

# ENERGIER APOLLO



## ALL-IN-ONE Inverter

CH1350L, CH2040M  
PWM version 1.2KW-1.7KW

CH2.0M, CH2.0S, CH3.0S, CH4.0S  
MPPT version 2KW-4KW

Energier Apollo is a powerful inverter integrated multiple functions, including a high-performance true sine wave inverter, a powerful battery charger, a MPPT or PWM charge controller, a high-speed automatic transfer switch and two outputs for load management.

Energier Apollo inverter can be used in multiple applications. With a simple setting, you can compose a power backup or solar off grid system. Its distinguishing surge capability makes it capable to power most demanding appliances, such as fridge, freezer, water pump and air-conditioner 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.

- All in one, plug and play design for easy installation
- Can be applied for solar hybrid and power backup system
- Inverter efficiency up to 96%
- MPPT efficiency up to 98%
- Extremely low status consumption power
- Standby level adjustable
- High performance designed for all kinds of home appliances
- TBB premium II multi stage charging algorithm with built in automatic temperature & voltage compensation charging
- Built in charging controller available with MPPT or PWM
- Equalization charging program was available for flooded and OPZS battery
- Lithium Battery charging was available
- Multiple working mode can be configured
- Designed for tropical region
- Designed to work with weak grid
- GEN mode makes it compatible with cheap generators in the market.
- With built in AGS
- Built in AC input and output MCB (for MPPT version only)



Model No.	CH1350L	CH2040M	CH2.0M	CH2.0S	CH3.0S	CH4.0S
LCD display	N/A		Yes			
AC IN MCB	N/A		D40			
AC OUT MCB	N/A		C16		C25	C32

## Inverter

Nominal battery voltage (VDC)	12	24		48		
Nominal input voltage range (VDC)	9~17	18~34		40~62.8		
Power 30mins @25°C (W)	1300	1700	2000	2000	3000	4000
Cont. power @25°C (W)	1100	1300	1800	1800	2700	3600
Cont. power @40°C (W)	1000	1200	1600	1600	2400	3200
Output voltage	230VAC±2%, 220/230/240VAC Settable, 50HZ±0.05%, 50/60Hz Settable					
Total harmonic distortion	< 3%					
Efficiency (MAX)	90.5%	93%	93%	96%		
Zero load power (W)	10	13	14	14	17	20
AC input range (VAC)	UPS mode	184 ~ 264				
	Weakgrid & GEN	168 ~276				
Typical transfer time	< 20ms (typical 10ms)			< 4ms		
Transfer switch (A)	16			31		

## AC Charger & Solar Charger

	PWM			MPPT		
Nominal output voltage (VDC)	12	24		48		
	25	50	100	150		
Recommended PV (W)	640	1520	2000	4000		
MPPT range (VDC)	16~19	32~37	32~100	64~140(150VDC absolute maximum coldest conditions, 140VDC start-up and operating maximum)		
Max PV short circuit current (A)	N/A	N/A		40		
Rated charging current - adjustable (A)	AC Charger	50		40	20	30
	Solar Charger	50		60		
Max charging current (A)	100	90	100	80	90	100
MPPT efficiency	N/A	N/A		99.90%		
Solar Charger Maximum efficiency	98.00%					
Battery types	AGM/GEL/LFP/FLOODED		AGM/GEL/LFP/Flooded/Lead-carbon/Traction/Semi-traction			
Temperature compensation	- 4mV / °C / cell, settable					

## Other Data

Protection	a)shortcut, b)over load ,c) over temperature, d) input voltage out of range ,e) battery low voltage disconnect ,f) battery high voltage protection ,g)fan lock					
AC out1 current (A)	N/A	N/A	16		25	32
AC out2 current (A)	N/A	N/A		40		
Auxiliary output	X1, programmable			X2, programmable		
Remote on-off	Yes			N/A		
CAN Bus communication port	N/A			Yes		
Operating ambient temperature range	-20°C~60°C					
Storage temperature range	-40°C~85°C					
Relative humidity in operation	95% without condensation					

## Mechanical Data

Dimension (mm) (max)	470 x 233 x 95			514 x 275 x 144		
Net Weight (kg)	11.6	12	20	20	22	25
Cooling	Forced fan					
Protection category	IP20			IP21		

## Standard

Safety	EN62109-1, EN62109-2		EN 62477-1 EN 62109-1, EN 62109-2			
EMC	EN61000-3-2, EN61000-3-3, EN61000-6-1, EN61000-6-3		EN61000-6-4, EN61000-6-2, EN61000-3-3, EN61000-3-2			