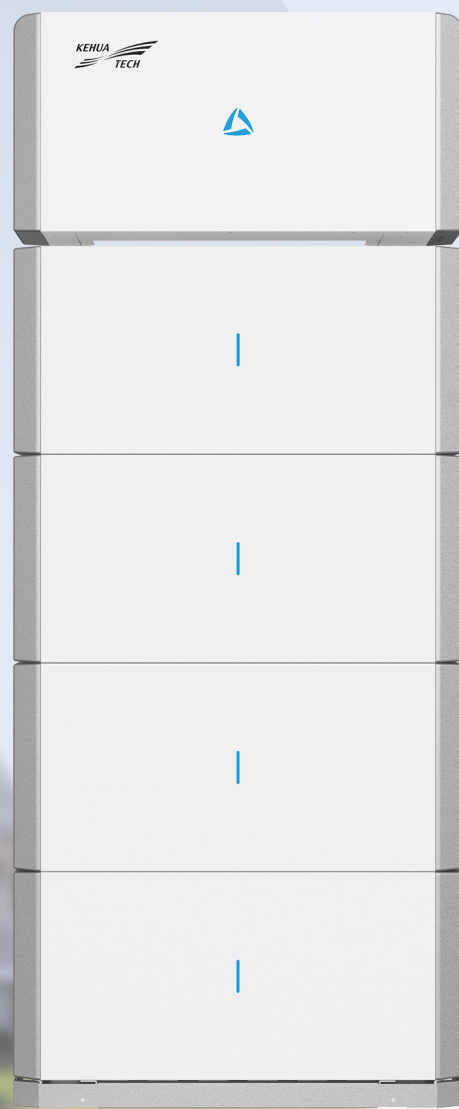


iStorageE3

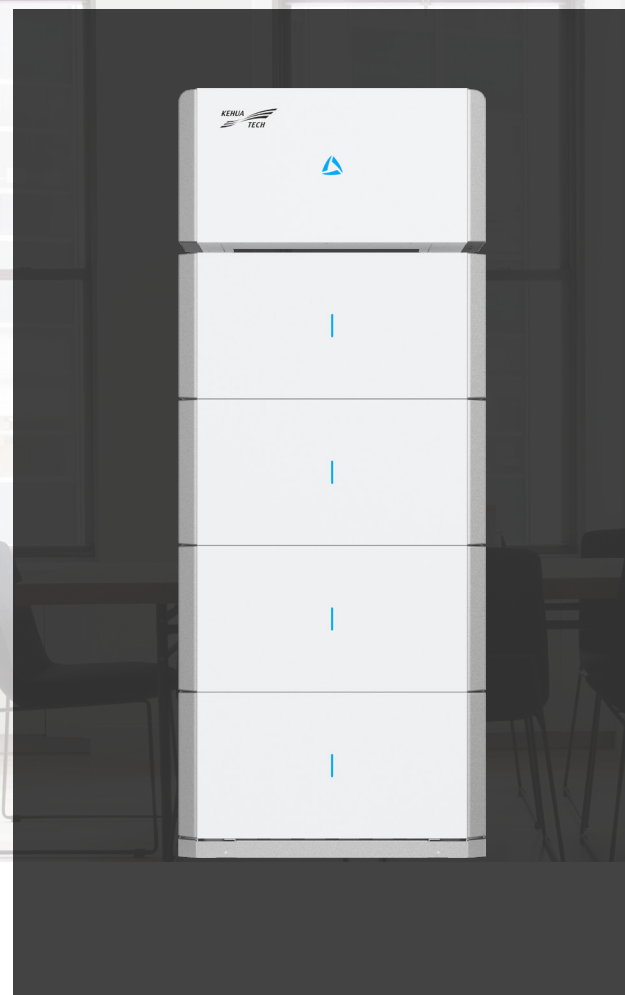
All-in-one Residential
Energy Storage System



Residential Energy Storage System

Three-phase ESS iStoragE3 Series 5K~12K

iStoragE3 series is an all-in-one solar battery system which consists of hybrid inverter and battery modules. Owners can build a new home energy storage system with iStoragE3, which can realize the maximum self-use of solar energy and reduce electricity bills. It is also very suitable for areas need backup power.



