

**Sunfine Solar Technology Co., Ltd.**

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**SMS series Single phase Grid tie and Off grid solar inverter****Overview**

Our Sunfine SMS inverter is an innovative product for both Grid tie and off-Grid solar power systems. It automatically switches between Grid tied or stand alone mode (Grid tied mode is always preferred)

**Grid tied Mode:**

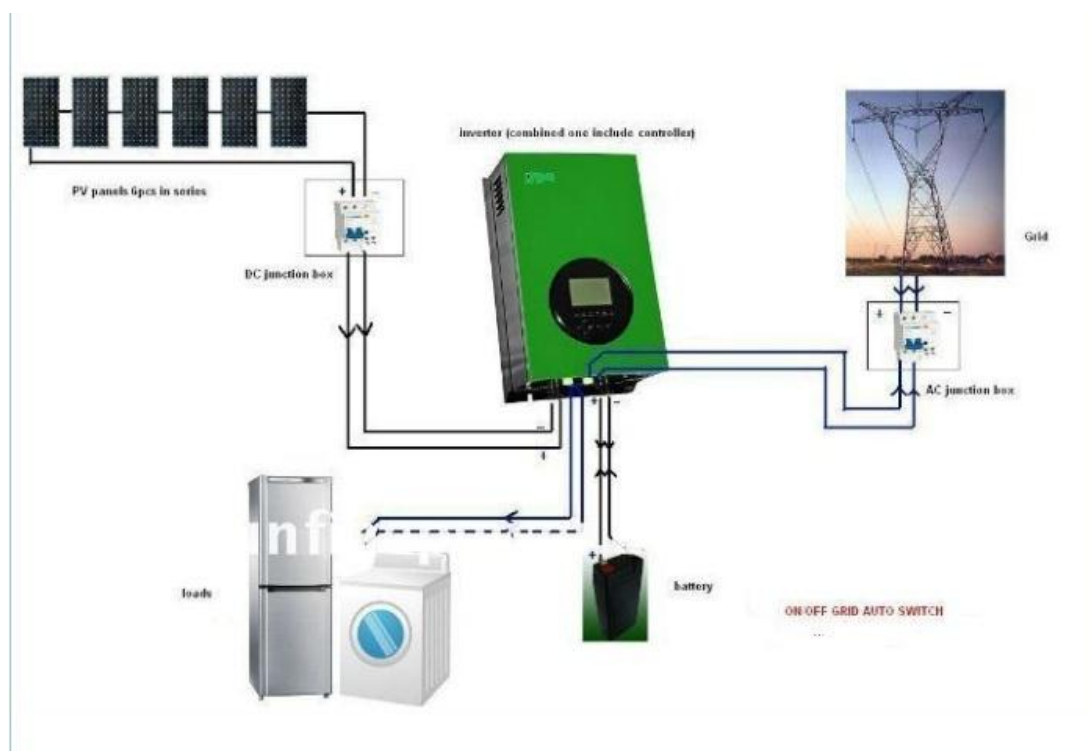
When the Grid and PV panels are performing well, your SMS inverter will first feed power to your loads and at the same time charge your battery bank – excess power is fed into the Grid.

If the Grid fails or is down for maintenance, your SMS inverter will automatically switch to stand-alone mode.

**In off Grid mode:**

PV power is preferred.

