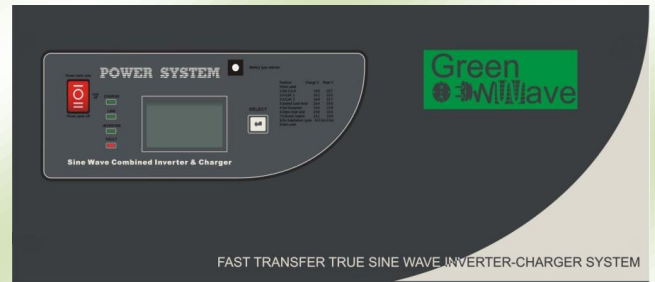


## Greenwave Alternative Power Source

### GW IR3000-48



#### Main Features:

- 48V DC or 220V AC input, 220V AC / 50Hz output with 3000W output power
- Pure sine wave output using IGBT
- Fast auto transfer from line to batteries with approx no effect to connected loads.
- Transformer based structure for strong structure suitable for different types of house loads
- Microprocessor & DSP control insure advance performance
- Protection for overload, over voltage, under voltage, over heat
- LCD to show all operational information including battery charge status and load level and mode of operation
- Simple ON / OFF push buttons
- High power progressive 4 stage charger (1200W), with constant current, constant voltage / absorb (according to connected battery technology) then float; with intelligent battery management to suit all types of batteries and to protect the batteries from over charge and over discharge.

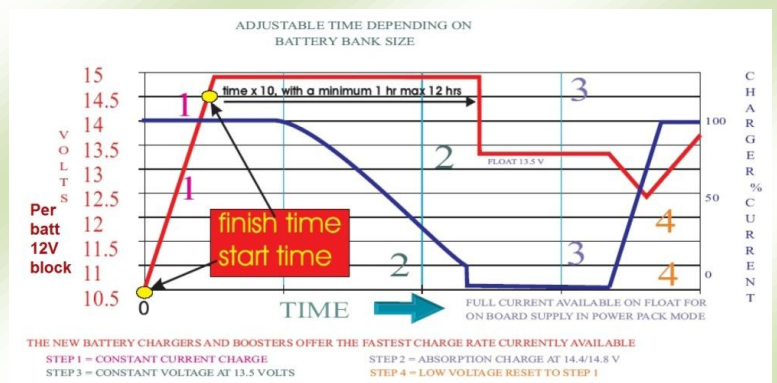
#### Applications:

Multi function inverter-charger system with auto-transfer switching works as an alternative power source for extended run time when no other source of power is available. Also works as automotive inverter for vans trucks, marine. Perfect choice for home UPS to feed home appliances with no interruption and compatible to work with all office equipment.

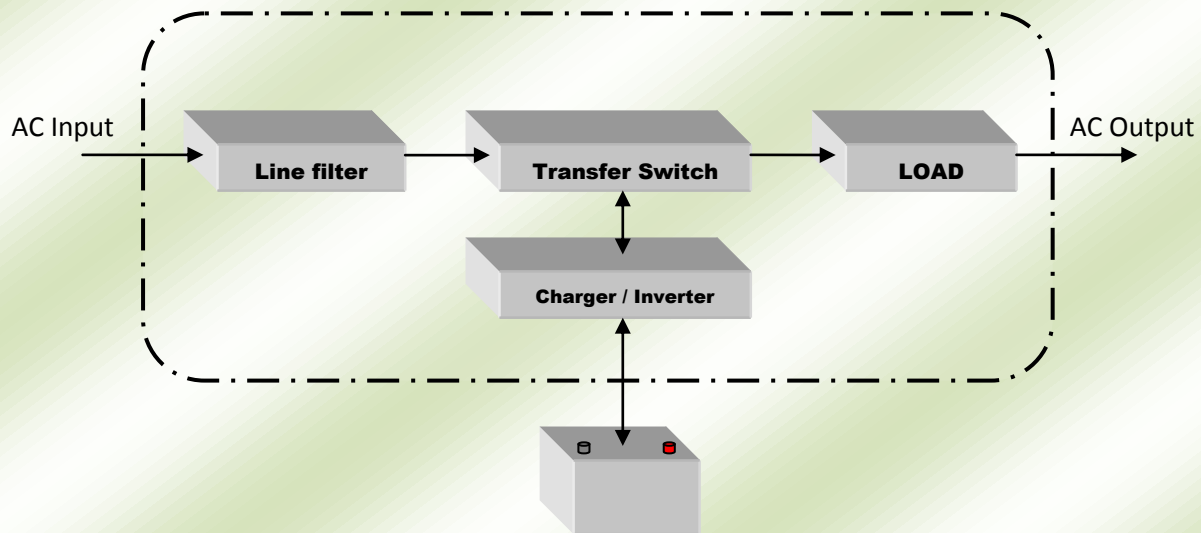
#### Charger technology:

