

# EPMSSL series Pure Sine Wave Inverter with Solar Charge Controller and AC Charger

The EPMSSL series Pure sine wave Inverter with Solar Charger Controller and AC Charger which can connect to Solar system direct comes with ATS, Battery Charger and Solar Charge Controller

## Features

- Multi-functional Feature
- Uninterrupted AC Power
- Battery Voltage Sense
- 2 outputs to charge 2 battery banks
- Temperature compensation: To increase battery life
- The right amount of charge: Variable Absorption Time
- Power Assist - Boosting the capacity of shore or generator power
- Adaptive 4-stage charge characteristic: Bulk-Absorption-Float-Equalize
- Battery Safe mode: Prevent battery damage due to excessive gassing
- Equalising mode: Less maintenance and aging when the battery is not in use
- Power Control - Dealing with limited generator, shore side power or grid power



## Technical Specification

EPMSSL MODEL NO.		3000-12	3000-24	3000-48	1500-12	1500-24	1500-48
<b>GENERAL</b>							
Ventilation		Forced cooling					
Temperature	Operation	-20°C ~ +70°C					
	Storage	-25°C ~ +80°C					
<b>Protection</b>							
	a. Output short circuit	✓					
	b. Over load	✓					
	c. Battery voltage too high	✓					
	d. Battery voltage too low	✓					
	e. DC voltage ripple too high	✓					
	f. Temperature Sensor	✓					
	g. Transformer	✓(105°C)					
	h. Electronic & Powerstage	✓(70°C)					
	i. BTS-3	✓(50°C)					
Humidity		0~95% (non condensing)					
Power control Function		✓					
Power assist Function		✓					
Uninterrupted AC power		✓ (less than 10 msec)					
Adaptive 4-stage charge		✓					
Two output to charge 2 battery banks		✓					
Auxiliary Relay		X 3					
Battery voltage sensor		✓					
Battery Temperature sensor (BTS-3)		✓					
Remote control port		✓					

## Technical Specification

EPMSL MODEL NO.	3000-12	3000-24	3000-48	1500-12	1500-24	1500-48
<b>INVERTER</b>						
Input Voltage Range (VDC)	9.5~16V / 19~32V / 38~64V					
Output Voltage (VAC)	90~120 VAC / 185~240 VAC					
Output Frequency	50Hz / 60Hz $\pm$ 0.1%					
Output Waveform	Pure sinewave					
Output Voltage THD	< 5%					
Power Factor (All Loads)	V					
No linger load, crest factor	3:1					
Cont. Power Output (W)	3000W			1500W		
Under 70°C (cos $\theta$ =1.0)	(No derate)					
Cont. Power Output (W)	0W					
Over 70°C (cos $\theta$ =1.0)	(Shutdown)					
Maximum Power (W)	6000W			6000W		
Maximum Efficiency (%)	89	86	84	85	84	82
Zero-load Power (W)	18W			12W		
<b>CHARGER</b>						
Input Voltage Range (VAC)	100~125 VAC / 200~250 VAC					
Input Frequency	45~55Hz / 55~65 Hz					
Power Factor	1					
Charge Characteristic	4-stage adaptive / Bulk-Absorption-Float-Equalize					
Maximum DC Voltage Ripple (Vrms)	< 1.25 V					
Charge Current House Battery (A)	140	70	40	70	40	20
Charge Current Starter Battery (A)	4A					
Absorption Voltage Default (VDC)	14.4V / 28.8V / 57.6V					
Float voltage Default (VDC)	13.8V / 27.6V / 55.2V					
Equalize Voltage default (VDC)	13.2V / 26.4V / 52.8V					
Output Charge Voltage (min ~ max)	8V~16V / 11V~32V / 22V~64V					
Battery Temperature sensor	BTS-3					
<b>AC INPUT SWITCH</b>						
AC IN Terminal Circuit Breaker	60A (110V) / 30A (220V)			30A (110V) / 15A (220V)		
Switch-over Time						
a. inverter to AC input	0 msec.					
b. AC input to inverter	0 msec.					
Detection Time AC Input Fault	4 ~ 10 msec.					
Trip Level AC Input to Inverter	90 VAC / 180 VAC					
Trip Level Inverter to AC Input	94 VAC / 187 VAC					
Min.~ Max. Frequency Range	45~55 Hz / 55~65 Hz					
<b>SOLAR CHARGE CONTROLLER</b>						
Maximum Charge Current	40A					
<b>MECHANICAL</b>						
Cabinet / Protecting Class	Aluminum / IP20 ( Other Enclosure type of EN60529 IP rating can be optionally customised					
Dimension (H X W X D)mm	Wall-mount: 355 x 256 x 368			Wall-moun: 298 x 256 x 368		
	Desktop: 189 x 285 x 708			Desktop: 189 x 285 x 494		
Weight (kgs)	35 kgs			30 kgs		