



TAKE THE SUN HOME

# HM5/HM6/HM12 All-in-One Residential Energy Storage System

(SINGLE PHASE)



IP66-rated  
Enclosures



24/7  
Monitoring  
System



Modular  
Installation



Scalable  
System  
Capacity



Temperature  
Resistance



Artificial  
Intelligence  
(AI) Operation



Ease of  
Maintenance



Energy  
Management  
Optimization

## ESYsunhome CO.,LTD



ADD. : Building 6, No. 5-2, inner ring road, Shanxia community, Pinghu street,  
Longgang District, Shenzhen GD, China 518000

Website: [www.esysunhome.com](http://www.esysunhome.com) Email: [info@esysunhome.com](mailto:info@esysunhome.com) TEL: +86 400-806-8266

## HM5/6/12 Multiple Batteries Overview



HM5/6-05



HM5/6/12-10



HM5/6/12-15



HM5/6/12-20



HM5/6/12-25



HM5/6/12-30

| Model              | HM5/HM6-05     | HM5/HM6/HM12-10 | HM5/HM6/HM12-15 | HM5/HM6/HM12-20 | HM5/HM6/HM12-25 | HM5/HM6/HM12-30 |
|--------------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Battery Quantity   | 1              | 2               | 3               | 4               | 5               | 6               |
| Max. Output Power  | 5/6 kW         | 5/6/12 kW       | 5/6/12 kW       | 5/6/12 kW       | 5/6/12 kW       | 5/6/12 kW       |
| Battery Capacity   | 5.12 kWh       | 10.24 kWh       | 15.36 kWh       | 20.48 kWh       | 25.60 kWh       | 30.72 kWh       |
| Dimensions (LxWxH) | 600x305x778 mm | 600x305x998 mm  | 600x305x1218 mm | 600x305x1438 mm | 600x305x1658 mm | 600x305x1878 mm |
| Weight             | 93 kg          | 143 kg          | 193 kg          | 243 kg          | 293 kg          | 343 kg          |

| Parameters                          | HM5                              | HM6                              | HM12                             |
|-------------------------------------|----------------------------------|----------------------------------|----------------------------------|
| Battery Type                        | IFpP                             | IFpP                             | IFpP                             |
| Cycle Life                          | ≥6000 Times 25 °C                | ≥6000 Times 25 °C                | ≥6000 Times 25 °C                |
| Max. Efficiency                     | 97.8%                            | 97.8%                            | 97.8%                            |
| MPPT Efficiency                     | 99.9%                            | 99.9%                            | 99.9%                            |
| Mounting                            | Modular Stacking/Ground          | Modular Stacking/Ground          | Modular Stacking/Ground          |
| Communication                       | WiFi/Bluetooth/DRM/4G            | WiFi/Bluetooth/DRM/4G            | WiFi/Bluetooth/DRM/4G            |
| Application Software Support System | iOS/Android/Web                  | iOS/Android/Web                  | iOS/Android/Web                  |
| Cooling Method                      | Natural Cooling                  | Natural Cooling                  | Air Cooling                      |
| Operating Temperature Range         | -25~60 °C (Derating above 45 °C) | -25~60 °C (Derating above 45 °C) | -25~60 °C (Derating above 45 °C) |
| Optimum Operating Temperature Range | 25±2 °C                          | 25±2 °C                          | 25±2 °C                          |
| Humidity                            | 0~100% Relative Humidity         | 0~100% Relative Humidity         | 0~100% Relative Humidity         |
| Noise Level                         | ≤25 dB                           | ≤25 dB                           | ≤45 dB                           |
| Protection Rating                   | IP66                             | IP66                             | IP66                             |
| Warranty                            | 10 Years                         | 10 Years                         | 10 Years                         |