Product Features



Safe

- Physical and electrical dual isolation
- Modular fire protection integration



Simple

- All-in-one design, modular installation
- 1~8 batteries flexible expansion



Smart

- Independent battery management, mix old and new batteries
- Built-in ECU function

System Specification

Items	iStorageE3 5K Series	iStorageE3 6K Series	iStorageE3 8K Series	iStorageE3 10K Series	iStorageE3 12K Series
System components					
Inverter model	iStorageE3 5K	iStorageE3 6K	iStorageE3 8K	iStorageE3 10K	iStorageE3 12K
Number of inverter	1				
Battery system model	iStorageE B5-S2				
Number of battery pack	1~8				
General					
System capacity	5~40kWh				
Rated system power	5kW	6kW	8kW	10kW	12kW
Dimension (W×H×D)	800×1995×240mm/31.49×78.54×9.45in (four battery packs, with foundation)				
Noise	< 35dB				
Cooling type	Natural cooling				
Altitude	2000m/6561ft				
Operating temperature	Charge: 0~50°C/32~122°F Discharge: -20~50°C/-4~122°F				
Recommended operating temperature	15~30°C/59~86°F				
Operating humidity	0~100%RH (Non-condensing)				
Display	LED & APP				
Installation method	Floor or Wall-mounted (optional)				

*Specifications are subject to change without prior notice.

Hybrid Inverter Specification

Items	iStorageE3 5K	iStorageE3 6K	iStorageE3 8K	iStorageE3 10K	iStorageE3 12K
DC Input (PV)					
Max. PV input power	23kWp		29kWp		
Max. PV input voltage			1000Vdc		
No. of MPPTs			2		
No. of PV strings per MPPT	1/1		2/1		
Max. PV input current	16A/16A		27A/16A		
Max. short current	20A/20A		34A/20A		
MPPT voltage range			150~900Vdc		
Starting voltage			200Vdc		
DC (PV) switch			Yes		
DC Input and Output (Battery)					
Battery voltage range			650~900Vdc		
Max. charge/discharge current			24.6A		
AC Input and Output (On-grid)					
Rated AC output power	5kW	6kW	8kW	10kW	12kW
Rated AC output voltage			380/400Vac, 3W/N/PE		
Grid voltage range			323-418Vac/340-440Vac		
Max. output current	7.9A	9.6A	12.8A	16A	17.4A
Max. input current	15.2A	18.3A	24.3A	26A	26A
Rated grid frequency			50Hz		
Grid frequency range			45~55HzHz		
Power factor			>0.99 (rated power)		
Adjustable power factor			0.8 (leading)~0.8 (lagging)		
THDi			<3% (rated power)		
AC Output (Off-grid)					
Rated AC output voltage			380/400Vac, 3W/N/PE		
Rated output frequency			50Hz		
Rated output power	5kW	6kW	8kW	10kW	12kW
Peak output power	12kVA, 60s		20kVA, 60s		
Peak output current	18.2A, 60s		30.4A, 60s		
Switch time ¹			<10ms		
Support the unbalance load			Yes		
Efficiency					
Max. efficiency ²			98.3%		
European efficiency ²			97.5%		
General					
Weight	27kg/59.52lb (including side plates)				
Dimension (W×H×D)	800×400×200mm/31.49×15.75×7.87in (including side plates)				
Protections	AFCI(optional), Anti-Islanding protection, DC reverse polarity protection, Insulation monitoring, DC/AC surge protection, AC short-circuit protection				
Enclosure type	IP65				
Communication Interface	Portal-WiFi (standard)/4G (optional), RS485				
Compliance	EN 62109-1/2, IEC 62109-1/2, EN IEC 61000-6-1/2/3/4, IEC 61727, IEC 62116, EN 50549-1, NC RfG, CEI 0-21				

*Specifications are subject to change without prior notice.


1. Except for countries with special requirements.


2. The data is from Kehua lab. The proceeding values are measured by an internal laboratory of Kehua in a secific environment.


Lithium-ion Battery Module


iStoragE B5-S2

Product Features

Modular fire protection integration

Quick plug connector

Integrated single-battery pack energy management optimization circuit



Items	iStorage B5-S2	
General		
Cell technology	LiFePO4	
Battery energy capacity	5kWh	
Battery usable capacity ¹	5kWh	
Scalability	8	
Scalable capacity range	5~40kWh	
Rated power	4kW	
Voltage range	650~900Vdc	
Maximum charge current	6.15A	
Maximum discharge current	6.15A	
Dimension (W×H×D)	800×380×238mm/31.49×14.6×9.37in (including side plates)	
Weight	52kg/114.64lb (including side plates)	
Operating temperature	Charge: 0~50°C/32~122°F Discharge: -20~50°C/-4~122°F	
Recommended operating temperature	15~30°C/59~86°F	
Humidity	0~100%RH (Non-condensing)	
Altitude	2000m/6561ft	
Cooling type	Natural cooling	
Display	LED	
Communication interface	RS485, CAN	
Topology	Isolated	
Connection method	Floor or Wall mounted (optional)	
Enclosure type	IP65	
Compliance	IEC 62619, IEC 60730, UN 38.3	

* Specifications are subject to change without prior notice.
1. Test conditions: 25°C, 0.2C charge & discharge, 100 % depth of discharge (DOD).