

SMI Series 4 in 1 Solar Inverter with Hybrid Charger



•Main Features

- + Powerful hybrid charger: solar charger 20A max + mains charger 5A max.
- + Built-in solar charger with MPPT technology.
- + Automatic switching between solar charger and mains charger, solar charger priority.
- + AVR (automatic voltage regulation) function at line mode.
- + Complete protection functions: over charge, over discharge, overload, overheat, etc.
- + 2 x USB port for charging mobile phones.
- + Optional 12VDC output port, for DC loads like DC lighting bulbs, DC fans.

•Typical Applications

- + Desktop fan, Floor standing fan, ceiling fan.
- + Lighting tube, energy saving lamp.
- + TV, DVD, DVB Receiver.

● Specification

SOLAR CHARGER

MPPT Range	18-50VDC
Battery Voltage	12VDC
Charging Scheme	3 stage smart charging
Charging Current	20A max

MAINS CHARGER

Battery Voltage	12VDC
Charging Scheme	3 stage smart charging
Charging Current	5A max

AVR (LINE MODE)

Input Voltage	220VAC +14%, -32% (150-250VAC)
Input Frequency	50/60Hz ± 5Hz
Output Voltage	220VAC ± 14% (190-250VAC)
Output Frequency	synchronized with input frequency

INVERTER(BATTERY MODE)

Input Voltage	10.5-13.8VDC
Output Voltage	220V ± 7% (205-235V)
Output Frequency	50/60Hz
Output Waveform	modified sine wave

INDICATORS & DISPLAY

LED	PV on, mains on, charging, inverter on, protecting(output cutoff)
Digital Display	output voltage, battery voltage

PROTECTION & ALARM

Protection	overload, overheat, short circuit, battery over charge, battery over discharge, battery reverse connection
Buzzer Alarm	switching between line mode and battery mode, overload, short circuit, battery low voltage, battery empty, other errors

OTHERS

USB Charging Port	5VDC, 750mA max
DC Output Port (Optional)	12VDC, 5A max
Cooling Fan	automatic startup when temperature >60°C
Charger Selection Mode	automatic switching between solar charger and mains charger
Audible Noise	<56dB at 1m distance

OPERATING CONDITIONS

Operating Temperature	-5°C - +40°C
Operating Humidity	10%-90%, non-condensing
Operating Altitude	<1,000m

MODEL AVAILABLE

Model No.	SMI-150	SMI-300	SMI-500
Rated Capacity	250VA/150W	500VA/300W	800VA/500W
Battery Voltage	12VDC		
Machine Size	W233 x H132 x D250 mm		

●Recommended Home Appliances

Model No.	Capacity	Recommended Home Appliances
SMI-150	150W	Option A: 1 x TV (100W), 1x DVB Receiver or DVD (20W), 2 x Energy Saver (9W) or 1x Light Tube (20W)
		Option B: 1 x TV (100W), 4 x Energy Saver (9W) or 2x Light Tube (20W)
		Option C: 2 x Fan (60W), 2 x Energy Saver (9W) or 1x Light Tube (20W)
		Option D: 1 x Fan (100W), 4 x Energy Saver (9W) or 2x Light Tube (20W)
SMI-300	300W	Option E: 1 x TV (100W), 1x DVB Receiver or DVD (20W), 2 x Fan (60W), 4 x Energy Saver (9W) or 2x Light Tube (20W)
		Option F: 1 x TV (100W), 1x DVB Receiver or DVD (20W), 2 x Fan (60W), 4 x Energy Saver (9W) or 2x Light Tube (20W)
SMI-500	500W	Option G: 1 x TV (120W), 1x DVB Receiver or DVD (20W), 4 x Fan (60W), 8 x Energy Saver (9W) or 4 x Light Tube (20W)
		Option H: 1 x TV (120W), 1x DVB Receiver or DVD (20W), 2 x Fan (100W), 10 x Energy Saver (9W) or 5 x Light Tube (20W)

●Options of Battery and Solar Panel

Model No.	Capacity	Battery Capacity	Backup Time	Min. Solar Panel
SMI-150	150W	12V / 50AH	2.4HR	150W
		12V / 75AH	3.6HR	180W
		12V / 100AH	4.9HR	220W
SMI-300	300W	12V / 50AH	1.2HR	150W
		12V / 75AH	1.8HR	180W
		12V / 100AH	2.4HR	220W
		12V / 150AH	3.6HR	280W
		12V / 200AH	4.9HR	300W
SMI-500	500W	12V / 50AH	0.7HR	150W
		12V / 75AH	1.1HR	180W
		12V / 100AH	1.4HR	220W
		12V / 150AH	2.2HR	280W
		12V / 200AH	2.9HR	300W