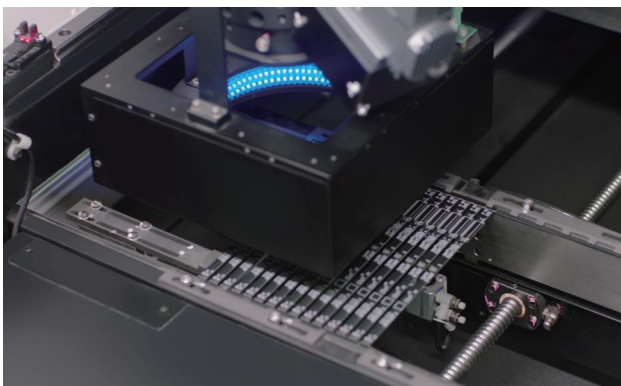
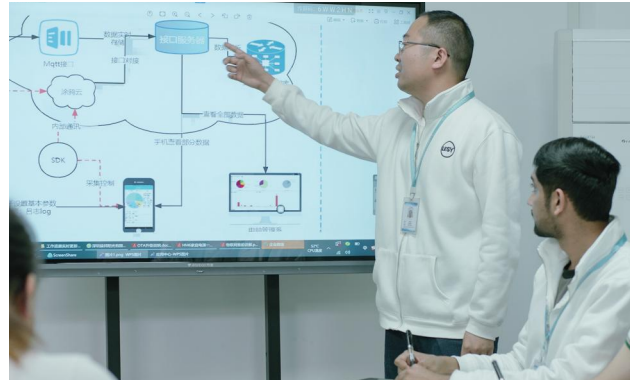
Quality Control



Before delivery, each type of product will be put through strict quality controls such as aging, falling, waterproofing, radiation and other tests to ensure quality, performance and safety. Strict quality controls embed the entire production process, which is a crucial mission of ESY SUNHOME.

