

# HYBRID

## Three Phase Inverter

SEI Series 14K 16K 18K



### Features

- 3 independent MPPT ports, up to 1.6 times the rated photovoltaic power.
- PV open-circuit voltage is 600V, and the single-channel current is 40A.
- Support fast charging, Max. charging/discharging current is 330A.
- Separate generator port.
- Smart load function.
- AC coupling function.
- Up to 9 units can be connected in parallel, forming a 162kW commercial and industrial system.
- Max. 200A Bypass Current (Grid).
- With a dual activation function (grid or PV).
- Support time-slot function for peak-valley.
- Three-phase input/output without N wire function.

# SEI SERIES

## PRODUCT DESCRIPTION

| MODEL                                   | SEI-14K-UH3   | SEI-16K-UH3                          | SEI-18K-UH3             |
|---|---|--------------------------------------|-------------------------|
| <b>AC Input/Output Data</b>             |   |                                      |                         |
| Rated AC Input/Output Active Power      | 14000W  | 16000W                               | 18000W                  |
| Max. AC Input/Output Apparent Power     | 15400VA   | 17600VA                              | 19800VA                 |
| Rated AC Input/Output Current           | 44.5A/38.8A   | 50A/44.5A                            | 55.5A/50A               |
| Max. AC Input/Output Current            | 44.5A/38.8A   | 50A/44.5A                            | 55.5A/50A               |
| Peak Power (off-grid)                   | 28000VA   | 32000VA                              | 36000VA                 |
| Power Factor Adjustment Range           | 0.8 leading to 0.8 lagging  |                                      |                         |
| Rated Input/Output Voltage/Range        | 120/208V 0.85Un-1.1Un   |                                      |                         |
| Rated Input/Output Grid Frequency/Range | 60Hz/40Hz-70Hz  |                                      |                         |
| Grid Connection Form                    | 3L+N+PE   |                                      |                         |
| THD                                     | <3% (of nominal power)  |                                      |                         |
| <b>Battery Input Data</b>               |   |                                      |                         |
| Battery Type                            | Lead-Acid Batteries / Lithium Batteries / User-defined  |                                      |                         |
| Number of Battery Input                 | 2   |                                      |                         |
| Battery Voltage Range                   | 40V-60V   |                                      |                         |
| Max. Grid/Generator Charging Current    | 300A  | 330A                                 | 350A                    |
| Max. Hybrid Charging Current            | 300A  | 330A                                 | 350A                    |
| Max. Discharging Current                | 300A  | 330A                                 | 350A                    |
| Charging Strategy for Li-ionBattery     | Self-adaption to BMS  |                                      |                         |
| <b>PV Input Data</b>                    |   |                                      |                         |
| No. Of MPPT Trackers                    | 3   |                                      |                         |
| No. of Strings MPPT Tracker             | 2+2+2   |                                      |                         |
| Max. PV Access Power                    | 28000W  | 32000W                               | 36000W                  |
| Max. PV Input Power                     | 22400W  | 25600W                               | 28800W                  |
| Rated PV Input Voltage                  | 450V  |                                      |                         |
| Max. PV Input Voltage                   | 600V  |                                      |                         |
| Start-up Voltage                        | 120V  |                                      |                         |
| Max. PV Input Current                   | 40A/40A/40A   |                                      |                         |
| Max. Input Short-Circuit Current        | 50A/50A/50A   |                                      |                         |
| MPPT Voltage Range                      | 120V-500V   |                                      |                         |
| <b>Grid/Generator Input</b>             |   |                                      |                         |
| Input Voltage Range                     | Phase voltage: 90V-140V, line voltage: 156V-243V  |                                      |                         |
| Input Frequency Range                   | 40Hz-70Hz   |                                      |                         |
| Max. Bypass Overload Current (Grid)     | 200A  |                                      |                         |
| <b>Efficiency</b>                       |   |                                      |                         |
| MPPT Tracking Efficiency                | 99.9%   |                                      |                         |
| Max. Efficiency                         | 97.5%   |                                      |                         |
| CEC Efficiency                          | 97%   |                                      |                         |
| <b>General Data</b>                     |   |                                      |                         |
| Parallel Capacity                       | 1-9 Units   |                                      |                         |
| Dimension                               | 860x480x313mm   |                                      |                         |
| Weight                                  | 59kg  |                                      |                         |
| Protection Degree                       | IP65  |                                      |                         |
| Temperature                             | -25~60°C, >45°C Derate  |                                      |                         |
| Temperature                             | 5 years   |                                      |                         |
| Humidity                                | 0~100%  |                                      |                         |
| Cooling Method                          | Heat sink + intelligent air cooling   |                                      |                         |
| Noise                                   | <55dB   |                                      |                         |
| Communication                           | RS485/CAN/USB/Dry Contact   |                                      |                         |
| External Module (Optional)              | Wi-Fi/4G Stick  |                                      |                         |
| Certificate                             | UL 1741-2021 (UL1741SB), CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL 1741 CRD-PCS, UL1699B, CEC, SGIP, CSIP |                                      |                         |
| <b>Protection</b>                       |   |                                      |                         |
| PV Lightning Protection                 | Yes   | Anti-islanding Protection            | Yes                     |
| Leakage Current Detection               | Yes   | Insulation Resistor Detection        | Yes                     |
| Output Overcurrent /Shorted Protection  | Yes   | PV Input Reverse Polarity Protection | Yes                     |
| Overvoltage Category                    | AC type III/DC type III   | Surge protection                     | AC type III/DC type III |