

# Residential Hybrid Inverter EAHI10-12KSL

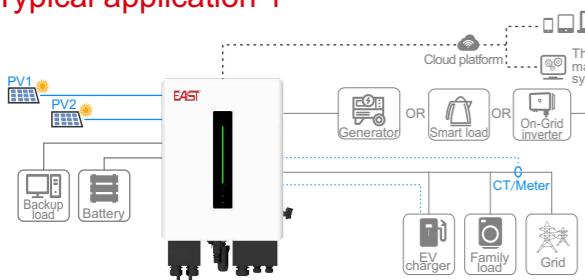
Single phase



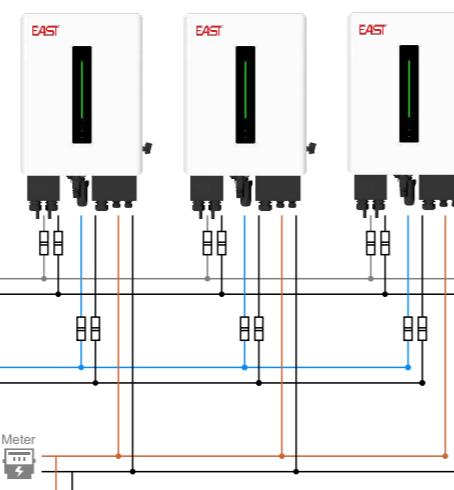
- Supports PV inverter, generators, and microgrid inputs, suitable for new and modified photovoltaic and microgrid systems
- Support RSD and AFCI optional configurations to provide safer protection for the system

- 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

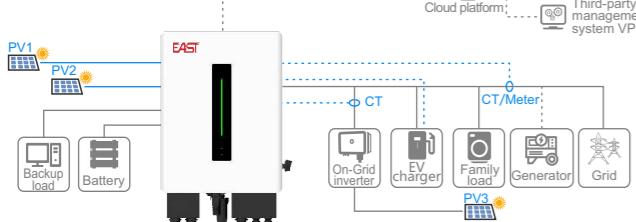
## Typical application 1



## Parallel application



## Typical application 2



## Hybrid inverter specification

MODEL	EAHI10KSL	EAHI12KSL
<b>PV input</b>		
Max. input power	18kW	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	300V~500V	
Max. input current per MPPT	30A/30A	
Max. short-circuit current per MPPT	40A/40A	
MPPT quantity	2	2/2
Number of input strings per MPPT		
<b>Battery input</b>		
Battery type	Li-ion battery/Lead acid battery	
Voltage range	42~58Vdc	
Max. charge/discharge current	180A/180A	250A/250A
<b>AC input and output(grid)</b>		
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, 220/230Vac	
Rated output frequency	50Hz	
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)	
<b>Generator input</b>		
Max. input power	10kW	12kW
Max. input current	45.5A	54.5A
<b>AC output(back-up)</b>		
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	
<b>Efficiency</b>		
Max. efficiency	97.8%	
MPPT efficiency	99.9%	
<b>Protections</b>	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	
Protections		
Surge protection	DC Type II/AC Type II	
<b>Others</b>		
Dimensions(W×H×D)(mm)	450x600x270	
Weight(kg)	45	
Topology	High frequency isolation(for battery)	
IP rating	IP66	
Operating temperature	-25°C~+60°C	
Cooling mode	Smart cooling	
Altitude	3000m	
Noise level at 1m	≤55dB	
Installation method	Wall-mounted	
<b>Standards</b>		
Safety regulation	IEC/EN 62109-1/-2, AS62109	
EMC	EN 61000-6-1/-2/-3/-4	
Grid connection	NRS097-2-1:2017	