

Residential Hybrid Inverter EAHI10-20KTH-S

Three phase | All-in-one | 102Ah Cell



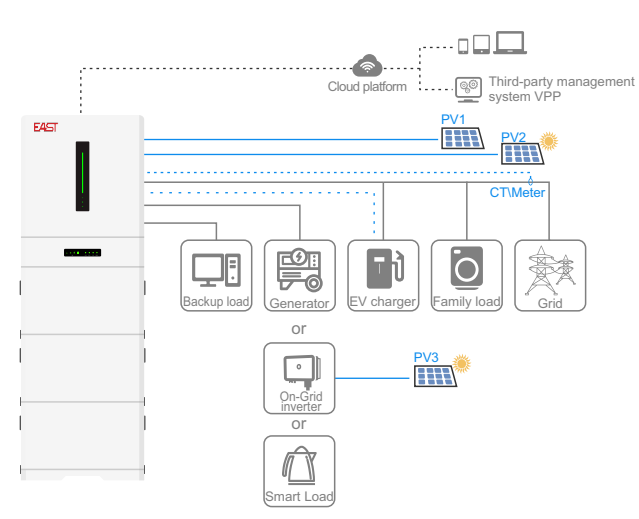
 Lithium iron phosphate battery, IP66 outdoor protection level, built-in fire protection module and DC-DC optimizer

 Single cluster supports 5-20KWH stacking expansion, and supports up to 3 clusters of 60KWH flexible expansion

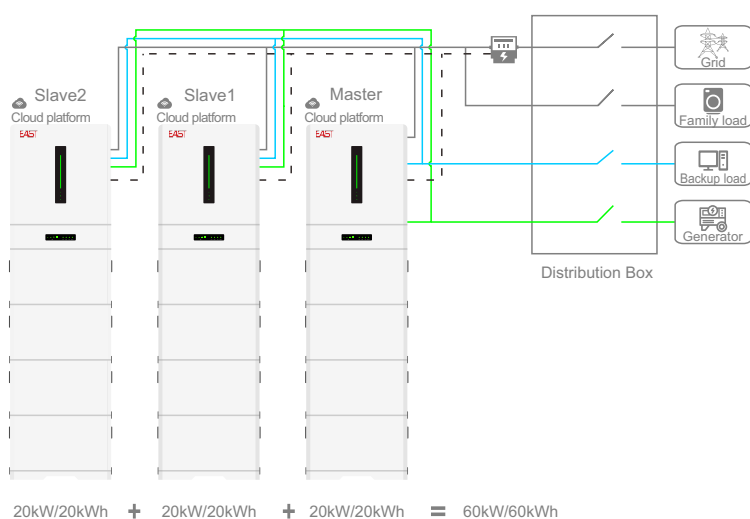
 Battery modular design, stacking plug-in installation, plug and play

 App real-time monitoring, support online remote OTA upgrade, easy operation and maintenance

Typical application



Parallel application



System composition



Hybrid inverter specification

MODEL	EAHI10KTH-S		EAHI15KTH-S		EAHI20KTH-S	
PV input parameter						
Max. input power	20kW		30kW		30kW	
Max. input voltage			1000Vdc			
MPPT voltage range			160~950Vdc			
Max. input current per MPPT	16A/16A				16A/32A	
Max. short circuit current per MPPT	24A/24A				24A/48A	
Number of input strings per MPPT	1/1				1/2	
Battery input parameters						
Battery type			Lithium battery			
Voltage range			650~980Vdc			
Max. charge/discharge current	15.4A/15.4A		23.1A/23.1A		30.8A/30.8A	
AC input/output parameters(grid side)						
Max. apparent power of grid	15kVA		22.5kVA		30kVA	
Max. input current	21.7A		32.6A		40A	
Input voltage range			320~480Vac			
Input frequency range			50±5Hz/60±5Hz			
Rated output power	10kW		15kW		20kW	
Power factor			>0.99(0.8 leading~0.8 lagging)			
THDi			≤3%(@ rated power)			
Generator input parameters						
Max. input power	10kW		15kW		20kW	
Max. input current	15.2A		22.8A		30.4A	
AC output parameters(back-up side)						
Rated output power	10kW		15kW		20kW	
Rated output voltage			3/N/PE, 380Vac/400Vac			
Rated output frequency			50Hz/60Hz			
Rated output current			22.8A/21.7A			
THDv			≤3%(linear load)			
Switching time			≤10ms			
Efficiency						
Max. efficiency			98.2%			
MPPT efficiency			99.9%			
Others						
Surge protection			DC Type II/AC Type III			
Parallel operation			Supports 6 units in parallel connection			
Topology			Non-isolated			
IP rating			IP66			
Operating temperature			-25°C~+60°C			
Cooling mode	Natural cooling				Smart cooling	
Altitude			3000m			
Noise level at 1 m	≤25dB		≤45dB		≤50dB	
Standards	NC RFG+PTPIREE, VDE 0126, EN50549-1/10, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, PPDS, CEI 0-21		IEC/EN 62109-1/-2, IEC62040-1, IEC62477, IEC62619:2022, EN 61000-6-1/-2/-3/-4			
Dimensions(W×H×D)(mm)			650×640×270			
Net weight(kg)			45			

Battery distribution box specification

MODEL	PDU-GU-Y/F
Maximum current	60A
Voltage range	550~1000Vdc
Dimensions(W×H×D)(mm)	650×150×270
Net weight(kg)	12
IP rating	IP66
Fixed base size(W×H×D)(mm)	650×80×270

Battery specification

MODEL	EHBS-P5-TH
Battery type	LiFePO4
Module capacity	5.12kWh
Cell type	102Ah
Rated voltage	750Vdc
Voltage range	600~1000Vdc
Max. charge/discharge current	3.4A/5.5A
Communication interfaces	CAN/RS485
Topology	High frequency isolation
IP rating	IP66
Operating temperature	-25°C~+55°C
Cooling mode/Heating mode	Natural cooling/PTC heating
Altitude	3000m
Standards	IEC/EN 62619 2022, ISO 13849, IEC/EN 62040-1, IEC/EN 62477, IEC62109-1/2, IEC 61000-6-1, EN/IEC 61000-6-3, UN 38.3
Dimensions(W×H×D)(mm)	650×370×270
Net weight(kg)	59