

EHCS-LV Series Hybrid Inverter: On-Grid Inverter With Energy Storage

Innovative and Cost-effective Power Solution

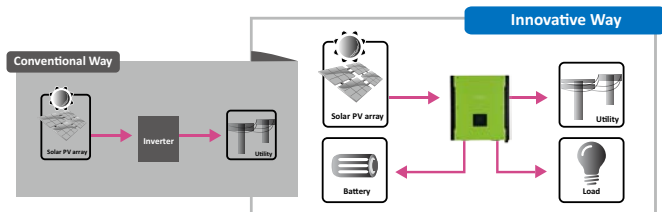


- Self-consumption and feed-in to the grid
- Programmable supply priority for PV, Battery or Grid
- User-adjustable battery charging current suits different types of batteries
- Programmable multiple operations modes: Grid tie, Off grid, and grid-tie with backup
- Built-in Timer for various mode of on/off operation
- Multiple communication for USB, RS-232, Modbus and SNMP
- Monitoring software for real time status display and control
- Custom-made firmware by ODM contract
- Parallel operation up to 6 units for 10KW and 15KW

EHCS-LV is a flexible and intelligent hybrid inverter which utilizes solar power, AC utility, and battery power source to supply continuous power. It's a simple and smart solar power storage system for home users to either store energy into a battery for night-time usage or use for self-consumption first depending on demands. Priority for power source is programmable through smart software. During night time or power failure, it will automatically consume reserved power from the battery. In this way, it will reduce dependence on the utility.

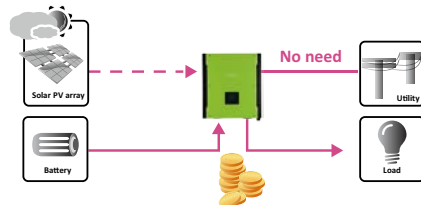


- **Feed-in is not the only choice**
In comparison with conventional grid-tie inverter, EHCS-LV can not only feed-in power to the grid but also store solar power to the battery for future usage and directly power to the loads.



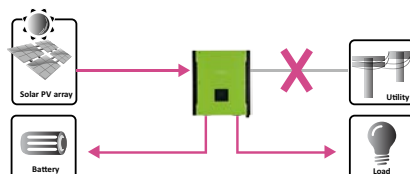
- **Save money by discharging battery for self-consumption first**

EHCS-LV can save money by using battery energy first when PV energy is low. Until battery energy is low, EHCS-LV will consume AC power from the grid.



- **Power backup when AC failed**

EHCS-LV can operate as an off-grid inverter to provide continuous power even without the grid. It's a perfect power solution for remote regions or temporary AC power source for camping or night market.



MODEL	EHCS-10KLV	EHCS-15KLV
PHASE	3-phase in / 3-phase out	
MAXIMUM PV INPUT POWER	14850 W	22500 W
RATED OUTPUT POWER	10000 W	15000 W
MAXIMUM CHARGING POWER	9600 W	15000 W
GRID-TIE OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	320 VDC / 350 VDC
Full Load MPPT Voltage Range	400 VDC ~ 800 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers / Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.2A; B: 18.6A
GRID OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Voltage Range	184 - 265VAC* per phase	184 - 265VAC* per phase
Nominal Output Current	14.5A per phase	21.7A per phase
Power Factor Range	0.9 lead - 0.9 lag	
EFFICIENCY		
Maximum Conversion Efficiency (DC/AC)	96%	
European Efficiency@ Vnominal	95%	
OFF-GRID OPERATION		
AC INPUT		
AC Start-up Voltage/Auto Restart Voltage	120 - 140 VAC per phase / 180 VAC per phase	
Acceptable Input Voltage Range	170 - 280 VAC per phase	
Maximum AC Input Current	40 A	
PV INPUT (DC)		
Maximum DC Voltage	900 VDC	900 VDC
Full Load MPPT Voltage Range	400 VDC ~ 800 VDC	400 VDC ~ 800 VDC
Number of MPP Trackers/Maximum Input Current	2 / 2 x 18.6A	2 / A: 37.2A; B: 18.6A
BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Output Waveform	Pure Sine wave	
Efficiency (DC to AC)	91%	91%
HYBRID OPERATION		
PV INPUT (DC)		
Nominal DC Voltage / Maximum DC Voltage	720 VDC / 900 VDC	720 VDC / 900 VDC
Start-up Voltage / Initial Feeding Voltage	320 VDC / 350 VDC	320 VDC / 350 VDC
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BATTERY MODE OUTPUT (AC)		
Nominal Output Voltage	230 VAC (P-N) / 400 VAC (P-P)	
Efficiency (DC to AC)	91%	
BATTERY & CHARGER		
Nominal DC Voltage	48VDC	
Maximum Charging Current	Default 60A, 10A - 200A (Adjustable)	Default 60A, 5A - 300A (Adjustable)
GENERAL		
PHYSICAL		
Dimension, D x W x H (mm)	167.2 x 500 x 622	224x 650 x 820
Net Weight (kgs)	40	62
INTERFACE		
Communication Port	RS-232, USB and Dry contact	
Intelligent Slot	Optional SNMP, Modbus and AS-400 cards available	
ENVIRONMENT		
Humidity	0 ~ 90% RH (Non-Condensing)	
Operating Temperature	-10 to 55°C (Power derating above 50°C)	
Altitude	0~1000m**	
IP Rating	IP20	

*These figures may vary depending on different AC voltage and country requirements.

**Power derating 1% every 100m when altitude is over 1000m.
Product specifications are subject to change without further notice.