PURSUIT OF PERFECTION

Energier Apollo

ALL-IN-ONE for Solar Hybrid-system

Energier Apollo bi-directional inverter can be used in multiple applications. You can use it to compose power backup system. Or, with a quick setting, you can compose a simple solar hybrid system either with grid or diesel generators.

Energier Apollo is a powerful unit integrated multiple functions, including a high performance true sine wave inverter, a powerful battery charger, a PWM charge controller, a high speed automatic transfer switch and function of load management. Its distinguishing surge capability makes it capable to power most demanding appliances, such as fridge, freezer, water pump etc.

Energier Apollo has some distinguished features designed especially for African, Middle East and South East Asian countries where the grid was not stable and low voltage was frequently encountered. Energier Apollo can maximize the usage of grid and automatically adjust its charging in accordance with the setting.

Cyber

PV extension

- All in one unit integrating multiple functions.
- Can be applied for solar hybrid and power backup system.
- High efficiency up to 93%.
- Extremely low status consumption power.
- High performance designed for all kinds of home appliances.
- TBB premium II multi stage charging algorithm with built in automatic temperature & voltage compensation charging.
- PWM solar charge controller with built in MC4 terminal.
- Equalization charging program was available for flooded and OPZS battery.
- Lithium Battery charging was available.
- Designed for tropical region.
- Designed to work with weak grid.
- Compatible with majority of cheap generators in the market.
- Built in AEA.

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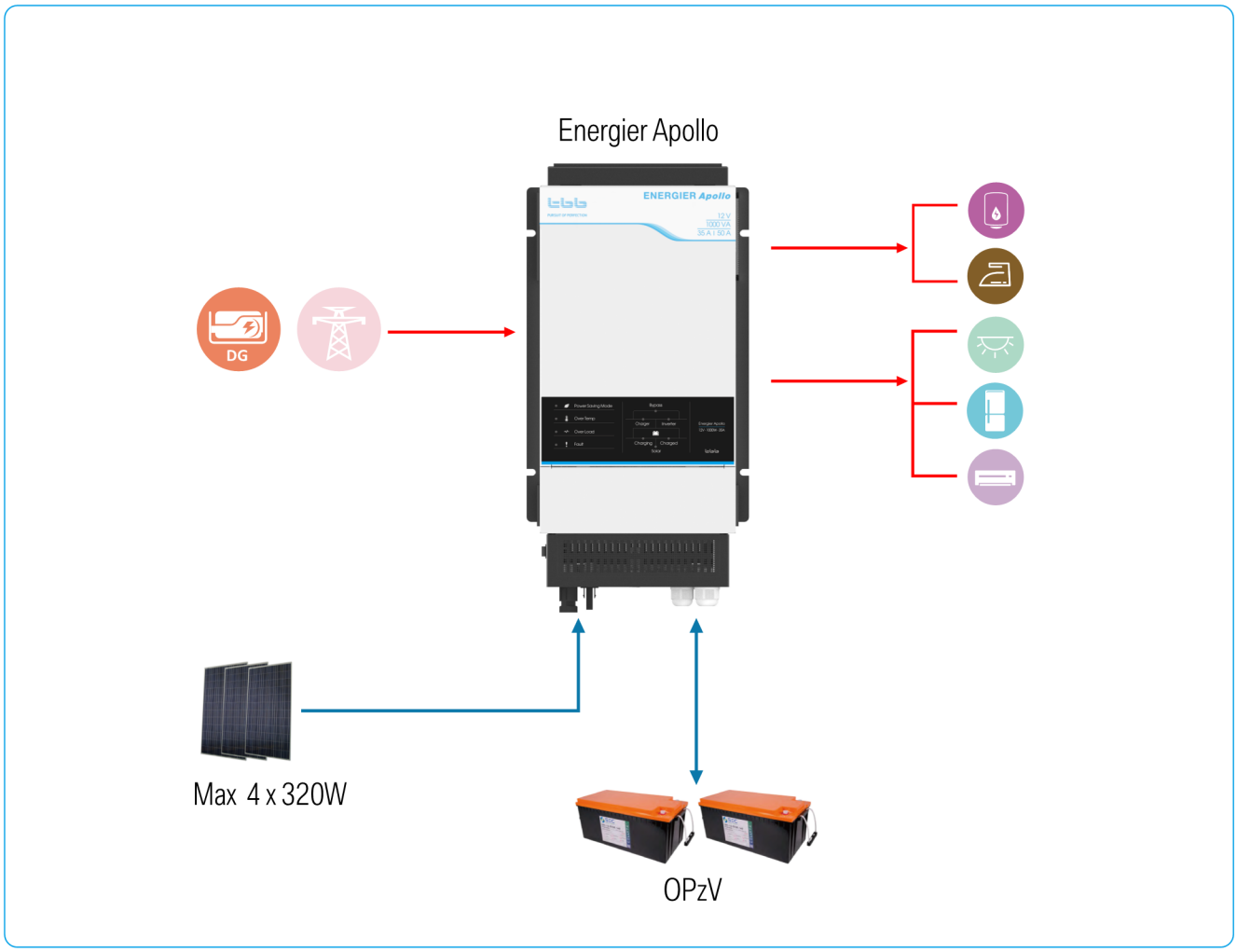