Research and Development

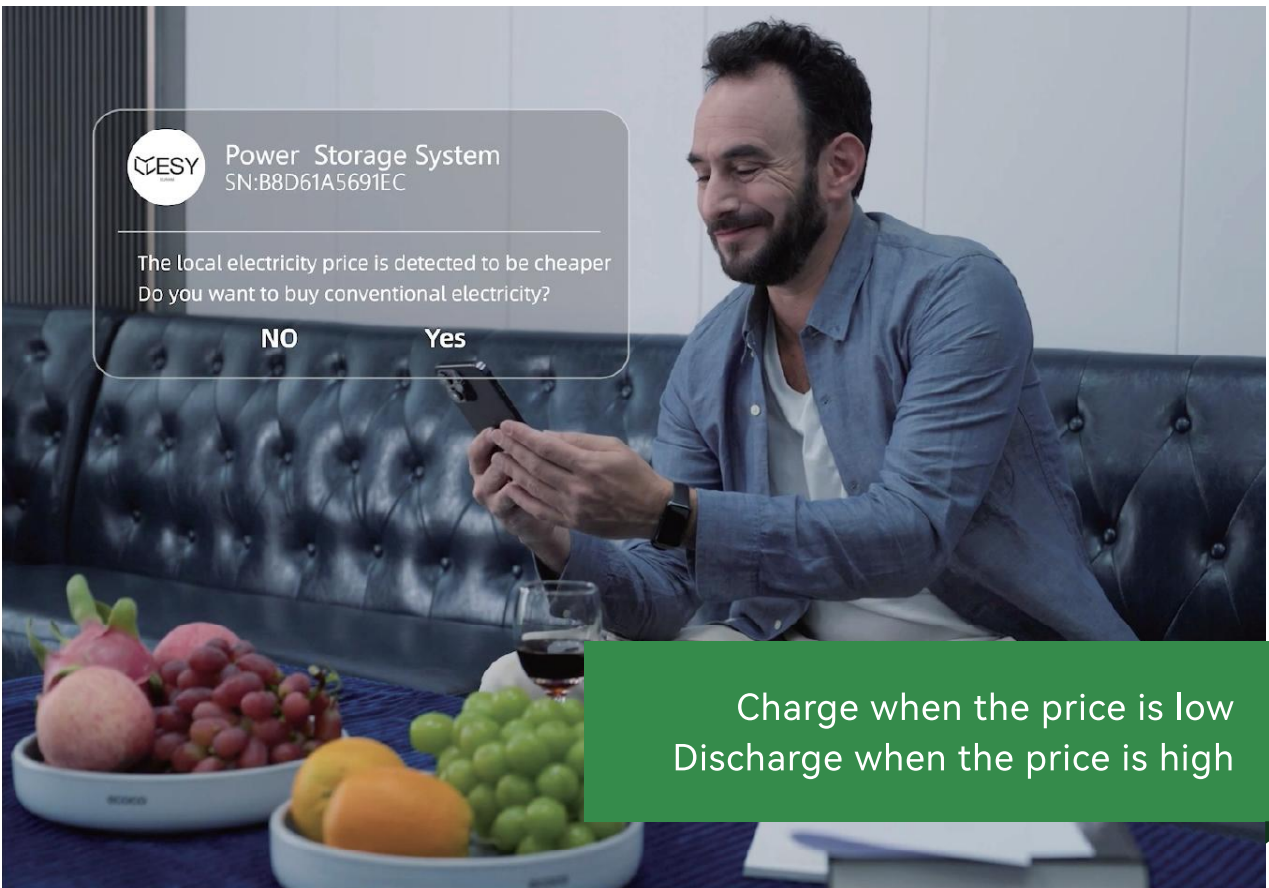
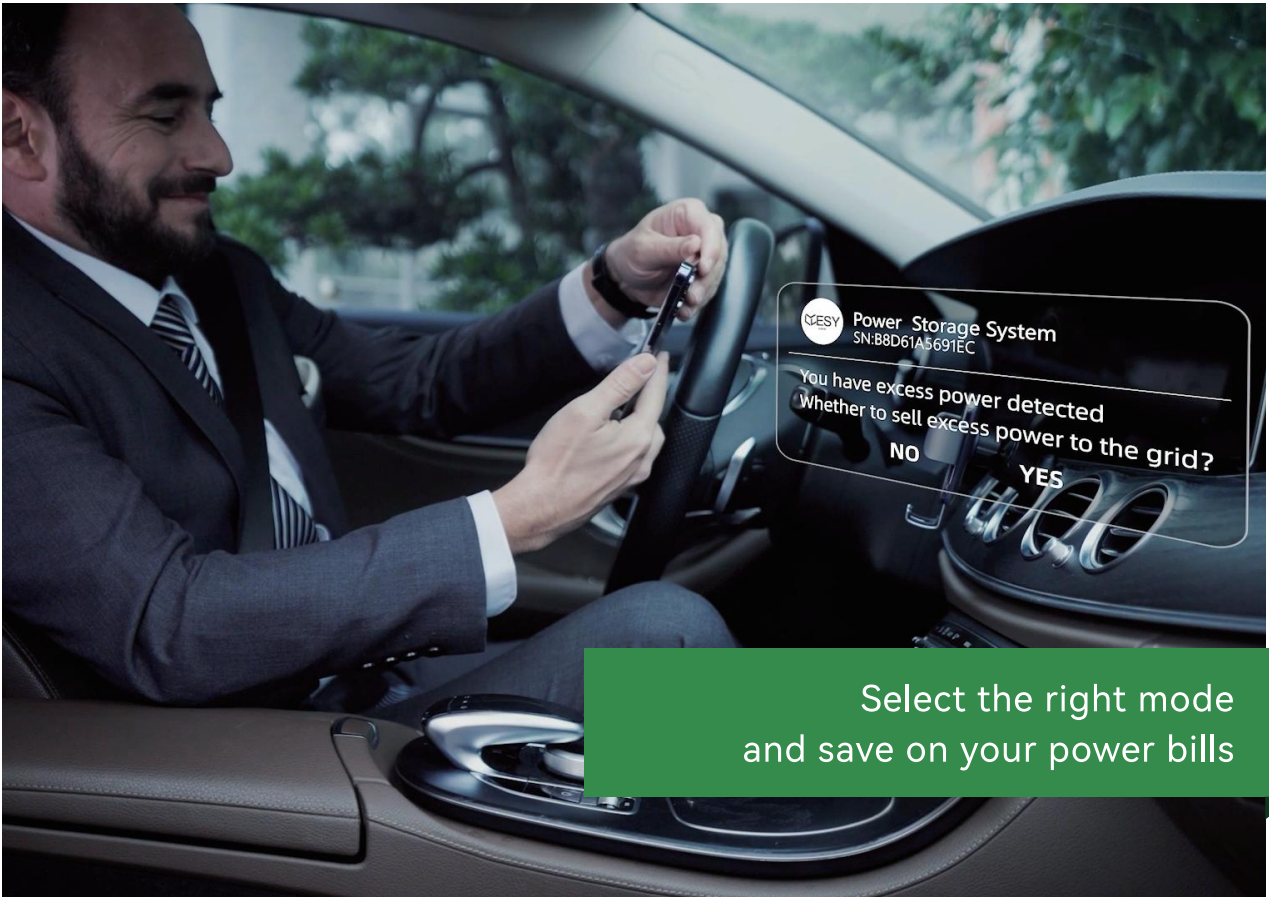
At ESY SUNHOME, our dedicated focus is on proprietary research and development. We bring together inverters, energy storage batteries, and IoT technology to create a comprehensive home solution for "solar, storage, and charging." Every pivotal technology in this system is crafted by our skilled R&D team.



