

# SSM-HH125K-P3

125kW All-in-One Hybrid Inverter for C&I

Designed for commercial and industrial storage systems, the SSM-HH125K-P3 integrates PCS, EMS, and BMS into a compact unit delivering 125kW output. Supports up to 10 units in parallel for scalable capacity up to 1.25MW.



## All-in-One Hybrid Cabinet

Integrates PCS, EMS, and BMS; supports PV, battery, load, and grid for full-scenario energy storage



## Multiple DC Inputs with High Current

2 MPPT-enabled DC inputs, each up to 110A, compatible with high-power PV and multiple strings



## Wide DC Voltage Range

150V to 1000V DC range supports various PV and battery setups for greater design flexibility



## Hot-Swappable Modular Design

Hot-swappable modules with compact footprint for easy O&M and high power density



## Smart Versatility

Seamless on/off-grid switching, adaptable to self-consumption, power dispatch, backup power, and more



## Flexible Expansion & Fast Grid Transfer

Supports up to 10 units in parallel, expandable to 1.25MW; seamless on/off-grid switch within 20ms

| TECHNICAL SPECIFICATION         |   |
|---------------------------------|---|
| Model                           | SSM-HH125K-P3                               |
| DC ( PV)                        |   |
| Max PV Voltage (V)              | 1000  |
| MPPT Voltage Range (V)          | 150-950                                     |
| MPPT Number                     | 2   |
| Max Input Current (A)           | 2×110                                       |
| DC ( BATTERY)                   |   |
| Battery Voltage Range (V)       | 600-1000V (for 3P3W) / 680-1000V (for 3P4W) |
| Rated Battery Voltage (V)       | 830   |
| Max Charging Current (A)        | 220   |
| Max Discharging Current (A)     | 220   |
| Battery Type                    | Lithium / Lead-Acid                         |
| AC (ON-GRID)                    |   |
| Rated Power (kW)                | 125   |
| Max Power (kVA)                 | 137.5                                       |
| Rated Voltage (V)               | 380 / 400                                   |
| Rated Frequency (Hz)            | 50 / 60                                     |
| Frequency Range (Hz)            | 45~55 / 55~65                               |
| Power Factor Range              | 1 Leading~1 Lagging                         |
| THDi                            | <3%   |
| Rated Current (A)               | 180   |
| AC (OFF-GRID)                   |   |
| Rated Voltage (V)               | 380 / 400                                   |
| THDu                            | <2% (Linear Load)                           |
| Rated Frequency (Hz)            | 50 / 60                                     |
| Overload Capacity               | 110%  |
| GENERAL PARAMETER               |   |
| Machine Dimensions (W*H*D) (mm) | 750*1200*1377                               |
| Weight (kg)                     | 300   |
| Temperature Range (°C)          | -35°C~+55°C (Derating above 45°C)           |
| Parallel Function               | Yes, up to 10pcs                            |
| Protection Degree               | IP20  |
| Humidity                        | 0~95%                                       |
| Noise (dB)                      | <80   |
| Altitude Derating (m)           | ≤4000                                       |
| Cooling Method                  | Air-Cooled                                  |
| DISPLAY & COMMUNICATION         |   |
| Display                         | LCD   |
| BMS Communication               | RS485, CAN                                  |
| EMS Communication               | RS485, TCP / IP                             |
| Certifications                  | IEC 62109; IEC 61000                        |

- 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.