

ECO Series Characteristics









On Inverter

- · High overload ability
- Low quiescent current

On Battery Charger

- 3-step intelligent battery charging
- Uses PFC (power factor correction) for charger

On Transfer

- 10ms typical transfer time
- 5 to 20 s delay before transfer when AC resumes

Optional

• Battery Temperature Sensor















ECO Series Modified Sine Wave Inverter/Charger

- Modified Sine Wave (3 Step Wave)
- Digital microprocessor control
- Rapid and synchronous transfer, compatible with computers
- Surge supressor
- Protection against extreme battery discharge
- Electronic protection against overloads and short circuits
- Batteries overload protection due to charger failure
- Three steps battery charger, adjustable voltage and current.
- Selectable Low AC voltage input 80-95VAC.
- Models from 1.5KW to 3.5KW
- Input voltage protector Mode when BYPASS position.
- FULL BRIDGE topology
- Sustainable nominal power in continuos way
- High overload capacity
- Automatic cooling fan with thermal sensor
- Modular construction
- Created design for latinamerican electric
- Breaker protection for load and for charger
- On the front panel, there are 4 DIP switches which enable users to customize the performance of the device.

SW1 OFF, SW2 OFF: Charging current is 0% SW1 OFF, SW2 ON: Charging current is 25% SW1 ON, SW2 OFF: Charging current is 50% Sw1 ON, SW2 ON: Charging current is 100%

Switcl	n NO	Switch Function	Position:OFF	Position: ON
SV	٧3	AC Input Range	80-135VAC	90-135VAC
SV	V4	Battery float selector	Flooded 13.8V	AGM 13.2V

Applications













Marine Heavy duty Work Bu trucks vehicles co-

vehicles

Model	ECO-1512	ECO-2524	ECO-3524				
Inverter Mode Specification							
Capacity (W)	1500	2500	3500				
Waveform	Modified sinewave						
Output voltage	120Vac ~+3%						
Output frequency	60Hz ± 1Hz						
Overload capacity	Overload > 103%, Output down voltage when loaded after buck: 105% < load < 125%, delay 30S protection, 130% LOAD 200ms Shut down. The fault light is on.						
Output short circuit protection	Shut down output after 200 ms						
Battery voltage	12V 24V		1V				
Voltage range	12V(10.5Vdc ~15Vdc) ±0.3Vdc /24		4V*2				
Battery overvoltage	12V(Battery voltage > 16V ± 0.3Vdc overvoltage alarm						
protection	$>16.5V \pm 0.3Vdc$ change to error); 24V*2						
DC low voltage alarm	12V(10.5 ±0.3Vdc) / 24V*2						
DC shutdown voltage	12V(10.0 ±0.3Vdc) / 24V*2						
Transfer time (AC to	Max. 10ms						
Battery mode)	Max. Turns						
Transfer time (Battery to	Max. 10ms						
AC mode)							
Transfer time (AC low/high		Max. 6ms					
voltage to battery mode	IVIUX. OTTS						
AC Mode Specificatio	AC Mode Specification						
Input voltage	120Vac / 60Hz						
Output voltage	Same as Input						
Input voltage range	80□135V (For Home Appliances) 95~135V (For Personal Computers)						
Frequency range	43~64HZ (±1HZ)						
Recover to AC	85V(For Home Appliances)						
mode from low voltage	100V(For Personal Computers)						
Change to battery mode	135Vac±3V 132Vac±3V Recover breaker						
while input high voltage							
Recover to AC mode from high voltage							
Output short circuit							
protection							
Efficiency (AC Mode)	>95%						
DC-AC Transfer delay time	10 seconds						
Charging Current Specification							
3 - stage charging		turrent, Constant voltage, Flo	oat charge)				
Charging current (±5A)	50	50	60				
(Charging current	30						
adjustment)		0%,25%,50%,100%					
OTHER							
Fan control							
Over temperature protection	perature protection Temperature switch protection 95°C						
Noise	≤40Db						
Humidity	0%~95%						
Operating temperature	0°C∼+40°C						
Weight(kg)	16	18	22				
Dimension LxHxD (cm)	47x2	3x18	56x23x18				



Diagram