Our strengths lie in cutting-edge technologies like BMS, EMS management systems, an IoT mobile app platform, and AI-driven intelligent algorithms, making ESY SUNHOME a trailblazer in the realm of new energy storage.

Business Excellence

ESYSUNHOME excels in multiple areas, including scientific manufacturing capabilities, a proficient in-house R&D team, rigorous production processes, and stringent quality control procedures. Additionally, we've established a top-notch overseas marketing and branding operation team. These combined strengths enable us to cover the full spectrum of operations, from production to marketing.





Residential Energy Storage System Mobile Application

The ESY SUNHOME APP introduces a cloud-based platform for residential energy storage, meticulously developed by our Internet of Things Research & Development team through years of dedicated work. This commitment to excellence is driven by our goal to provide every household with a secure energy storage application system that offers user-friendly simplicity, operational convenience, heightened safety, and unwavering stability.



iOS



Android

Advantages of **ESY SUNHOME APP**

Dynamic Analysis

Compared with the traditional dashboard to view and adjust parameters, our APP provides easy control of the operation status of the home energy storage system.

Revenue Monitoring

The latest power generation and revenue can be tracked through intelligent charts, and the data of electricity purchase and sale can be monitored in real-time to maximize the revenue of users.

Safety Warning

When an abnormal situation occurs in the residential energy storage system, an early warning will notify the local installation service provider to operate and maintain in time.

Artificial Intelligent Control

The Artificial Intelligence (AI) mode can provide users with the best solution in real-time by combining the user's electricity consumption, climate conditions of the living environment, electricity price, and other factors.

What is ESY SUNHOME Residential Energy Storage System



Stand-by emergency power supply, seamless switching power supply for power failure detection.



Equipped with photovoltaic panels, using sunlight to generate electricity, the independent household power station provides environmentally friendly electricity and stores it for self-use.



It can be operated in dual modes of off-grid and grid-connected, intelligently switch according to grid, load, electricity price, and weather conditions, push AI mode preference settings, and stabilize the power supply and energy storage.



Utilize photovoltaic power generation, low electricity price, battery with long cycle life, and peak-to-valley adjustment to save electricity costs and generate value for users.



Utilize the ESY SUNHOME APP to instantly monitor power generation, customize performance settings, and track system operations whenever needed.



Use solar energy to charge and store power in low valleys to reduce carbon emissions and help carbon neutrality.



Central to its essence, the fusion of light, storage, and charging embodies an active participant within the shared smart energy ecosystem. This evolution transcends the traditional role of a "consumer" to that of a "prosumer," enabling each user to engage in both electricity consumption and generation with utmost seamlessness.

Advantages of HM Series

Easy Installation

HM-Series is a plug-and-play energy storage system and can support multiple battery expansion.

Temperature Resistance

Equipped with cell heating films, effectively works under variable weather conditions.

IP66 Certificate

Waterproof & Dustproof IP66 (few manufactories get this Certificate).

24-hour Monitoring System

When an abnormal situation occurs, an early warning will notify the local installation service provider to operate and maintain in time.

Expandable Capacity

Flexibly configure, battery capacity can be expanded from 5kWh up to 30kWh. It can greatly fulfill different scenarios.

Artificial Intelligence (AI) Operation

Perform Artificial Intelligence (AI) Operation on the cloud platform and recommend the best operation mode according to preference.



