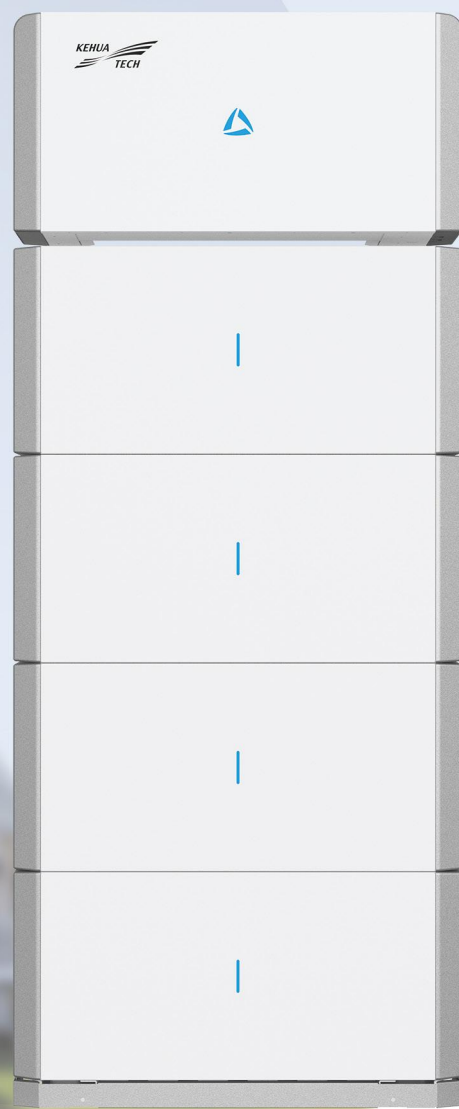


iStorageE3

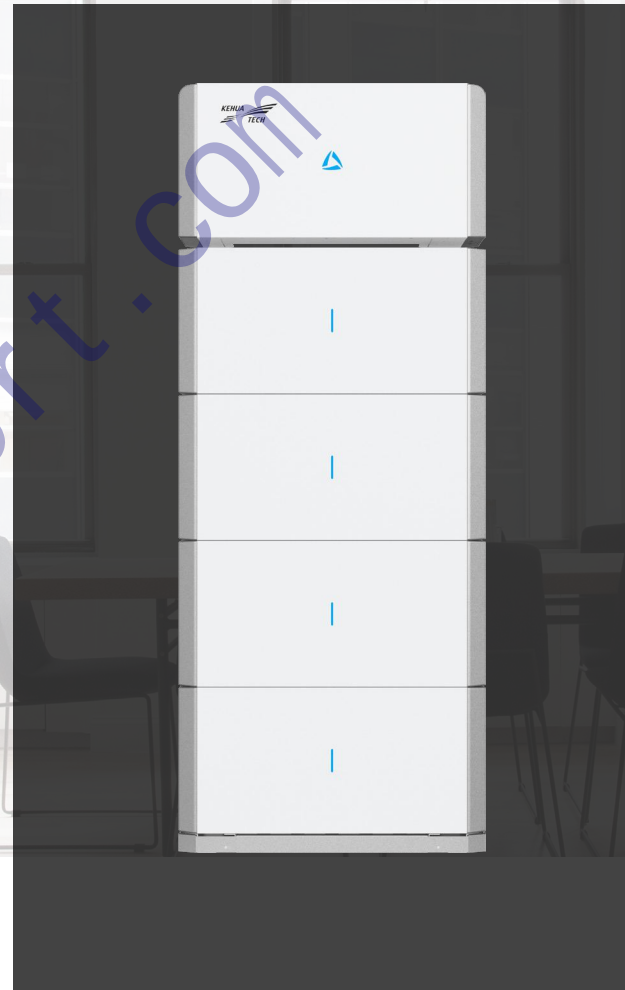
All-in-one Residential
Energy Storage System



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			45~55Hz		
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 specific 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).