

# Three-Phase Home Energy Solution

## All in one

### EAH10-20KTH Series



- Lithium iron phosphate battery, IP66 outdoor protection level, built-in fire protection module
- Battery modular design, stacking plug-in installation, plug and play
- Single cluster supports 5-20KWH stacking expansion, and supports up to 3 clusters of 60KWH flexible expansion
- App real-time monitoring, support online remote OTA upgrade, easy operation and maintenance

## System Specification

EAH10K/15K/20KTH Series				
<b>System component</b>				
Number of battery modules	1	2	3	4
Battery capacity	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Battery system model	EHBS-P5-TH			
Number of inverter	3			
Inverter mode	EAH10K/15K/20KTH-S(optional)			
Rated power	10K/15K/20kW(optional)			
Dimensions(WxHxD)(mm)	650x1250x270	650x1600x270	650x1950x270	650x2300x270
Weight(kg)	120	175	230	285
Noise	≤25dB@EAH10K, ≤45dB@EAH15K, ≤50dB@EAH20K			
Cooling type	Smart cooling			
Maximum altitude	3000m			
Operating temperature	-20°C ~ +58°C			
Operating humidity	0~100%RH(Non-condensing)			
Display	LED and app			
Installation method	Floor-mounted			

## Battery Specification

MODEL	EHBS-P5-TH
<b>System component</b>	
Battery type	LiFePO4
Module capacity	5.12kWh
Rated voltage	750Vdc
Voltage range	600~1000Vdc
Max. charge/discharge current	3.4A/5.5A
Communication interfaces	CAN/RS485
Dimensions(WxHxD)(mm)	650x370x270
Net weight	59
Topology	High frequency isolation
IP rating	IP66
Operating temperature	-25°C ~ +55°C
Cooling mode/Heating mode	Natural cooling/PTC heating
Altitude	3000m
Noise level at 1 m	< 40dB
Installation method	Floor-mounted
<b>Standards</b>	
Safety regulation	IEC/EN 62619 2022, ISO 13849, IEC/EN 62040-1, IEC/EN 62477, IEC62109-1/2
EMC	IEC 61000-6-1, EN/IEC 61000-6-3
Transportation	UN 38.3

## Hybrid Inverter Specification

MODEL	EAH10KTH-S	EAH15KTH-S	EAH20KTH-S
<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	650~980Vdc		
Max. charge/discharge current	15.4A/15.4A	23.1A/23.1A	30.8A/30.8A
<b>AC input and output (grid)</b>			
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
Max. apparent output 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 load)</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>			
Max. efficiency	98.2%		
MPPT efficiency	99.9%		
<b>Others</b>			
Protections	Over/under voltage, over/under-frequency, over load, output short-circuit, over temperature, residual current monitoring unit, output over-current, insulation resistance, anti-islanding, surge protection		
Surge protection	DC Type II/AC Type III		
Dimensions(WxHxD)(mm)	650x640x270mm		
Net weight(kg)	45		
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 1m	≤25dB	≤45dB	≤50dB
<b>Standards</b>			
Grid connection	NC RFG+PTPIREE, VDE 0126, EN50549-1/10, DIN VDE V 0124-100:2020, VDE-AR-N 4105:2018, PPDS, CEI 0-21		
EMC	IEC/EN 62109-1/-2, IEC62040-1, IEC62477, IEC62619:2022, EN 61000-6-1/-2/-3/-4		

## Battery Distribution Box Specification

MODEL	PDU-SH-Y/PDU-SH-F
<b>Parameter</b>	
Maximum current	60A
Voltage range	300~1000Vdc
Display method	LED
Dimensions(WxHxD)(mm)	650x150x270
Net weight(kg)	12
IP rating	IP66
<b>Others</b>	
Fixed base size(WxHxD)(mm)	650x80x270