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

Model	No. of Modules	Max. Output Power	Usable Energy	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/DRM
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	≤25 dB
Protection Rating	IP66
Warranty	10 Years

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

Applicable Standards

Grid Connection:

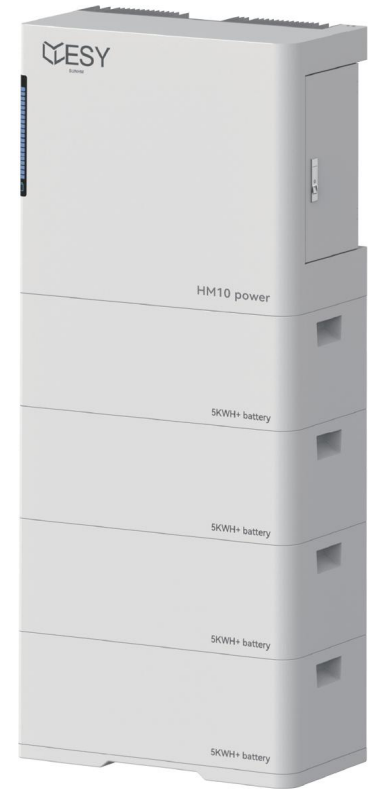
AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NA/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE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

Model	No. of Modules	Max. Output Power	Usable Energy	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	≤45 dB
Protection Rating	IP66
Warranty	10 Years

PV Input

Max. Input Power	13 kW
Rated Input Voltage	360 Vd.c.
Max. Input Voltage	550 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.

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

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



HM12 (Single Phase) All-In-One Residential Energy Storage System

Model	No. of Modules	Max. Output Power	Usable Energy	Dimensions (LxWxH)	Weight
HM12-05	1	5 kW	5.12 kWh	600x305x778 mm	93 kg
HM12-10	2	10 kW	10.24 kWh	600x305x998 mm	143 kg
HM12-15	3	12 kW	15.36 kWh	600x305x1218 mm	193 kg
HM12-20	4	12 kW	20.48 kWh	600x305x1438 mm	243 kg
HM12-25	5	12 kW	25.60 kWh	600x305x1658 mm	293 kg
HM12-30	6	12 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	≤45 dB
Protection Rating	IP66
Warranty	10 Years

PV Input

Max. Input Power	15.6 kW
Rated Input Voltage	360 Vd.c.
Max. Input Voltage	550 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.

Backup

Rated Output Power	12 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	52.17 Aa.c.
Rated Grid Frequency	50/60 Hz

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: 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



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

Model	No. of Modules	Max. Output Power	Usable Energy	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	≤25 dB
Protection Rating	IP66
Warranty	10 Years

PV Input

Max. Input Power	15 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 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	15.2 Aa.c./14.4 Aa.c.
Max. Output Current	15.2 Aa.c.
Current Harmonics	≤3% (Linear Load)
Switching Time	≤10 ms

Battery

Rated Standby Voltage	51.2 Vd.c.
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	22.8 Aa.c.
Input Voltage Range	320Va.c.~480 Va.c.
Input Frequency Range	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	15.2 Aa.c./14.4 Aa.c.
Max. Output Current	16.7Aa.c./15.8 Aa.c.
Rated Output Frequency	50/60 Hz
Current Harmonics	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

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



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

Model	No. of Modules	Max. Output Power	Usable Energy	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	≤45 dB
Protection Rating	IP66
Warranty	10 Years

PV Input	
Max. Input Power	22.5 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 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	22.8 Aa.c./21.7 Aa.c.
Max. Output Current	22.8 Aa.c.
Current Harmonics	≤3% (Linear Load)
Switching Time	≤10 ms

Battery	
Rated Standby Voltage	51.2 Vd.c.
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	34.2 Aa.c.
Input Voltage Range	320 Va.c.~480 Va.c.
Input Frequency Range	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	22.8 Aa.c./21.7 Aa.c.
Max. Output Current	25.1 Aa.c./23.8 Aa.c.
Rated Output Frequency	50/60 Hz
Current Harmonics	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

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



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

Model	No. of Modules	Max. Output Power	Usable Energy	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	≤45 dB
Protection Rating	IP66
Warranty	10 Years

