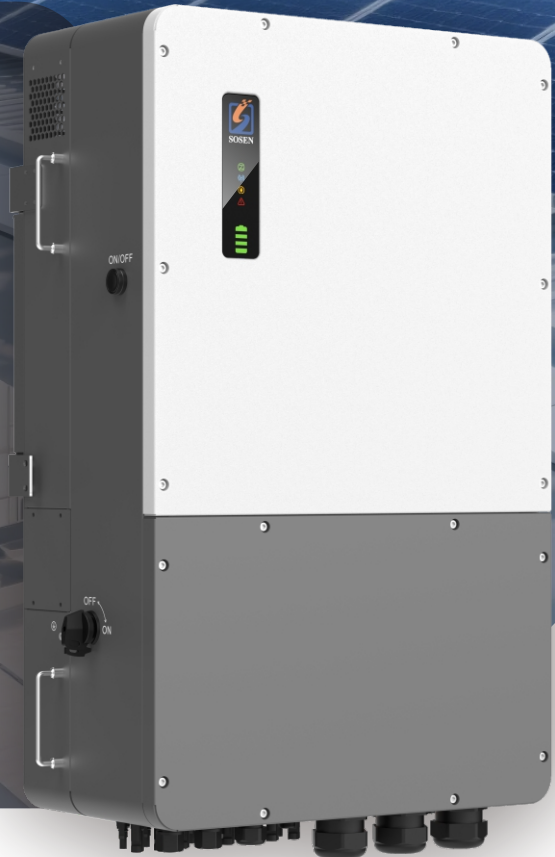


# SSE-HH29.9~60K-P3EU

## Three Phase | 4 MPPTs Hybrid Inverter (HV)

The SSE-HH29.9K~60K-P3EU series hybrid inverters, from 29.9kW to 60kW, are ideal for commercial and industrial use. They support both on-grid and off-grid systems with 4 MPPTs and intelligent energy management for efficient energy conversion. Featuring SiC technology for enhanced efficiency and stability in harsh environments. Dual independent battery inputs support up to 100A charge/discharge per port and 200A parallel current, offering a comprehensive and highly competitive energy storage solution.



### Superior Performance & Efficiency

- 100% three-phase unbalanced output
- 4 MPPTs, efficiency up to 99.9%
- 1.67x PV oversizing



### Intelligent Energy Management

- Integrated local and remote EMS
- Support diesel generator
- Provides open API for system integration



### High Safety & Reliability

- All-SiC technology for higher efficiency
- IP66 protection
- Compact design, plug & play installations



### Flexible Expansion & Compatibility

- Supports up to 6 units in parallel
- Enables AC coupling for system retrofit
- Compatible with mainstream Li-ion batteries



### Dual Battery Inputs & High Current

- Dual independent battery inputs, 100A charge/discharge per port
- Up to 200A parallel current



### System Intelligence & Upgradability

- Supports intelligent module integration
- Modular design for easy expansion

| TECHNICAL SPECIFICATION                       |                                                                                                                   |                |                |                |                |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------|----------------|----------------|----------------|----------------|
| Model                                         | SSE-HH29.9K-P3EU                                                                                                  | SSE-HH30K-P3EU | SSE-HH40K-P3EU | SSE-HH50K-P3EU | SSE-HH60K-P3EU |
| INVERTER INPUT / OUTPUT(GRID)                 |                                                                                                                   |                |                |                |                |
| Rated Power (kW)                              | 29.9                                                                                                              | 30             | 40             | 50             | 60             |
| Rated Voltage                                 | 380 / 400Va.c.,3W+N+PE                                                                                            |                |                |                |                |
| Rated Frequency (Hz)                          | 50 / 60                                                                                                           |                |                |                |                |
| Power Factor Range                            | 0.8 leading~0.8 lagging                                                                                           |                |                |                |                |
| Max.Continuous Current (Input/Output)(A a.c.) | 90.8 / 45.4                                                                                                       | 91.2 / 45.6    | 121.6 / 60.8   | 152 / 76       | 182.4 / 91.2   |
| Max.Output Overcurrent Protection (A a.c.)    | 68.1 / 64.7                                                                                                       | 68.4 / 65      | 91.2 / 86.6    | 114 / 108.3    | 136.7 / 129.9  |
| BATTERY                                       |                                                                                                                   |                |                |                |                |
| Battery Type                                  | Lithium / Lead-acid                                                                                               |                |                |                |                |
| Battery Voltage Range (V d.c.)                | 135 ~ 850                                                                                                         |                |                |                |                |
| Rated Battery Voltage (V d.c.)                | 150                                                                                                               | 150            | 200            | 250            | 300            |
| Max.Charge Current (A d.c.)                   | 2*100                                                                                                             |                |                |                |                |
| Max.Discharge Current (A d.c.)                | 2*100                                                                                                             |                |                |                |                |
| Reverse Connect Protection                    | Yes                                                                                                               |                |                |                |                |
| PV INPUT                                      |                                                                                                                   |                |                |                |                |
| No.of MPPT Tracker / Strings                  | 4 / 2+2+2+2                                                                                                       |                |                |                |                |
| Max.PV Input Power (kW)                       | 59.8                                                                                                              | 60             | 80             | 100            |                |
| Max.DC Voltage (V d.c.)                       | 1000                                                                                                              |                |                |                |                |
| MPPT Voltage Range (V d.c.)                   | 150~850                                                                                                           |                |                |                |                |
| Start-up Voltage (V d.c.)                     | 200                                                                                                               |                |                |                |                |
| Max.Input Current / string (A d.c.)           | 8*20                                                                                                              |                |                |                |                |
| Isc PV (Absolute Maximum) / string (A d.c.)   | 8*30                                                                                                              |                |                |                |                |
| 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)            | 29.9                                                                                                              | 30             | 40             | 50             | 60             |
| EPS Rated Output Apparent Power (kVA)         | 29.9                                                                                                              | 30             | 40             | 50             | 60             |
| EPS Rated Output Current (A a.c.)             | 45.4 / 43.2                                                                                                       | 45.6 / 43.3    | 60.8 / 57.7    | 76 / 72.2      | 91.2 / 86.6    |
| Overload Capacity (Off Grid)                  | 110% 30s / 120% 10s / 150% 0.2s                                                                                   |                |                |                |                |
| EFFICIENCY                                    |                                                                                                                   |                |                |                |                |
| MPPT Efficiency                               | 99.90%                                                                                                            |                |                |                |                |
| Euro-efficiency                               | 97.50%                                                                                                            |                |                |                |                |
| Max.Efficiency                                | 98.5%                                                                                                             |                |                |                |                |
| PROTECTION & FEATURE                          |                                                                                                                   |                |                |                |                |
| Insulation Monitoring                         | Yes                                                                                                               |                |                |                |                |
| Residual Current Monitoring                   | Yes                                                                                                               |                |                |                |                |
| Parallel Function                             | Yes,up to 6pcs                                                                                                    |                |                |                |                |
| Protection Degree                             | IP66                                                                                                              |                |                |                |                |
| Certifications                                | EN IEC 62477-1, EN IEC 62109-1/2, EN IEC 61000-6-2, EN50549-1/10, VDE-AR-N 4105, G99:2022, AS/NZS 477.2:2020 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                                                                                                              |                |                |                |                |
| Noise (dB)                                    | <65                                                                                                               |                |                |                |                |
| Machine Dimensions(W*H*D) (mm)                | 544*880*278                                                                                                       |                |                |                |                |
| Machine Weight / N.W. (kg)                    | 88                                                                                                                |                |                |                |                |
| 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.