

U1 SERIES SPLIT-PHASE HYBRID INVERTER

SS-H8.5K2L-U1 ~ SS-H12K2L-U1

8.5kW~12kW / BAT48V / 120Vac/240Vac



Reliable performance

- Both the battery side and the load side have super strong load capacity, smooth voltage and current waveforms, and can drive inductive loads such as air conditioning, supporting unlimited load
- Independent intelligent load/generator interface, compatible with existing PV system access, can operate without batteries (PV+grid combined power supply).
- Even without a battery, it can be bypassed for output, important loads will not be powered off; The grid connected electricity sales function significantly improves energy utilization efficiency.

Super Protection

- AICOT island protection, anti backflow (internal/external), PV reverse connection alarm, External CT reverse connection alarm and open circuit detection functions.

Economic benefits

- 2 MPPT channel, PV input can exceed 1.2-1.4 times the rated power, supporting simultaneous full power charging and load, maximizing economic benefits.
- Supports grid connected, off grid, and grid connected switching modes, with adaptive frequency and the ability to set charging and discharging strategies based on time of use electricity prices to achieve economical energy use.

Friendly Design

- High definition touch screen supports multiple languages; Removable dust cover suitable for harsh environments; Flexible setting of AC output voltage standards; Support battery activation function.

Parameters

MODEL	SS-H8.5K2L-U1	SS-H10.5K2L-U1/P	SS-H11.4K2L-U1/P	SS-H12K2L-U1
Battery Voltage	48Vdc			
Battery Type	Lead-acid, lithium batteries, gel batteries, etc			
Output				
Rated Output Power	8500W	10500W	11400W	12000W
Parallel Function	N/A	P: Yes, up to 10 units	P: Yes, up to 10 units	N/A
Rated Output Voltage	120/240Vac			
Rated Output Frequency	50/60Hz Intelligent adaptive/configurable			
Output Waveform	Pure sine wave			
Max Efficiency(Peak)	92%			
Rated Current	35.4A	43.7A	47.5A	50.0A
Transfer Time	10ms(Typical value)			
PV Input				
Max PV Power	20000W			
MPPT Voltage Range	90~500Vdc			
Max Input Voltage	500Vdc			
Max Charging Current	180A±5A	200A±5A	200A±5A	200A±5A
Number of MPPT / Strings per MPPT	2/1+1			
Mains/ Generator Input				
Max Charging Current	100A	120A	120A	120A
Nominal input voltage	120Vac~240Vac			
AC Input Voltage Range	90Vac (L~N) ~140Vac (L~N) ,180Vac (L~L) ~280Vac (L~L)			
Frequency Range	(47-55Hz) ±0.3 / (57-65Hz) ±0.3			
Battery Input				
Voltage Range	40~60Vdc			
Max Charging Current	180±5A	200±5A	200±5A	200±5A
Default Charging Current	60A			
General Parameters				
Dimension. W*D*H(mm)	465*140*620			
Installation Method	Wall-mounted			
Weight (kg)	26			
Communication Mode	RS485/CAN Optional WIFI/4G			
Protection function	Over/Under Voltage Protection, Over/Under Frequency Protection, AC Output Short Circuit Protection, AC Output Overload Protection, High/Low Temp Protection, PV Reverse Connection Alarm			
Operating Environment				
Operating Ambient Temperature	-25°C~60°C(> 45°C Derating)			
Storage Ambient Temperature	-20°C~60°C			
Humidity	5%~95% Non-condensation			
Altitude	4000m(> 2000m Derating)			
Installation Environment	For indoor use only			
Certifications				
Certification	FCC, UL			
Certifications standard	FCC 47 CFR Part 15, UL1741, TSCA, CA65			

Specifications are subject to change without advance notice.