



ENERGIER ESSENTIAL



Inverter Charger Combination 1KW - 4KW

EnergiEssential inverter charger combination is designed for power shedding application. With battery, you can quickly compose a power backup system to support 2 -6hrs backup time. Compared with diesel generator, it has many distinguished features such as automatic, much less operation cost, fully automatic, less noise, high quality power etc.

EnergiEssential integrates multiple functions, including a powerful battery charger, pure sine wave inverter and a high speed automatic transfer switch. Its distinguishing surge capability makes it capable to power most demanding appliances, such as air conditioner, water pump, washing machine, freezer etc.

EnergiEssential has some distinguished features designed especially for African, Middle East and South East Asian countries where the grid is not stable and low voltage is frequently encountered.

EnergiEssential can maximize the usage of grid and automatically adjust its charging in accordance with grid condition.

- Inverter charger combination with pure sine wave output
- High performance designed for all kinds of home appliances
- TBB premium II multi stage charging algorithm with built in automatic temperature compensation
- Equalization charging program was available
- Compatible with majority of cheap generators in the market
- Designed to work with weak grid
- Designed for tropical region with working temperature up to 60 °C
- Optional CM was available for automatic generator start
- Dry contacts
- Optional SNMP card for remote internet access
- LED or LCD version available



RCC
Simple remote LED Display



LMD
Load management device



RAPDOG SNMP CARD
Remote monitor via TCP / IP



Inverter

	12 VDC	CS0625L	CS1040L	CS2080L		
Model No.	24 VDC	CS0615M	CS1020M	CS2040M	CS3060M	CS4080M
	48 VDC	/	/	/	CS3030S	CS4040S
Nominal voltage (VDC)	12 / 24 / 48					
Power 30mins @25 °C (W)	600	1000	2000	3000	4000	
Cont. power@25 °C (W)	600	1000	1800	2500	3600	
Cont.power @40 °C (W)	600	1000	1500	2000	3000	
Cosφ	0.9 - 1					
Surge	300%					
Output voltage (VAC)	230 / 110 ± 2%				230 ± 2%	
Output frequency	50 / 60 Hz ± 0.1%					
Efficiency (MAX)	12 V	89%				
	24 V	92%				
	48 V	95%				
Bypass range (VAC)	UPS mode	184 ~ 264 / 92 ~ 132			184 ~ 264	
	GEN mode	160 ~ 280 / 80 ~ 140			160 ~ 280	
Crest factor	3:1					
THD	< 3%					
Zero load power (W)	17	22	14	15	18	
Zero load power (power save mode) (W)	4	5	3.5	4	4.5	
Output circuit breaker (A)	5	10	15	30	30	
Overheat protection	auto disconnect					
Overload protection	auto disconnect					
Shortcut protection	auto disconnect					

Charger

Nominal output voltage (VDC)	12/ 24 / 48					
Max output current (A) - adjustable	25 / 15	40 / 20	80 / 40	60 / 30	80 / 40	
AC input range (VAC)	UPS mode	184 ~ 264 / 92 ~ 132			184 ~ 264	
	GEN mode	160 ~ 280 / 80 ~ 140			160 ~ 280	
Battery types	AGM / GEL / LFP / Flooded					
Absorption time	variable					
Temperature compensation	- 4mV / °C / cell					
Charger circuit breaker (A)	5	10	15	30	30	

Other Data

Transfer time	UPS mode	15 ms				
	GEN mode	20 ms				
Transfer switch (A)	40					
Dry contact	3					
Battery connector	M8 x 2					
AC terminal	terminal block (M3 screw)					
Enclosure	steel with powder paint					
Dimension (mm)(max)	444 x 186 x 135	512 x 216 x 176				
Net Weight (KGs)	9.5	14	16	18.5	22.5	
Cooling	Forced fan					
Protection	IP22			IP20		

Standard

Safety	EN60950 - 1					
EMC	EN61000 - 6 - 3, EN61000 - 6 - 1					