

SEI-18K-UP

Split-Phase Hybrid Solar Storage Inverter



Efficiency

- 3 independent MPPT ports, up to 1.6 times the rated photovoltaic power.
- MPPT operating voltage: 120-500Vdc

Safety

- AC output with 3-level relay isolation (inverter to grid)
- IP65 waterproof protection degree

All in one

- With a three activation function (Grid/PV/Generator)
- AC coupling function
- Separate generator port

Reliable

- PV open-circuit voltage is 600V, and the single-channel current is 42A
- Max charge/discharge current: 380A, supporting fast charge/discharge
- Up to 9 units can be connected in parallel
- Battery 2-level buck-boost topology, significantly reducing current ripple and extending lifespan
- Max. 200A Bypass Current (Grid)

Intelligent

- Support time-slot function for peak-valley
- Smart load function

SEI

Application scenario



House



Farm



Telecom



Countryside



Island



Pasture



Product Parameters

Model	SEI-15K-UP		SEI-16K-UP		SEI-18K-UP	
AC Output						
Rated Output Power	1,5000W		1,6000W		18,000W	
Max. Peak Power	2 times rated power, 10s					
Max. Apparent Power	16,500VA		17,600VA		19,800VA	
Rated Output Voltage	120/240Vac (Split-phase) 120/208Vac (Single-phase)					
Rated Output Current	62.5A		66.7A		75A	
Rated Frequency	50/60Hz ±0.3Hz					
Waveform	Pure sine wave					
Battery						
Battery Type	Lead-acid battery / Lithium-ion battery / User-defined					
Rated Battery Voltage	48Vdc					
Battery Voltage Range	40Vdc~60Vdc					
Max. Grid/Generator Charging Current	320A _{dc}		340A _{dc}		380A _{dc}	
Max. Charging/Discharging Current	320A _{dc}		340A _{dc}		380A _{dc}	
PV Input						
No. of MPPT Trackers	3					
No. of Strings MPPT Tracker	2+2+2					
Max. PV Access Power	30,000W		32,000W		36,000W	
Max. PV Input Power	24,000W		25,600W		28,800W	
Max. PV Input Current	42A _{dc} + 42A _{dc} +42A _{dc}					
Max. short-circuit current	63A _{dc} + 63A _{dc} + 63A _{dc}					
PV Start-up Voltage	120Vdc					
Max. PV Open Circuit Voltage	600Vdc / 600Vdc / 600Vdc					
MPPT Operating Voltage Range	120Vdc~500Vdc / 120Vdc~500Vdc/ 120Vdc~500Vdc					
Grid/Generator Input						
Rated Input Voltage	120/240Vac (Split-phase) 120/208Vac (Single-phase)					
Input Voltage Range	85Vac~140Vac / 170Vac~280Vac					
Input Frequency Range	50/60Hz					
Bypass Overload Current	200A _{ac}					
Efficiency						
MPPT Tracking Efficiency	>99%	Max. Efficiency	97.6%	CEC Efficiency	97%	
General						
Parallel Capacity	1~9 Units					
Dimensions	480*860*313mm		Humidity Range		0~100%	
Weight	64.7kg		Cooling Method		Heat sink + intelligent air cooling	
Protection Level	IP65		Noise		<55dB	
Temperature	-40~60°C, >45°C Derating		Communication Port		RS485/CAN/USB/Dry Contact	
Warranty	5 years		External Module		Wi-Fi / GPRS (Optional)	
Protection						
PV Reverse Protection	Yes		Anti-Islanding Protection		Yes	
Residual-Current Monitoring	Yes		Insulation Resistance Monitoring		Yes	
Output Short-Circuit Protection	Yes		Output Over-Current Protection		Yes	
Over-Voltage Protection	AC type III/DC type II		Surge Protection		AC type II/DC type II	