PV Input	
Max. Input Power	30 kW
Rated Input Voltage	600 Vd.c.
Max. Input Voltage	1100 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	30.4 Aa.c./28.9 Aa.c.
Max. Output Current	30.4 Aa.c.
Current Harmonics	≤3% (Linear Load)
Switching Time	≤10 ms

Battery	
Rated Standby Voltage	51.2 Vd.c.
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	45.6 Aa.c.
Input Voltage Range	320 Va.c.~480 Va.c.
Input Frequency Range	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	30.4 Aa.c./28.9 Aa.c.
Max. Output Current	33.5 Aa.c./31.8 Aa.c.
Rated Output Frequency	50/60 Hz
Current Harmonics	≤3% (@Rated Power)
Power Factor Range	0.8 leading~0.8 lagging

Applicable Standards

Grid Connection:

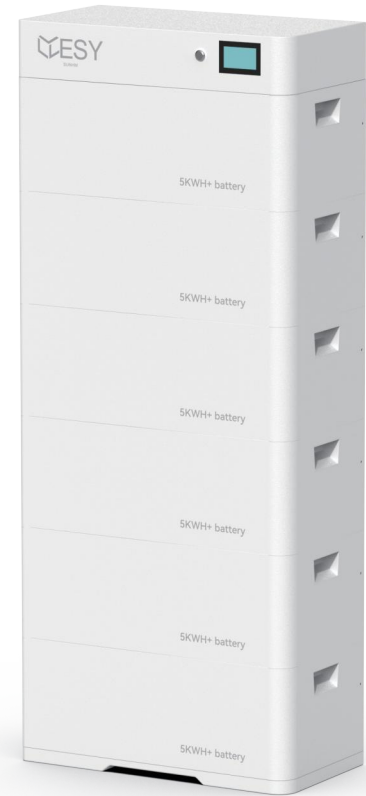
AUS: AS 4777.2; CEC+RCM; DE: DIN VDE V 0124-100:2020; VDE-AR-N 4105:2018; AT: OVE Directive R 25:2020; TOR Erzeuger Type A V1.2; IT: CEI 0-21; UK: G99/1-8 typeA; IE: Distribution Code Version 8; BE: C10/11:2021; CH: NA/EEA-NE7-CH:2020; FR: DINVDE 0126-1-1 VFR:2019; ES: NTS 631 V21 SEPE (type A); UNE 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	Usable Energy	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	IFpP48/133/174 [16S] M/-20+50/90
Encoding Rule	EA.LESY.5kWh-16A0
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	≤25 dB
Protection Rating	IP66
Warranty	10 Years

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

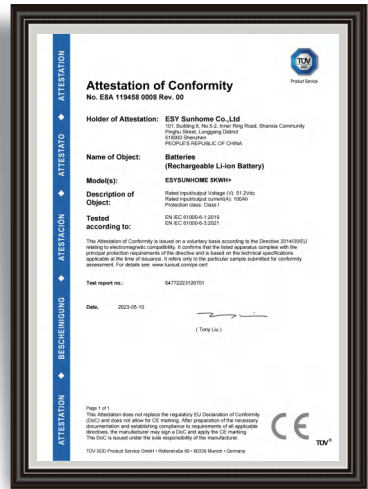
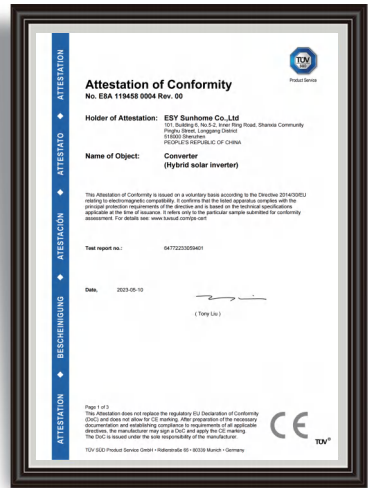
Model	No. of Modules	Usable Energy	Dimensions (LxWxH)	Weight	Max. Discharge Power	Max. Discharge Current
10KWH+H	1	10.54 kWh	660x270x608 mm	90 kg	6.8 kW	18 A
10KWH+H2	2	21.08 kWh	640x270x1008mm	175 kg	13.6 kW	36 A
10KWH+H3	3	31.62 kWh	640x270x1408 mm	260 kg	20.4 kW	54 A
10KWH+H6	6	63.24 kWh	(640x270x1408mm)x2	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	Natural Cooling
Warranty	10 Years

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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