

## SP Vitality

### Features

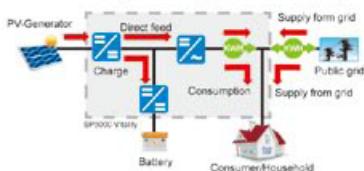
- On-Grid inverter with energy storage
- 6KW Maximum PV input
- PV direct-supply Function
- Pure sine wave output
- Microprocessor Controlled to Guarantee Stable Charging System
- Maximum Efficiency Up to 96.5%
- Built-In Dual MPPT Solar Chargers (SP5000 Vitality only)
- Maximum Charging 100A
- LCD Display Panel For Comprehensive Information
- Generator Compatible
- Surge Protection
- Six inverters in parallel (SP5000 Vitality only)

### Operation Diagram:

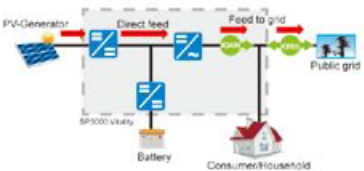
#### Enough PV Energy Input



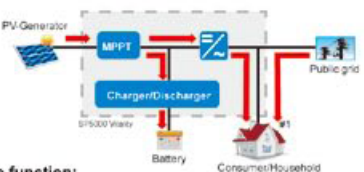
#### Household's consumption is higher than supply from PV



#### No consumption from household and the battery is fully charged



#### Inverter will detect the load consumption



#### Self-use function:

Inverter will detect the load consumption. To supply the load, it will take power from Solar and take power from public grid simultaneously. (#1: Public grid will be accepted to the load if Solar is insufficient)



### Application diagram



### Specifications

MODEL	SP5000 Vitality-S	SP5000 Vitality
Rated Power	5000W	
<b>INPUT</b>		
Rated Voltage	230 VAC	
Voltage Range	190-300 VAC	
Frequency Range	50 Hz/60 Hz (Auto sensing)	
<b>OUTPUT</b>		
AC Voltage Regulation (Batt. Mode)	230VAC ± 5%	
Overload Capacity	60 seconds for 100% ≤ load ≤ 110% 30 seconds for 110% < load ≤ 150% 10 seconds for 150% < load ≤ 200%	
Peak Efficiency	96.5%	
Transfer Time	20ms	
Waveform	Pure sine wave	
<b>BATTERY</b>		
Battery Voltage	48 VDC	
Voltage Range	40VDC~56VDC	
Low Battery Alarm Voltage	42 VDC	
Maximum discharge Current	150A	
Maximum Utility Charging Current	30A	50 A
<b>SOLAR CHARGER</b>		
Maximum PV Rated Power	5000W	6000W
Maximum PV Array Open Circuit Voltage	500VDC	
MPPT Operation Voltage Range	150~450VDC	
Start-up Voltage	150VDC	
Maximum input Current	20A×1	10A× 2
Maximum Charging Current	60A	100A
Standby Power Consumption	60W	
<b>JOINT UTILITY AND SOLAR CHARGING</b>		
Maximum Charging Current	60A	100A
<b>PHYSICAL</b>		
Dimension (D×W×H)	580×408×168mm	
Net Weight	24kgs	24.2kgs
<b>OPERATING ENVIRONMENT</b>		
Humidity	0% to 95%(Non-condensing)	
Operating Temperature	0°C - 40°C	
Storage Temperature	-20°C - 40°C	

Specifications are subject to change without notice.