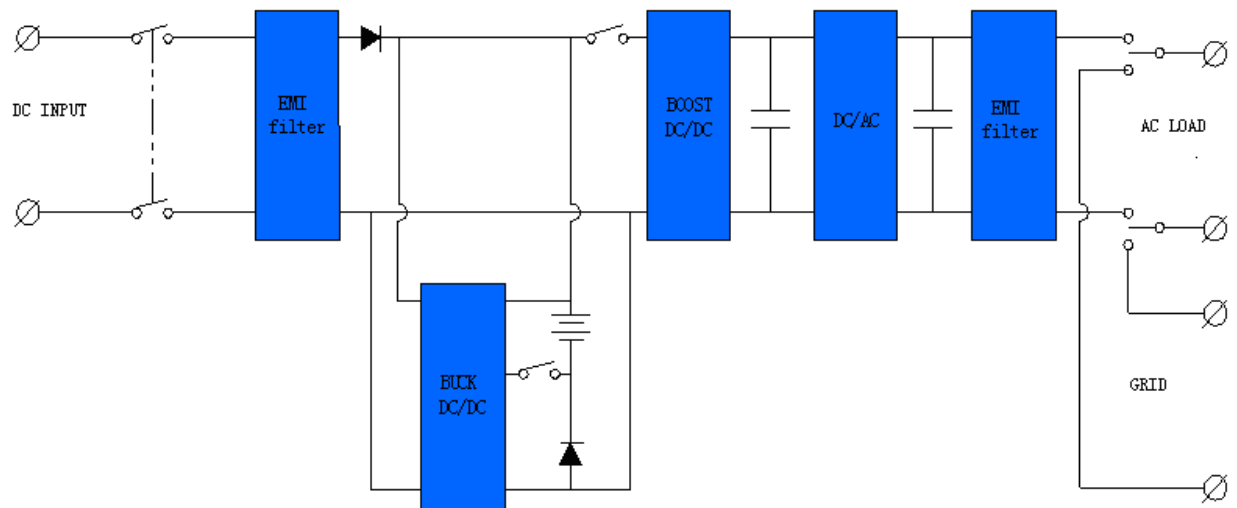
Should solar power from your Panels not be enough to power loads, your SMS inverter will automatically start drawing power from your battery bank to make up the shortfall. At night, when you have no power generated from your panels, the inverter automatically lets your batteries take over as power source.



## Features

Max. efficiency 97.0%  
MPPT Max. efficiency 99.0%  
Power factor 0.9999  
Active frequency offset Anti-islanding  
Large screen multi-language- LCD display  
Stacked available  
Less standby power consumption  
Multi-protection for maximum safety  
Statistics for power production and CO<sub>2</sub>  
8K\*4 RUN LOG cycle index  
RS485/232 compatible  
Soft or variable frequency start options  
Battery manage option  
Various panel types matched  
Various battery types matched

## Diagram



## Technical parameters

AC side	SMS-1K/1S	SMS-1K5/1S	SMS-2K/1S	SMS-2K5/1S	SMS-3K/1S	SMS-4K/1S	SMS-4.8K/1S
Continuous output power at 40°C (P nom)							
	1000W	1500W	2000W	2500W	3000W	4000W	4800W
AC output current	5.45A	8.18A	10.91A	13.64A	16.36A	21.82A	26.18A
AC output voltage (nominal)	220V AC+20%, 50/60Hz±1Hz, true sine wave<3% THD, single phase						
AC output range	176-264V AC (limited by local anti-islanding regulations)						
Standby losses	≤15W						
User interface	interactive LCD display with button operation						
Connectivity	Wireless RS232/458, TCP/IP						
Backup switch over time	<5 ms						
DC side							
Max. input	6.6A	10A	13.3A	16.7A	20A	24.6A	32A
No. of strings	unlimited						
No. of MPPT trackers	1						
Solar Voltage	180-360V DC						
MPPT voltage	180-360V DC						
Solar Connections	MC4						
Max. Efficiency	97.00%						
Max. MPP Efficiency	99.00%						
Power factor	>0.99 (Rated power)						
Battery							
Charge voltage (V DC)	168	144	144	144	144	168	192
Battery voltage output (Vout)	12V DC a pack						
No. of battery	14	12	12	12	12	14	16
Battery types	Gel, AGM, LiFePO4						
Battery capacity	85-200Ah recommended						
Charge curve	CC, CV, FC, 3-stage adaptive with maintenance						
Battery patrol management	for option						
Battery self-checking	for option						
Environmental							
Operating Temperature Range (full power)	-10°C to +50°C (derating from 40°C)						
Storage Temperature	-40°C to +70°C						
Humidity	maximum 90%, non-condensing						
Warranty	five years						
General							
Dimensions (WxHxD) (mm)	454*270*182	466*270*181	466*270*181	466*270*181	466*270*181	538*310*181	538*310*181
Protection Category	IP65						
Weight (kg)	20	21	21.5	22	22.5	26.5	29
Protection	over/under voltage, over/under frequency, anti-islanding, AC short circuit, Ground fault monitoring, DC reverse polarity, over load						
Topology	HF-CHAIN						
Cooling	Nature Cooling			Fan Cooling			