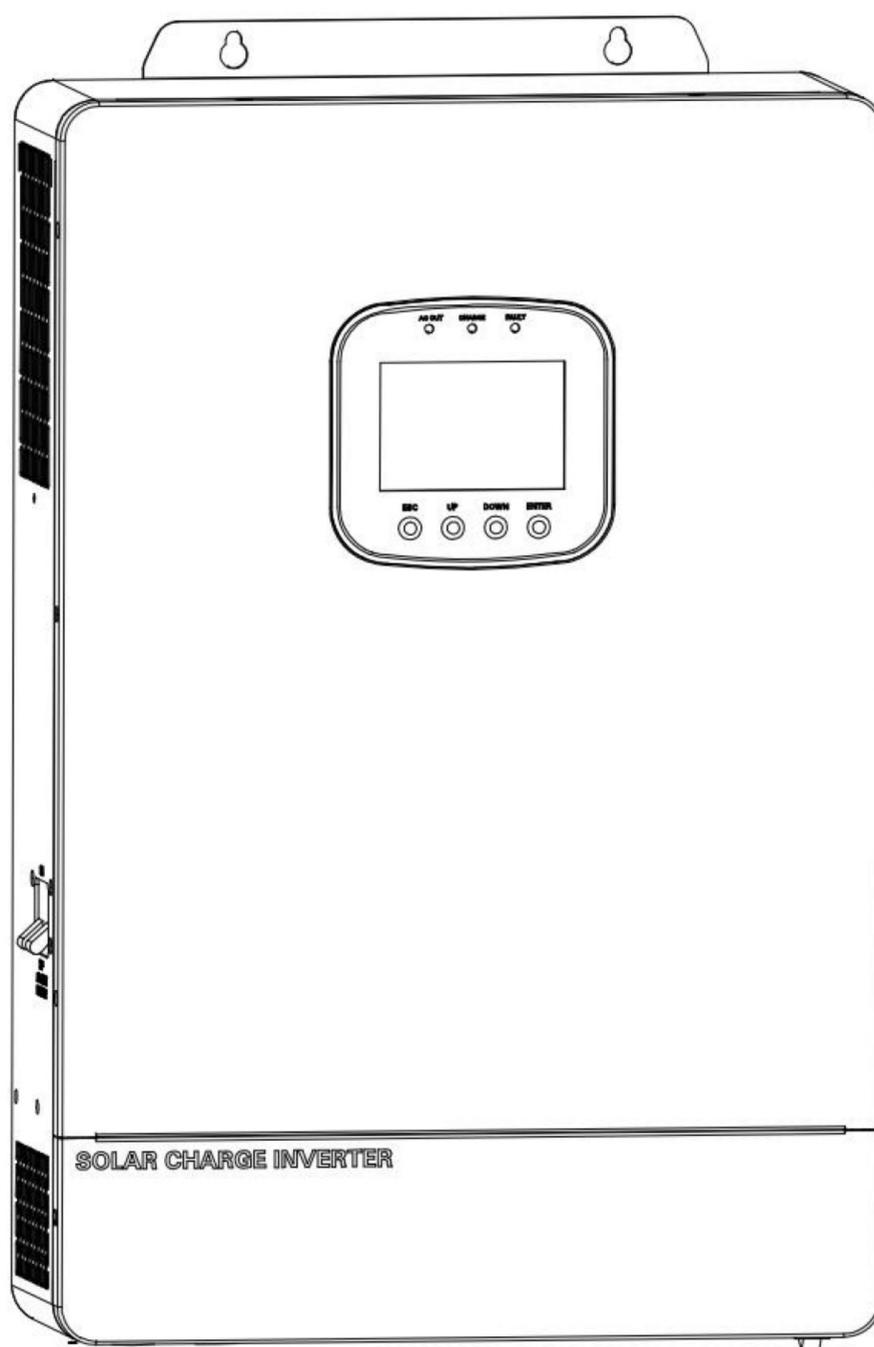


# All-in-one Solar Charge Inverter

## Product Manual



**SPI4856V100-500**

**SPI4862V100-500**

**SPI4880V150-500**

**SPI48110V150-500**

**SPI48120V150-500**

**SPI4856V100-500P**

**SPI4862V100-500P**

**SPI4880V150-500P**

**SPI48110V150-500P**

**SPI48120V150-500P**

# 11. Technical parameters

Models	SPI4856V100-500/ SPI4856V100-500P	SPI4862V100-500/ SPI4862V100-500P
<b>Parallel mode</b>		
Permitted parallel number	NO/1~6	
<b>AC mode</b>		
Rated input voltage	220/230Vac	
Input voltage range	(170Vac~280Vac)±2%@UPS (90Vac-280Vac)±2%@APL	
Frequency	50Hz/60Hz (Auto detection)	
Frequency Range	47±0.3Hz~55±0.3Hz (50Hz); 57±0.3Hz~65±0.3Hz (60Hz);	
Overload/short circuit protection	Circuit breaker	
Efficiency	>95%	
Conversion time (bypass and inverter)	10ms (typical)	
AC reverse protection	Yes	
Maximum bypass overload current	40A	
<b>Inverter mode</b>		
Output voltage waveform	Pure sine wave	
Rated output power (VA)	5600	6200
Rated output power (W)	5600	6200
Power factor	1	
Rated output voltage (Vac)	230Vac	
Output voltage error	±5%	
Output frequency range (Hz)	50Hz±0.3Hz/60Hz±0.3Hz	
Maximum Efficiency	>92%	
Overload protection	(102% < load <125%) ±10%: report error and turn off the output after 5 minutes; (125% < load < 150%) ± 10%: report error and turn off the output after 10 seconds; Load >150% ±10%: report error and turn off the output after 5 seconds;	
Peak power	11000VA	12000VA