12 V 1000 VA 35 A | 50A 25 VDC

12 V 1300 VA 50 A | 50A 25 VDC

24 V 1600 VA 30 A | 50A 50 VDC

24 V 2000 VA 40 A | 50A 50 VDC

Model No.	CH1035L	CH1350L	CH1630M	CH2040M
Weak grid mode	yes	yes	yes	yes
Solar Hybrid mode	yes	yes	yes	yes
Solar Energy Storage mode	yes	yes	yes	yes

Inverter

Nominal Voltage		12 VDC		24 VDC	
Power 30mins @25℃ （VA）		1000	1300	1600	2000
Power 30mins @25℃ （W）		900	1200	1500	1700
Cont. power @25℃ （VA） 【1】		800	1200	1300	1600
Cont. power @25℃ （W）		750	1100	1200	1300
Cont. power @40℃ （W）		700	1000	1100	1200
Output voltage		230 VAC / 110 VAC ±2%			
Otput frequency		50/60 Hz ± 0.1%			
Cosφ		0.9-1			
Overload Capability 【2】	>125%	60 s			
	>150%	20 s			
Surge		300%			
Efficiency (MAX)		90.5%		93%	
Bypass range	Weak Grid	168 VAC - 276 VAC / 84 VAC - 138 VAC			
	Standard	184 VAC - 264 VAC / 92 VAC - 132 VAC			
THD 【3】		< 3%			
Zero load power		10 W	11 W	12 W	13 W
Zero load power (power save mode)		2.5 W	2.5 W	3 W	3 W
Overload and overheat protection		auto disconnect with 3 times restart attempt			
Shortcut protection		auto disconnect			

Charger

Nominal Output Voltage		12 VDC		24 VDC	
Max Output current (A) - adjustable		35	50	30	40
AC Input range	Weak Grid	168 VAC - 264 VAC / 84 VAC-132 VAC			
	Standard	194 VAC - 250 VAC / 97 VAC-125 VAC			
Battery types		AGM / GEL / OPzV / LFP / Flooded			
Absorption time		variable			
Temperature compensation		-4 mV / ℃ / cell			

Model No.	CH1035L	CH1350L	CH1630M	CH2040M

Solar Charge Controller

Max PV open circuit voltage (Voc)	25 VDC	50 VDC
Recommended PV (Vmpp)	16 -19 VDC	32 -37 VDC
Current max	50 A	
Temperature compensation	Automatic, -4 mV / ℃ / cell	
Charging algorithm	TBB Premium II	
PV Fuse	40 A × 2	
PV input terminal	MC4×2	

Other Data

Typical transfer time	Weak Grid	8 ms			
	Standard	8 ms			
Transfer switch		16 A			
Battery connector		M6x2			
DC Fuse		40A x 3	40A x 4	30A x 3	40A x 3
AC terminal		M3			
Enclosure		Steel with powder paint			
Dimension (mm) (max)		470×233×95			
Net Weight (KGs)		10.5	11.6	11.7	12
Cooling		Forced fan			
Protection		IP20 / IP40 with optional dust-proof net			

Standard

Safety	EN62109-1,EN62109-2
EMC	EN61000-3-2,EN61000-3-3,EN61000-6-1,EN61000-6-3

【1】None linear load, crest factor 3:1

【2】Base on Cont. power @25℃

【3】Linear load, crest factor 1.4:1

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