

# SINGLE-PHASE RESIDENTIAL ENERGY STORAGE INVERTER

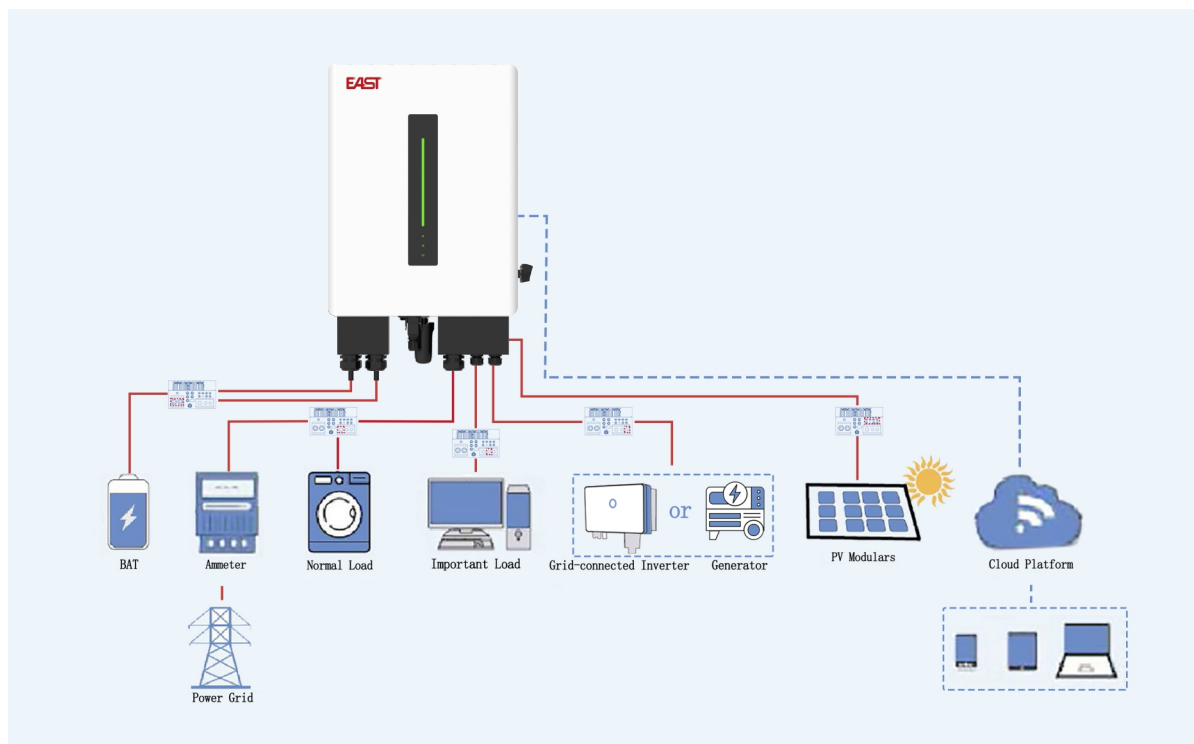
EAHI10KSL, G3  
EAHI12KSL, G3



## Features

- Supports PV inverter, generators, and microgrid inputs, suitable for new and modified photovoltaic and microgrid systems
- Supports multiple mode settings, supports local independent operation and peak shaving
- App real-time monitoring, supports online remote OTA upgrades, easy operation and maintenance
- Supports multiple inverters with EPS output in parallel, and can be expanded to small industrial and commercial applications
- Mains and PV input power oversized at a ratio of 1.5, resulting in a more stable system operation
- Support RSD and AFCI optional configurations to provide safer protection for the system

## System Principle Diagram



MODEL	EAHI10KSL	EAHI12KSL
PV input		
Max. input power	15kW	18kW
Max. open-circuit voltage	550Vdc	
Rated input voltage	360Vdc	
Start-up voltage	150Vdc	
Min. operating voltage	100Vdc	
MPPT voltage range	100~540Vdc	
Full power MPPT voltage range	250~500V	
Max. input current per MPPT	30A/30A	
Max. short-circuit current per MPPT	40A/40A	
MPPT quantity	2	
Number of input strings per MPPT	2/2	
Battery input		
Battery type	Li-ion battery / Lead acid battery	
Voltage range	42~58Vdc	
Max. charge/discharge current	180A/180A	250A/250A
AC input and output (Grid)		
Max. apparent power of grid	15kVA	18kVA
Max. input current	68.2A	81.8A
Input voltage range	184~276Vac	
Input frequency range	50±5Hz	
Rated output power	10kW	12kW
Max. output apparent power	10kVA	12kVA
Rated output voltage	1/N/PE, 220Vac/230Vac	
Rated output frequency	50 Hz	
Rated output current	45.5A/43.5A	54.5A/52.2A
Max. output current	45.5A	54.5A
Power factor	>0.99 (0.8 leading~0.8 lagging)	
THDI	≤3% (@ rated power)	
Generator input		
Max. input power	10kW	12kW
Max. input current	45.5A	54.5A
AC output (Backup load)		
Rated output power	10kW	12kW
Max. apparent power	10kVA	12kVA
Rated output voltage	1/N/PE, 220Vac/230Vac	
Rated output frequency	50Hz	
Rated output current	45.5A/43.5A	54.5A/52.2A
Max. output current	45.5A	54.5A
THDV	≤3% (linear load)	
Switching time	≤20ms	
Efficiency		
Maximum efficiency	97.8%	
MPPT efficiency	99.9%	
Protections		
Protections	Over/under voltage, over/under-frequency, overload, output short-circuit, over temperature, residual current monitoring unit, output over-current, insulation resistance detection, anti-islanding, surge protection	
Surge protection	DC Type II / AC Type II	
Others		
Dimensions (W x H x D)	450 x 600 x 270mm	
Weight	41kg	
Topology	High frequency isolation (for battery)	
IP rating	IP66	
Operating temperature	-25°C~+60°C	
Cooling mode	Smart cooling	
Altitude	4000m	
Noise level (1m)	≤45dB	
Installation method	Wall-mounted	
Standards		
Safety regulation	IEC/EN 62109-1/-2, AS62109	
EMC	EN 61000-6-1/-2/-3/-4	
Grid connection	NRS097-2-1:2017	