Loaded motor capability	3HP	4HP
Output short circuit protection	Circuit breaker	
Bypass circuit breaker specification	40A	
Rated battery input voltage	48V (Minimum starting voltage 44V)	
Battery voltage range	40.0Vdc~60Vdc±0.6Vdc (Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen)	
Power saving mode self-consumption	Load≤25W	
<b>AC charging</b>		
Battery type	Lead acid or lithium battery	
Maximum charge current(can be set)	80A	
Charge current error	±5A <sub>dc</sub>	
Charge voltage range	40 –60V <sub>dc</sub>	
Short circuit protection	Circuit breaker and blown fuse	
Circuit breaker specifications	40A	
<b>PV charging</b>		
Maximum PV open circuit voltage	500V <sub>dc</sub>	
PV operating voltage range	120-500V <sub>dc</sub>	
MPPT voltage range	90-450V <sub>dc</sub>	
Battery voltage range	40-60V <sub>dc</sub>	
Maximum PV input power	6000W	
Maximum PV input current	22A	
PV charging current range (can be set)	0-100A	
Charging short circuit protection	Blown fuse	
Wiring protection	Reverse polarity protection	
<b>Hybrid charging Max charger current specifications (AC charger+PV charger)</b>		

Max charger current(can be set)	0-100A
<b>Certified specifications</b>	
Certification	CE(IEC62109-1,2)
EMC certification level	EN61000, C2
Operating temperature range	-15°C to 55°C
Storage temperature range	-25°C ~ 60°C
Humidity range	5% to 95% (Conformal coating protection)
Noise	≤60dB
Heat dissipation	Forced air cooling, variable speed of fan
Communication interface	USB/RS485(/WiFi/GPRS)/ Dry node control
Size (L*W*D)	415mm*280mm*100mm
Weight (kg)	7.8

<b>Models</b>	<b>SPI4880V150-500/ SPI4880V150-500P</b>	<b>SPI48110V150-500/ SPI48110V150-500P</b>	<b>SPI48120V150-500/ SPI48120V150-500P</b>
<b>Parallel mode</b>			
Permitted parallel number	NO/ 1~6	NO/ 1~6	NO/ 1~6
<b>AC mode</b>			
Rated input voltage	230Vac±5%		
Input voltage range	(170Vac~280Vac)±2% (90Vac-280Vac)±2%		
Frequency	50Hz/60Hz (Auto detection)		
Frequency Range	47±0.3Hz~55±0.3Hz (50Hz); 57±0.3Hz~65±0.3Hz (60Hz);		
Overload/short circuit protection	Circuit breaker		
Efficiency	>95%		
Conversion time (bypass and inverter)	10ms (typical)		
AC reverse protection	Yes		
Maximum bypass overload current	60A		
<b>Inverter mode</b>			

Output voltage waveform	Pure sine wave		
Rated output power (VA)	8000	11000	12000
Rated output power (W)	8000	11000	12000
Power factor	1		
Rated output voltage (Vac)	230Vac		
Output voltage error	±5%		
Output frequency range (Hz)	50Hz±0.3Hz/60Hz±0.3Hz		
Maximum Efficiency	>93%		
Overload protection	(102% < load < 125%) ±10%: report error and turn off the output after 5 minutes; (125% < load < 150%) ± 10%: report error and turn off the output after 10 seconds; Load > 150% ±10%: report error and turn off the output after 5 seconds;		
Peak power	16000VA	22000VA	24000VA
Loaded motor capability	5HP	7HP	8HP
Output short circuit protection	Circuit breaker		
Bypass circuit breaker specification	63A		
Rated battery input voltage	48V (Minimum starting voltage 44V)		
Battery voltage range	40.0Vdc~60Vdc±0.6Vdc (Undervoltage alarm/shutdown voltage/overvoltage alarm /overvoltage recovery... settable on LCD screen)		
Power saving mode self-consumption	Load≤50W		
<b>AC charging</b>			
Battery type	Lead acid or lithium battery		
Maximum charge current(can be set)	120A	150A	150A
Charge current error	±5A <sub>dc</sub>		
Charge voltage range	40 – 60V <sub>dc</sub>		
Short circuit protection	Circuit breaker and blown fuse		
Circuit breaker specifications	63A		

<b>PV charging</b>		
MPPT way	2	
Maximum PV open circuit voltage	500Vdc	
PV operating voltage range	120-500Vdc	
MPPT voltage range	90-450Vdc	
Battery voltage range	40-60Vdc	
Maximum PV input power	5500W+5500W	6000W+6000W
Maximum PV input current	22A+22A	
PV charging current range (can be set)	0-150A	
Charging short circuit protection	Blown fuse	
Wiring protection	Reverse polarity protection	
<b>Hybrid charging Max charger current specifications (AC charger+PV charger)</b>		
Max charger current(can be set)	0-150A	
<b>Certified specifications</b>		
Certification	CE(IEC62109-1,2)	
EMC certification level	EN61000, C2	
Operating temperature range	-10°C to 55°C, > 45°C drop runs	
Storage temperature range	-25°C ~ 55°C	
Humidity range	5% to 95% (Conformal coating protection)	
Noise	≤60dB	
Heat dissipation	Forced air cooling, variable speed of fan	
Communication interface	USB/RS485(/WiFi/GPRS)/ Dry node control	
Size (L*W*D)	540mm*350mm*120mm	
Weight (kg)	19.5	