

Single Phase Off-grid Hybrid Inverter

STH3-12KSO



Dual MPPT
High PV utilization



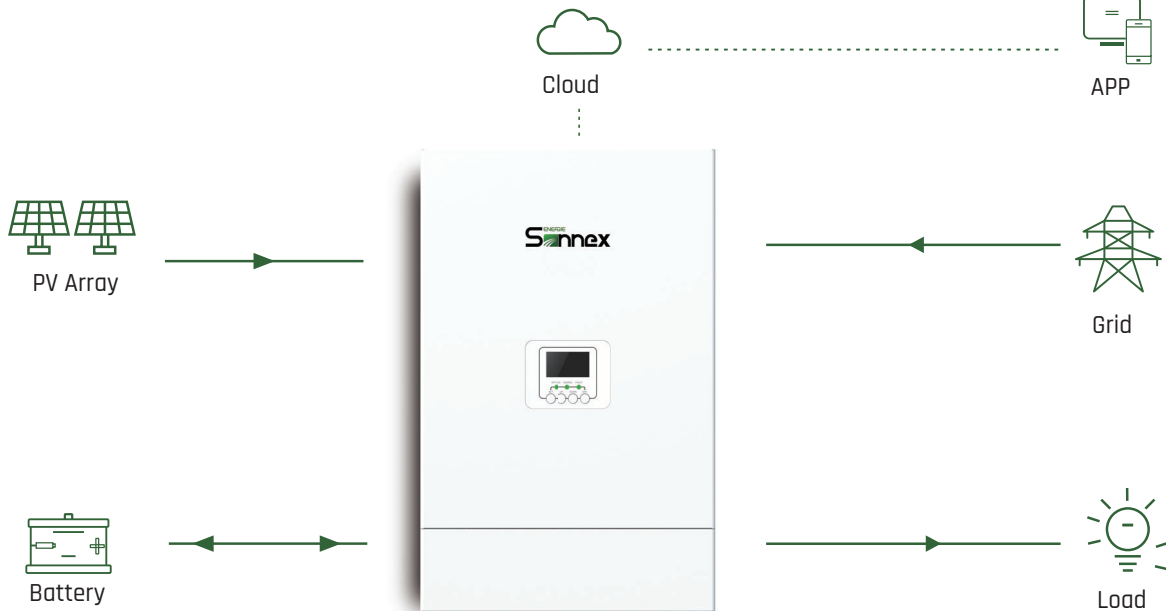
150% PV overmatching
Higher overall system performance



6 parallel capacity expansion
Better compatibility



Compatible with lithium/lead-acid
battery
More flexible configuration



Model	STH3KSO	STH4KSO	STH5KSO	STH6KSO	STH8KSO	STH10KSO	STH12KSO
Max. Output Power	3kVA	4kVA	5kVA	6kVA	8kVA	10kVA	12kVA
Nominal Output Voltage	220Vac						
Output Voltage Range	220Vac±10%						
Nominal Output Current	13.6A	18.2A	22.7A	27.2A	36.4A	45.4A	54.4A
Peak Power & Duration	4.5kVA(10s)	6kVA(10s)	8kVA(10s)	8kVA(10s)	12kVA(10s)	16kVA(10s)	16kVA(10s)
On-grid Parameter							
Max. AC Input Current	60A				100A		
Nominal AC Voltage	220Vac						
AC Voltage Range	176-264V						
Nominal AC Frequency	50/60Hz						
THDi	<3%						
Battery Parameter							
Battery Type	Lithium-ion / Lead-Acid						
Nominal Battery Voltage	48V/51.2V						
Battery Voltage Range	42-58V						
Max.Charging Voltage	58V						
Charging Curve	3 stages						
Max. Charging Current	60A	80A	100A		200A		
Max. Discharging Current	60A	80A	100A	120A	200A		
PV Input							
Max. DC Input Power	6600W	7000W	8000W	9000W	14000W	16000W	18000W
Start-up Voltage	120V						
Input Voltage Range	100-500V						
MPPT Voltage Range	100-500V						
Full Load MPPT Voltage Range	350-450V				320-500V		
Numbers of MPPT	2				4		
Max. Input String Per MPPT	1						
Nominal Input Voltage	360V						
Max. DC Input Current	13A/13A				14A/14A		
Max. Short-circuit Current	18A/18A						
Efficiency							
European Efficiency	97.2%		97.3%		97.2%		97.3%
Max.Efficiency	97.4%		97.5%		97.4%		97.5%
Max. Battery Charging/ Discharging Efficiency	94.00%						
General Data							
Size(W*H*D)	360mm*470mm*114mm				480mm*500mm*200mm		
Weight	14kg				28kg		
Noise	<45dB(A)				<45dB(A)		
Operating Temperature Range	-25°C-60°C (>45°C power-down)						
Cooling	Air cooling						
Parallel Units	6				1		
Warranty	5 years						
Protection Degree	IP20						
Monitoring	LCD/LED/APP/WIFI/Bluetooth						
Communication Port	CAN+RS485						
Protection	Reverse Polarity Protection; Over Current/Voltage Protection; AC Short-circuit Protection; PV Ground Fault Monitoring; Over Temperature Protection						
CE_LVD	EN62109-2:2011 EN62109-1:2010						
CE EMC	EN61000-6-1, EN61000-6-2						