| PV Input                   | HM5                 | HM6                 | HM12                |
|----------------------------|---------------------|---------------------|---------------------|
| Max. Input Power           | 8000 W              | 8000 W              | 18 kW               |
| Rated Input Voltage        | 360 Vd.c.           | 360 Vd.c.           | 360 Vd.c.           |
| Max. Input Voltage         | 550 Vd.c.           | 550 Vd.c.           | 550 Vd.c.           |
| Starting Voltage           | 150 Vd.c.           | 150 Vd.c.           | 150 Vd.c.           |
| MPPT Voltage Range         | 100 Vd.c.~540 Vd.c. | 100 Vd.c.~540 Vd.c. | 100 Vd.c.~540 Vd.c. |
| PV Max. Input Current      | 15 Ad.c./15 Ad.c.   | 15 Ad.c./15 Ad.c.   | 30 Ad.c./30 Ad.c.   |
| Max. Short Circuit Current | 20 Ad.c./20 Ad.c.   | 20 Ad.c./20 Ad.c.   | 40 Ad.c./40 Ad.c.   |

| AC Grid                    | HM5                     | HM6                     | HM12                    |
|----------------------------|-------------------------|-------------------------|-------------------------|
| Rated Input Power          | 5000 W                  | 6000 W                  | 12 kW                   |
| Rated Output Power         | 5000 W                  | 6000 W                  | 12 kW                   |
| Max. Output Apparent Power | 5000 VA                 | 6000 VA                 | 12 kVA                  |
| Rated Voltage              | 230 Va.c. L/N/PE        | 230 Va.c. L/N/PE        | 230 Va.c. L/N/PE        |
| Input Voltage Range        | 184 Va.c.~276 Va.c.     | 184 Va.c.~276 Va.c.     | 184 Va.c.~276 Va.c.     |
| Rated Current              | 21.74 Aa.c.             | 26.09 Aa.c.             | 52.2 Aa.c.              |
| Rated Output Frequency     | 50/60 Hz                | 50/60 Hz                | 50/60 Hz                |
| Power Factor Range         | 0.8 leading~0.8 lagging | 0.8 leading~0.8 lagging | 0.8 leading~0.8 lagging |

| Backup                     | HM5              | HM6              | HM12             |
|----------------------------|------------------|------------------|------------------|
| Rated Output Power         | 5000 W           | 6000 W           | 12 kW            |
| Max. Apparent Output Power | 5000 VA          | 6000 VA          | 12 kVA           |
| Rated Output Voltage       | 230 Va.c. L/N/PE | 230 Va.c. L/N/PE | 230 Va.c. L/N/PE |
| Rated Output Current       | 21.74 Aa.c.      | 26.09 Aa.c.      | 52.2 Aa.c.       |
| Rated Output Frequency     | 50/60 Hz         | 50/60 Hz         | 50/60 Hz         |
| Waveform                   | Sine Wave        | Sine Wave        | Sine Wave        |

| Battery                 | HM5                   | HM6                   | HM12                  |
|-------------------------|-----------------------|-----------------------|-----------------------|
| Rated Voltage           | 51.2 Vd.c.            | 51.2 Vd.c.            | 51.2 Vd.c.            |
| Voltage Range           | 40.8 Vd.c.~57.6 Vd.c. | 40.8 Vd.c.~57.6 Vd.c. | 40.8 Vd.c.~57.6 Vd.c. |
| Rated Charge Current    | 100 Ad.c.             | 100 Ad.c.             | 140 Ad.c.             |
| Rated Discharge Current | 120 Ad.c.             | 120 Ad.c.             | 140 Ad.c.             |

| Protection                          | HM5                                            | HM6                                            | HM12                                           |
|-------------------------------------|------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Anti-islanding Protection           | Yes                                            | Yes                                            | Yes                                            |
| PV Reverse Polarity Protection      | Yes                                            | Yes                                            | Yes                                            |
| Insulation Resistance Detection     | Yes                                            | Yes                                            | Yes                                            |
| Residual Current Detection          | Yes                                            | Yes                                            | Yes                                            |
| Output Overcurrent Protection       | Yes                                            | Yes                                            | Yes                                            |
| Output Short Circuit Protection     | Yes                                            | Yes                                            | Yes                                            |
| Overvoltage Category                | II (for PV/Battery)<br>III (for AC Grid Mains) | II (for PV/Battery)<br>III (for AC Grid Mains) | II (for PV/Battery)<br>III (for AC Grid Mains) |
| Battery Reverse Polarity Protection | Yes                                            | Yes                                            | Yes                                            |

## 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/VE 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