

# Three-phase Residential Energy Storage System

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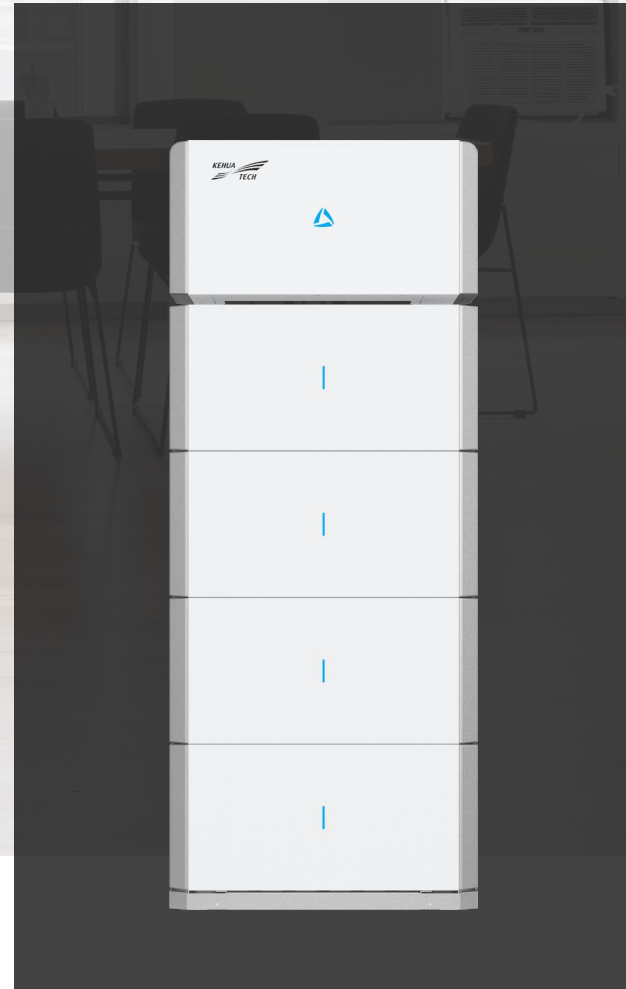
Stock Code

**002335.SZ**

Kehua Digital Energy

# Three-phase Residential Energy Storage System

## Three-phase ESS iStorageE3 Series 5K~12K



### Product Features



#### Independent

- Built-in EMS function with multi-mode operation (achieves energy independence)
- Real uninterruptible power supply, switching time <10ms
- Stronger back up power up to 20kW



#### Safe

- Physical and electrical dual isolation
- Modular fire protection integration
- AFCI function integration (optional)



#### Simple

- All-in-one design
- Modular installation & Quick plug connector
- Multiple battery expansion & Multiple system expansion



#### Smart

- Multi-point real-time monitoring, adaptive SOC management
- PACK-level battery management, active balance of charging and discharging
- Intelligent energy management with weather forecast function

# System Specification

Items	iStoragE3 5K Series	iStoragE3 6K Series	iStoragE3 8K Series	iStoragE3 10K Series	iStoragE3 12K Series
<b>System components</b>					
Inverter model	iStoragE3 5K	iStoragE3 6K	iStoragE3 8K	iStoragE3 10K	iStoragE3 12K
Number of Inverter	1				
Battery system model	iStoragE B5-S2				
Number of battery module	1~8				
<b>General</b>					
Cell technology	LiFePO4				
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 modules, with foundation)				
Noise emission	<30dB				
Cooling type	Natural cooling				
Altitude	2000m/6561ft				
Operating temperature	-20~50°C/-4~122°F				
Recommended operating temperature	15~30°C/59~86°F				
Storage temperature	-10~45°C/14~113°F				
Operating humidity	0~100%RH				
Display	LED & APP				
Installation method	Floor or Wall-mounted (optional)				
Communication Interface	Portal-WiFi (standard)/4G (optional), Meter-RS485, EMS-RS485 (sunspec)				
Certification	VDE AR-N-4105, IEC/EN 62109-1, IEC/EN 62109-2, CEI 0-21, EN61000, VDE V0124-100, EN 50549-1 (NCRFG)				

