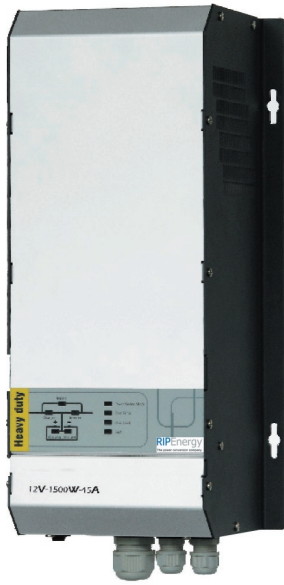


# Pure Sinewave Inverter / Charger



## Inverter / Charger

Series Symphony Combi

### Description

Symphony Combi is an inverter/chargers combination providing true sine-wave inverter, battery charging and AC transfer switch in together.

It can be connected to either grid or generator to compose power system for the most demanding mobile, off grid and power backup application.

### Features

#### Pure Sine Wave Inverter

- Distortion free sine-wave AC power for household appliance and sensitive electronics without worry, such as TV, stereo, laptop, or make your appliance work smoother, cooler and more efficient, such as fridge, power tools and microwave.
- Provided with outstanding peak power in together with super fast protection make it suitable heavy load.
- Low consumption power (5W) could effectively protect the precious energy.
- User's adjustable low voltage disconnect level makes it users friendly for various application.

#### Sophisticated Battery Charger

- Power factor corrected battery charging gets the most out of your shore cord.
- Charger power adjustable makes it suitable for charging different battery capacity
- Multi stage charging algorithm with variable absorption charging timer guarantee your battery getting the quick and right maintenance.
- Temperature compensated charging (@4mv/°C/cell)
- Various charging algorithm for multiple battery chemicals including AGM, GEL, Flooded...
- Recycle Charging (10days)
- Equalization charging
- Battery over-temp protection (50°C shutdown, 40°C restart)
- Generator compatible

#### Power management

- In even of a grid failure, the output will switch to inverter automatically and take over the power supply to the load without interruption – UPS mode
- Through dry contact at CM module, it could start generator when battery voltage run low.
- In case of battery run low, it could supply dry contact for user to switch off some high power less important load.



# Specifications ( Specifications Subject to Change Without Notice)

Model	SYC600-12-230	SYC1000-12-230	SYC1500-12-230	SYC2000-12-230	SYC3000-12-230
Nominal DC voltage	12VDC				
Inverter continuous power (W at 25°C)	600	1000	1500	2000	3000
Max charger output (A)	25	40	60	80	120
De-sulphation	15.5V for 30mins				
CB - charger (A)	5	10	10	15	30
CB - output (A)	5	10	10	15	30
Size	400x190x135		460x220x180		630x220x180
Weight (kgs)	9.5	14	16	18.5	28

Model	SYC600-24-230	SYC1000-24-230	SYC1500-24-230	SYC2000-24-230	SYC3000-24-230	SYC4000-24-230	SYC5000-24-230
Nominal DC input voltage	24VDC						
Inverter continuous power (W at 25°C)	600	1000	1500	2000	3000	4000	5000
Max charger output (A)	15	20	30	40	60	80	100
De-sulphation	31V for 30mins						
CB - charger (A)	5	10	10	15	30	30	30
CB - output (A)	5	10	10	15	30	30	30
Size	400x190x135		460x220x180			630x220x180	
Weight (kgs)	9.5	14	16	18.5	22.5	34.5	38

Model	SYC2000-48-230	SYC3000-48-230	SYC4000-48-230	SYC5000-48-230	SYC6000-48-230
Nominal DC input voltage	48VDC				
Inverter continuous power (W at 25°C)	2000	3000	4000	5000	6000
Max charger output (A)	20	30	40	50	60
De-sulphation	62V for 30mins				
CB - charger (A)	15	30	30	30	40
CB - output (A)	15	30	30	30	40
Size	460x220x180		630x220x180		
Weight (kgs)	18.5	22.5	34.5	38	42

Inverter	
Norminal Voltage	12VDC / 24VDC / 48VDC
Cont output power at 25°C (W)	12VDC: 600W-3000W 24VDC: 600W-5000W 48VDC: 600W-6000W
Output voltage	230VAC or 110VAC
Output voltage variation	Max ± 2%
Output frequency	50/60Hz ± 0.1%
Efficiency	max 88%
Surge	300%
Overload (600W-2000W model)	>150% 20s >125% 1min >110% 15mins
Overload (>2000W model)	>150% 20s >125% 1min >110% 1min
Crest factor	.3:1
THD	<3%
Zero load power	<5W
Low voltage disconnect (VDC) - settable	12VDC: 10.0 - 11.7 24VDC: 20.0 - 23.4 48VDC: 40.0 - 46.8
Overload and overheat protection	auto disconnect with 3 times restart attempt
shortcut protection	auto disconnect

Charger	
AC Input voltage max	270VAC - UPS mode 280VAC - GEN mode
AC Input voltage min	194VAC - UPS mode 185VAC - GEN mode
Input frequency	45Hz-65Hz - UPS mode 40Hz-70Hz - GEN mode
Battery types	AGM/GEL/Flooded
Nominal output	12VDC / 24VDC / 48VDC
Output voltage	refer to manual
Max output current	refer to other spec
Absorbtion time	variable
De-sulphation	15.5V / 31V / 62V
Temperature compensation	4mV/°C/cell

Other Data	
Transfer time	10ms-15ms (UPS mode) 2s (GEN mode)
Dry contact	x 3
Enclosure	Aluminum
Cooling	Forced fan
Protection	IP21
Battery connector	M6 x 2
AC connector	Terminal block (M3 screw)
Safety	EN60950-1
Emission / Immunity	EN55022

Available from:



## RIPEnergy

The power conversion company

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