

# Three-Phase Residential Energy Storage Inverter

EAHI10KTH / EAHI15KTH / EAHI20KTH



Supports PV inverter, generators, and microgrid inputs, suitable for new and modified photovoltaic and microgrid systems



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

## Hybrid Inverter Specification

MODEL	EAHI10KTH	EAHI15KTH	EAHI20KTH
<b>PV input parameter</b>			
Max. input power	20kW	30kW	30kW
Max. input voltage	1000Vdc		
Rated input voltage	650Vdc		
Start-up voltage	180Vdc		
Min. operating voltage	160Vdc		
MPPT voltage range	160-950Vdc		
Full power MPPT voltage range	625-800V		
Max. input current per MPPT	16A/16A	16A/32A	
Max. short-circuit current per MPPT	24A/24A	24A/48A	
Number of MPPTs	2		
Number of input strings per MPPT	1/1	1/2	
<b>Battery input parameter</b>			
Battery type	Lithium battery		
Voltage range	150-600Vdc		
Max. charge/discharge current	25A/25A	50A/50A	
<b>AC input and output parameter(grid)</b>			
Max. apparent power of grid	15kVA	22.5kVA	30kVA
Max. input current	22.8A	34.2A	40.0A
Input voltage range	320-480Vac		
Input frequency range	50±5Hz/60±5Hz		
Rated output power	10kW	15kW	20kW
Max. output apparent power	11kVA	16.5kVA	22kVA
Rated output voltage	3/N/PE, 380Vac/400Vac		
Rated output frequency	50 Hz/60Hz		
Rated output current	15.2A/14.5A	22.8A/21.7A	30.4A/29.0A
Max. output current	16.7A/15.8A	25.1A/23.8A	33.5A/31.8A
Power factor	>0.99(0.8 leading-0.8 lagging)		
THDI	≤3%(@ rated power)		
<b>Generator input</b>			
Max. input power	10kW	15kW	20kW
Max. input current	15.2A	22.8A	30.4A
<b>AC output parameter(back-up)</b>			
Rated output power	10kW	15kW	20kW
Max. apparent power	10kVA	15kVA	20kVA
Rated output voltage	3/N/PE, 380Vac/400Vac		
Rated output frequency	50Hz/60Hz		
Rated output current	15.2A/14.5A	22.8A/21.7A	30.4A/29.0A
Max. output current	15.2A	22.8A	30.4A
THDV	≤3%(linear load)		
Switching time	≤10ms		
<b>Efficiency</b>			
Maximum efficiency	98.2%		
MPPT efficiency	99.9%		
<b>Protections</b>			
Protections	Over/under voltage, over/under frequency, overload, output short-circuit, over-temperature, residual current monitoring unit, output overcurrent, insulation resistance detection, anti-islanding, surge protection		
Surge protection	DC Type II/AC Type III		
<b>Others</b>			
Dimensions(WxHxD)(mm)	500x660x270		
Packaged dimensions(WxHxD)(mm)	510x860x370		
Net weight(kg)	41		
Gross weight(kg)	47		
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(1m)	≤25dB	≤45dB	≤50dB
Installation method	Wall-mounted		
<b>Standards</b>			
Grid connection	VDE 0126, EN50549, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018		
Safety regulation	IEC/EN 62109-1/-2		
EMC	EN 61000-6-1/-2/-3/-4		