



Combi S is an inverter charger combination which was designed for off grid and power back up applications providing True Sine Wave Inverter, Battery Charger, AC transfer switch and Power Management in one unit. It can be connected to either grid or generator to compose power system for the most demanding applications.

+ Pure Sine Wave Inverter

- o Distortion free sine wave AC power for household appliance and sensitive electronics without worry, such as TV, stereo, laptop. Or, make your appliances work smoother, cooler and more efficient, such as fridge, power tools and microwave.
- o Provided with outstanding peak power in together with super fast protection make it suitable heavy inductive load.
- o High efficiency gets most out of your reserved energy.
- o Low consumption power could effectively save the precious energy.
- o Adjustable low voltage disconnect level suitable for various applications.

+ Sophisticated Battery Charger

- o Powerful charger with multi stages charging algorithm.
- o Generator mode make it suitable to work with various kinds of generator.
- o Power factor corrected battery charging.
- o Charger power adjustable.
- o Temperature compensated charging.
- o Various battery chemical : AGM, GEL, Flooded

+ Automatic Transfer Switch

- o In even of a grid failure, the output will switch to inverter automatically and take over the power supply to the load without interruption.

+ Power management

- o Starting generator when battery voltage runs low.
- o Along with battery running low, it could supply various signals for customer to have a smart load management.

+ Accessories

Remote Control



Communication Module



- o RS232
- o 3 x dry contacts



Pursuit Of Perfection

CS series v3.0

Inverter Charger Combi

Model	CS0625L	CS1040L	CS1560L	CS2080L	CS30120L
Nominal DC voltage	12VDC				
Inverter continuous power (W at 25°C)	600	1000	1500	2000	3000
Charger max current (A)	25	40	60	80	120
De-sulphation	15.5V for 30mins				
Circuit breaker - charger (A)	5	10	10	15	30
Circuit breaker - output (A)	5	10	10	15	30
Size	457x190x130		557x220x180		720x220x180
Weight (kgs)	9.5	10.5	18	20	28

Model	CS0615M	CS1020M	CS1530M	CS2040M	CS3060M	CS4080M	CS50100M
Nominal DC voltage	24VDC						
Inverter continuous power (W at 25°C)	600	1000	1500	2000	3000	4000	5000
Charger max current (A)	15	20	30	40	60	80	100
De-sulphation	31V for 30mins						
Circuit breaker - charger (A)	5	10	10	15	30	30	30
Circuit breaker - output (A)	5	10	10	15	30	30	30
Size	457x190x130		557x220x180			720x220x180	
Weight (kgs)	9.5	10.5	18	20	24.5	34.5	38

Model	CS2020S	CS3030S	CS4040S	CS5050S	C6060S
Nominal DC voltage	48VDC				
Inverter continuous power (W at 25°C)	2000	3000	4000	5000	6000
Charger max current (A)	20	30	40	50	60
De-sulphation	62V for 30mins				
Circuit breaker - charger (A)	15	30	30	30	40
Circuit breaker - output (A)	15	30	30	30	40
Size	457x190x130		557x220x180		
Weight (kgs)	18.5	22.5	34.5	38	42

Inverter	
Normal Voltage	12VDC / 24VDC / 48VDC
Cont output power at 25°C (W)	12VDC: 600W-3000W
	24VDC: 600W-5000W
	48VDC: 600W-6000W
Output voltage	110VAC or 230VAC
Output voltage variation	Max ± 2%
Output frequency	50/60Hz ± 0.1%
Efficiency	max 88%
Overload (600W-2000W model)	>110% 15mins
	>125% 1min
	>150% 20s
Overload (3000W and above model)	>110% 1mins
	>150% 20s
Crest factor	3:1
THD	<3%
Zero load power with power saver	10W
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
	45Hz-70Hz- GEM mode
Battery types	AGM/GEL/Flooded
Nominal output	12VDC / 24VDC / 48VDC
Output voltage	refer to manual
Max output current	refer to other spec
Absorbion 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 case
Cooling	Forced fan
Protection	IP21
Battery connector	M6 x 2
Ac connector	Terminal block (M3 screw)
Safety	EN60950-1
Emmission	EN55022
Immunity	EN55022

