

# SSE-HH8~12K-P3EU

## Three Phase | 2 MPPTs Hybrid Inverter (HV)

The SSE-HH8~12K-P3EU is a three-phase high-voltage hybrid inverter built for residential and small commercial storage. It supports 125–800V battery voltage, 100% unbalanced loads, and <10ms UPS-level switching to ensure power continuity. With 150% PV oversizing, intelligent EMS control, and multiple operation modes, it improves energy efficiency and system flexibility. The IP65 fanless design ensures quiet, durable performance in any environment.



<10ms UPS Function for  
Uninterrupted Power



100% Unbalanced Load  
Support



Flexible 125-800V  
Battery Input



Smart Energy Management &  
Multiple Operating Modes



1.5x PV Oversizing



IP65-rated Fanless  
Outdoor-ready Design

| TECHNICAL SPECIFICATION                       |                                                                                                                                     |                |                |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------------|----------------|
| Model                                         | SSE-HH8K-P3EU                                                                                                                       | SSE-HH10K-P3EU | SSE-HH12K-P3EU |
| INVERTER INPUT / OUTPUT(GRID)                 |                                                                                                                                     |                |                |
| Rated Power (Input/Output)(kW)                | 12 / 8                                                                                                                              | 14 / 10        | 16 / 12        |
| Rated Voltage                                 | 380 / 400Va.c.,3W+N+PE                                                                                                              |                |                |
| Rated Frequency (Hz)                          | 50 / 60                                                                                                                             |                |                |
| Power Factor Range                            | 0.8 leading~0.8 lagging                                                                                                             |                |                |
| Switch Time (ms)                              | <10                                                                                                                                 |                |                |
| Max.Continuous Current (Input/Output)(A a.c.) | 17.4 / 11.6                                                                                                                         | 20.3 / 14.5    | 23.2 / 17.4    |
| Max.Output Overcurrent Protection (A a.c.)    | 400 / 60                                                                                                                            |                |                |
| BATTERY                                       |                                                                                                                                     |                |                |
| Battery Type                                  | Lithium / Lead-acid                                                                                                                 |                |                |
| Battery Voltage Range (V d.c.)                | 125 ~ 800                                                                                                                           |                |                |
| Rated Battery Voltage (V d.c.)                | 200                                                                                                                                 | 250            | 300            |
| Max.Charge Current (A d.c.)                   | 40                                                                                                                                  |                |                |
| Max.Discharge Current (A d.c.)                | 40                                                                                                                                  |                |                |
| Reverse Connect Protection                    | Yes                                                                                                                                 |                |                |
| PV INPUT                                      |                                                                                                                                     |                |                |
| No.of MPPT Tracker / Strings                  | 2 / 1+1                                                                                                                             |                |                |
| Max.PV Input Power (kW)                       | 12                                                                                                                                  | 15             | 18             |
| Max.DC Voltage (V d.c.)                       | 1000                                                                                                                                |                |                |
| MPPT Voltage Range (V d.c.)                   | 150~950                                                                                                                             |                |                |
| Start-up Voltage (V d.c.)                     | 200                                                                                                                                 |                |                |
| Max.Input Current / sring (A d.c.)            | 2*16                                                                                                                                |                |                |
| Isc PV (Absolute Maximum) / sring (A d.c.)    | 2*24                                                                                                                                |                |                |
| AC OUTPUT(EPS) / GENERATOR                    |                                                                                                                                     |                |                |
| EPS Rated Output Voltage                      | 380 / 400Va.c.,3W+N+PE                                                                                                              |                |                |
| EPS Rated Output Frequency (Hz)               | 50 / 60                                                                                                                             |                |                |
| EPS Rated Output Active Power (kW)            | 8                                                                                                                                   | 10             | 12             |
| EPS Rated Output Apparent Power (kVA)         | 8                                                                                                                                   | 10             | 12             |
| EPS Rated Output Current (A a.c.)             | 11.6                                                                                                                                | 14.5           | 17.4           |
| Overload Capacity (Off Grid)                  | 110% 30s / 120% 10s / 150% 0.2s                                                                                                     |                |                |
| EFFICIENCY                                    |                                                                                                                                     |                |                |
| MPPT Efficiency                               | 99.90%                                                                                                                              |                |                |
| Euro-efficiency                               | 97.50%                                                                                                                              |                |                |
| Max.Efficiency                                | 98%                                                                                                                                 |                |                |
| PROTECTION & FEATURE                          |                                                                                                                                     |                |                |
| Insulation Monitoring                         | Yes                                                                                                                                 |                |                |
| Residual Current Monitoring                   | Yes                                                                                                                                 |                |                |
| Parallel Function                             | Yes                                                                                                                                 |                |                |
| Protection Degree                             | IP65                                                                                                                                |                |                |
| Certifications                                | IEC 62109-1/2, IEC 62477-1, IEC 61000-6-1, IEC 61000-6-3, EN 50549-1,VDE-AR-N 4105,OVE R25,NA/EEA-NE7-CH UNE 217001&2/NTS 631, etc. |                |                |
| Other Protection                              | Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.                                         |                |                |
| GENERAL PARAMETER                             |                                                                                                                                     |                |                |
| Storage Temperature                           | -25℃~+60℃                                                                                                                           |                |                |
| Operating Temperature                         | -25℃ ~ +60℃ (Linely derating to 60% when exceed +45℃ ~ +60℃)                                                                        |                |                |
| Humidity                                      | 0%~100% (Non-condensing)                                                                                                            |                |                |
| Max.operating altitude (m)                    | 4000 (>2000 Derating)                                                                                                               |                |                |
| Noise (dB)                                    | <35                                                                                                                                 |                |                |
| Machine Dimensions(W*H*D) (mm)                | 530*600*210                                                                                                                         |                |                |
| Machine Weight / N.W. (kg)                    | 35                                                                                                                                  |                |                |
| DISPLAY & COMMUNICATION                       |                                                                                                                                     |                |                |
| Display                                       | LED+APP                                                                                                                             |                |                |
| Interface                                     | RS485 / WiFi / CAN / DRM (Optional:Bluetooth / LAN / Meter)                                                                         |                |                |

- The AC voltage and frequency range can differ according to the grid standards of each country.
- Please note that all specifications are subject to change without prior notice.