The unique 4 stage charger technology enables to charge the batteries in a very fast, efficient, yet safe to the connected batteries, thanks to the special algorithm in calculating the connected batteries capacity and adjustment of the absorb cycle time accordingly.

Also De-sulphation cycle can be used to revive the wet batteries and regain capacity and extend the batteries service life, when batteries show low backup time performance.



### Working principal:



### Specs & product technical details

<b>Input</b>	
Voltage range	154 to 253V $\pm 4\%$
Frequency	47 Hz to 55Hz
<b>Charger</b>	
Voltage	48V DC (4 blocks of 12V batteries in series)
Current	Up to 25A
Charge method	CPU controlled fast smart charge
Extended back up time:	Back up time depend on capacity of user supplied batteries.
Recommended battery capacity	Up to 500Ah /48V
<b>Output:</b>	
Power:	3000W
Nominal Voltage:	230 V AC (RMS) $\pm 10\%$
Frequency	50Hz $\pm 0.5$
Wave form:	Pure Sine Wave
Transfer time*:	8ms (Typical)
Overload capability*:	Up to 124% for 15min then APS shutdown For loads 125% and <150% for 60sec then APS shutdown For loads > 150% APS for 20sec immediate shutdown 300% during 5sec to cover loads startups APS restart if load returned to < nominal
Protection:	Overload protection (electronic and via resettable 30A CB), short circuit protection, charger protection CB, Battery over-charge and discharge protection, automatic self test

<b>Interface:</b>	LCD display on the front panel to show all operational and unit measurements. Additional 4 LEDs showing: <ul style="list-style-type: none"> <li>- One LED to show inverter operation.</li> <li>- One LED to show mains power presence</li> <li>- One LED to show charger function</li> <li>- One LED to show APS fault alarm (RED)</li> </ul>
<b>Operation buttons:</b>	3 positions main operation switch: <ul style="list-style-type: none"> <li>- Power saver auto (power on with load &gt;25W)</li> <li>- Unit off</li> <li>- Power on without power saver function.</li> </ul>
<b>Connections:</b>	Battery connection cables (included) for battery stud terminal, Junction box for the AC input and output.
<b>Inverter efficiency:</b>	90%
<b>Working conditions:</b>	
Ambient Temperature	Recommended: 20 to 25°C Acceptable: 0 to 40°C
Humidity:	Up to 90% (none condensing)
<b>Cooling:</b>	Forced air cooling through temp controlled variable speed fan
<b>Audible noise:</b>	60dbA max
<b>EMC classification:</b>	EN62040-2, C2
<b>Safety certification:</b>	EN62040-1
<b>Dimensions &amp; weight :</b>	
Box (L x W x H): mm	570 x 315 x 300
Unit (L x W x H): mm	461 x 217 x 179
Net weight: kg	24
Gross weight: kg	25.8

\* all numbers and values are subject to ±10% measurement accuracy

**Important note!**

The technical data enclosed is for general information. Please note that the operating instructions and references indicated on the products are for installation, operation and maintenance.

**Product designations**

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