# Hybrid Inverter Specification

Items	iStoragE3 5K	iStoragE3 6K	iStoragE3 8K	iStoragE3 10K	iStoragE3 12K
<b>DC Input (PV)</b>					
Recommended Max. PV input power	9kWp		18kWp		
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	180Vdc				
DC (PV) switch	Yes				
<b>DC Input (Battery)</b>					
Battery voltage range	630~900Vdc				
<b>AC Input and Output (On-grid)</b>					
Rated AC output power	5kW	6kW	8kW	10kW	12kW
Rated AC output voltage	380/400Vac				
Grid voltage range	323-418Vac/340-440Vac				
Max. output current	7.6A	9.1A	12.2A	15.2A	18.2A
Max. input current	15.2A	18.2A	24.4A	30.4A	30.4A
Rated grid frequency	50Hz/60Hz				
Grid frequency range	45~55Hz/55~65Hz				
Power factor	>0.99 (rated power)				
Adjustable power factor	0.8 (leading)~0.8 (lagging)				
THDi	<3% (rated power)				
<b>AC Output (Back-up)</b>					
Rated AC output voltage	380/400Vac, 3W/N/PE				
Rated output frequency	50/60Hz				
Rated output power	5kW	6kW	8kW	10kW	12kW
Peak output power	12kW, 60s		20kW, 60s		
Peak output current	18.2A, 60s		30.4A, 60s		
Switch time	<10ms (without parallel), <300ms (parallel)				
Support the unbalance load	Yes				
<b>Efficiency</b>					
Max. efficiency	98.3%				
European efficiency	97.5%				
<b>General</b>					
Weight	30kg/66.14lb				
Dimension (W*H*D)	800*400*200mm/31.49*15.75*7.87in				
Enclosure type	IP65				

\*Specifications are subject to change without prior notice.

# Lithium-ion Battery Module

## iStoragE B5-S2 Series

### Product Features



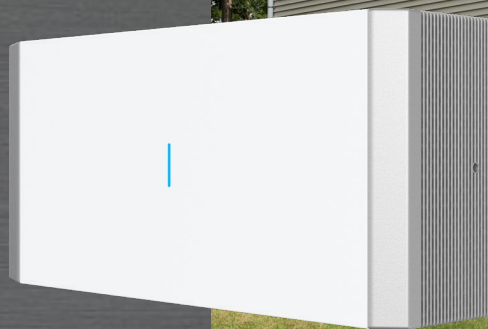
Safe and reliable



Intelligent and flexible



Easy O&M



Items	iStoragE B5L-S1	iStoragE B5-S1	iStoragE B5-S2
<b>General</b>			
Cell technology		LiFePO4	
Energy capacity		5kWh	
Usable capacity		5kWh	
Scalability		8	
Scalable capacity range		5~40kWh	
DOD		100%	
Rated power	2.5kW	4kW	4kW
Voltage range		360~500Vdc	650~900Vdc
Maximum charge current	6.94A	11.11A	6.15A
Maximum discharge current	6.94A 8.3A, 10s	11.11A 13.33A, 10s	6.15A 7.38A, 10s
Dimension (W*H*D)		800*380*200mm/31.49*14.6*7.87in	
Weight		55kg/121.25lb	
Operating temperature		-20~50°C/-4~122°F	
Recommended operating temperature		15~30°C/59~86°F	
Storage temperature		-10~45°C/14~113°F	
Humidity		0~100%RH	
Altitude		2000m/6561ft	
Cooling type		Natural cooling	
Display		LED	
Communication interface		RS485, CAN	
Topology		Isolated	
Connection method		Floor or Wall mounted (optional)	
Certification	UL1973, UL60730, UN38.3,		IEC 62619, IEC 60730, UN38.3

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### Kehua Digital Energy

Aggiungi: No. 457, Malong Road, Torch High-Tech Industrial Zone, Xiamen Fujian China

Tel: +86-592-5160516 Fax: +86-592-5162166 www.kehua.com

