



iStorageE1

All-in-one Residential
Energy Storage System

stock code

002335.SZ

Kehua Data Co., Ltd

PV+ESS for the future



Residential Energy Storage System

Single-phase ESS

iStoragE1 Series 3600~6000

iStoragE1 series is an all-in-one solar battery system which consist of hybrid inverter and battery modules. Owners can build a new home energy storage system with iStoragE1, 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



Simple

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



Safe

- Physical and electrical dual isolation
- Modular fire protection integration



Smart

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

System Specification

Items	iStorageE1 3600 Series	iStorageE1 5000 Series	iStorageE1 6000 Series
System components			
Inverter model	iStorageE1 3600	iStorageE1 5000	iStorageE1 6000
Number of Inverter	1		
Battery system model	iStorageE B5-S1		
Number of battery module	1~8		
General			
System capacity	5~40kWh		
Rated system power	3.6kW	5kW	6kW
Dimension (W*H*D)	800*1090*240mm/31.49* 42.91*9.45in (two battery modules, with foundation)		
Noise	< 35dB		
Cooling type	Natural cooling		
Altitude	3000m/9842ft (Derating above 2000m/6561ft)		
Operating temperature ¹	-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.

*1 Charge: 0~50°C. Discharge: -20~50°C.

Hybrid Inverter Specification

Items	iStorageE1 3600		iStorageE1 5000		iStorageE1 6000	
DC Input (PV)						
Max. PV input power			9.0kWp			
Max. PV input voltage			580Vdc			
No. of MPPTs			2			
No. of PV strings per MPPT			1/1			
Max. PV input current			15A/15A			
Max. short current			18.75A/18.75A			
MPPT voltage range			100~550Vdc			
Starting voltage			120Vdc			
DC (PV) switch			Yes			
DC Input and Output (Battery)						
Battery voltage range			360~500Vdc			
Max. charge/discharge current			25A			
AC Input and Output (On-grid)						
Rated AC output power	3.6kW		5.0kW		6.0kW	
Rated AC output voltage			230Vac			
Grid voltage range			180~270Vac			
Max. output current	15.6A		21.7A		26.1A	
Max. input current	31.2A		43.4A		52.2A	
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			230Vac			
Rated output frequency			50Hz			
Rated output power	3.6kW		5.0kW		6.0kW	
Peak output power	4.68kW, 60s 5.4kW, 30s		6.5kW, 60s 7.5kW, 30s		7.8kW, 60s	
Switch time ¹			<10ms			
Efficiency						
Max. efficiency			97.70%			
European efficiency			97.10%			
General						
Weight			17kg/37.47lb (including side plates)			
Dimension (W*H*D)			800*280*233mm/31.49*11.02*9.17in (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 61000-6-2/3, EN IEC 61000-3-11, EN 61000-3-12, VDE-AR-N 4105, XP C15-712-3, VDE V 0126-1-1, EN 50549-1, CEI 0-21, NTS SEPE-V2.1, UNE 217002, UNE 217001			

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*1 Except for countries with special requirements.

Lithium-ion Battery Module

iStoragE B5-S1

Product Features



Safe and reliable



Intelligent and flexible



Easy O&M



Items	iStoragE B5-S1
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	360~500Vdc
Maximum charge current	11.11A
Maximum discharge current	11.11A 13.33A, 10s
Dimension (W*H*D)	800*380*238mm/31.49*14.6*9.37in (including side plates)
Weight	51kg/112.43lb (including side plates)
Operating temperature ²	-20~50°C/-4~122°F
Recommended operating temperature	15~30°C/59~86°F
Humidity	0~100%RH (Non-condensing)
Altitude	3000m/9842ft (Derating above 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, IEC 62040-1

* Specifications are subject to change without prior notice.

*1 Test conditions: 25°C, 0.2C charge & discharge, 100 % depth of discharge (DOD).

*2 Charge: 0~50°C. Discharge: -20~50°C.

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