RAJA NEW ENERGY

Residential, Commercial and Industrial battery energy storage system datasheet

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RAJA NEW ENERGY TECHNOLOGY CO., LTD

About Us

10+

More than 10 years focus on New Energy

30000+

Over 30,000 square meters production base

40+

Projects in more than 40 countries

100+

Products and Services provided to over 100 enterprises

Chengdu RAJA New Energy Technology Co., Ltd.

Born in 2014 with the technological background from RAJA EV, RAJA New Energy was the first EV manufacturer in China to obtain an Electric Vehicle license. As a leader in China's logistics electric truck industry, RAJA has mastered the core technology of new energy "three-electrics" and independently developed BMS, MCU, VCU management systems, which are widely used in the production of new energy logistics vehicles, sanitation vehicles, as well as power batteries, energy storage batteries, household energy storage and other products. In the field of new energy lithium battery packs, we use automotive-grade battery design standards and specifications for design and production, with 100% full inspection before the products leave the factory and passing rigorous tests such as collision, extrusion, fire, and seawater.

The company is a national high-tech enterprise, with 260 professional qualifications and over 60 certifications and awards, such as the quality and safety management standard ISO 9001. As of December 2022, we have provided large-scale energy storage batteries for more than 60% of China's tunnel traction vehicles and are strategic partners of large state-owned enterprises and listed companies such as China Tower, SF Express, China Construction, and CCCC.

RAJA New Energy's business covers power batteries for electric vehicles such as two- and three-wheelers, logistics distribution vehicles, sanitation vehicles, energy storage batteries such as RV power supplies, communication base station backup batteries, household energy storage batteries, and overall solutions for household and commercial energy storage. We are actively expanding into overseas markets and committed to providing one-stop OEM/ODM services for partners in North America, Europe, Australia, and Southeast Asia.

We offer standardized products and customized solutions to meet the energy storage needs of users across various industries: power batteries for electric vehicles, energy storage battery products, battery swap solutions for electric light trucks, and residential and commercial energy storage solutions.

Leveraging over 10 years of expertise and experience in electric truck and power battery manufacturing, as well as energy storage system technology, we are committed to providing our global customers with cost-effective, reliable, and personalized new energy battery products and energy storage solutions. RAJA New Energy brings you intelligent, efficient, safe, and green power to collectively create a beautiful, green future!

RAJA

RAJA NEW ENERGY FA3000A

3KW Integrated Energy Storage System

3KW Integrated Energy Storage System	FA3000A
Inverter type	Off-grid
AC rated power	3.2kW
AC peak power	6.4kW
Vac input power	230Vac±5%
Vac output power	230Vac±5%
PV MPPT range	55-450V
Maximum pv input current	10A
Maximum charging current	50A
Rated voltage	25.6V
Rated capacity	100Ah(0.5C/25℃)
Rated energy	2.56kWh(0.5C/25℃)
Display	LCD/APP
Size	590X680X243mm
Weight	58kg
Protection level	IP40
working temperature	Charging : 0-55℃ Discharging : -20-60℃
Storage temperature	10-35℃
Certification	UN38.3、MSDS、IEC 62619、IEC 61000-6-1、IEC 61000-6-3、ROHS、WEEE

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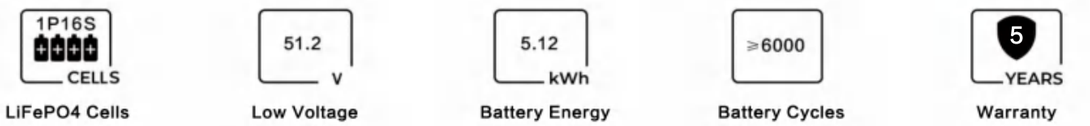
RAJA NEW ENERGY FA3000A

5KW Integrated Energy Storage System

5KW Integrated Energy Storage System	FA5000A
Inverter type	Off-grid
AC rated power	5.5kW
AC peak power	11kW
Vac input power	230±5%
Vac output power	230±5%
PV MPPT range	120-450Vdc
Maximum pv input current	20A
Maximum charging current	50A
Rated voltage	51.2V
Rated capacity	100Ah(0.5C/25℃)
Rated energy	5.12kWh (0.5C/25℃)
Display	LCD/APP
Size	590X800X240mm
Weight	70kg
Protection level	IP40
working temperature	Charging : 0-55℃ Discharging : -20-60℃
Storage temperature	10-35℃
Certification	UN38.3、MSDS、IEC 62619、IEC 61000-6-1、IEC 61000-6-3、ROHS、WEEE

Low Voltage Wall Mounting Battery System			FD5000B
Number of modules	1	2	3
Rated energy	5.12kWh	10.24kWh	15.36kWh
Battery capacity	100Ah	200Ah	300Ah
Rated voltage		51.2V	
Working voltage range		40~58.4V	
Configuration	1P16S	2P16S	3P16S
Battery type		LFP	
Cycle life		>6000	
Rated charging current	50A	100A	100A
Rated discharging current	100A	100A	100A
Display		LCD	
Communication		CAN/RS485	
Working temperature		Charging: 0-55℃ Discharging: -20-60℃	
Storage temperature		10-35℃	
Environmental humidity		0~95%	
Application altitude		2000m	
Size		514X560X191mm (Single)	
Weight		46kg (Single)	
Protection level		IP55	
Installation		Wall Mounting	
Certification		UN38.3、MSDS、IEC 62619、IEC 61000-6-1、IEC 61000-6-3、ROHS、WEEE	



RAJA FD5000B

FD5000B Low Voltage Wall Mounting Battery System

High Voltage Stackable Battery System						FD3000A
Number of modules	2	3	4	5	6	7
Rated energy	6.144kWh	9.216kWh	12.288kWh	15.360kWh	18.432kWh	21.504kWh
Battery capacity	30Ah					
Rated voltage	204.8V	307.2V	409.6V	512.0V	614.4V	716.8V
Working voltage range	160~233.6V	240~350.4V	320~467.2V	400~584.0V	480~700.8V	560~817.6V
Configuration	2P64S	2P96S	2P128S	2P160S	2P192S	2P224S
Battery type	LFP					
Cycle life	>6000					
Rated charging current	15A					
Rated discharging current	30A					
Display	LCD					
Communication	CAN					
Working temperature	Charging: 0-55℃ Discharging: -20-60℃					
Storage temperature	10-35℃					
Environmental humidity	0~95%					
Application altitude	2000m					
Size	520*350*624mm	520*350*800mm	520*350*976mm	520*350*1152mm	520*350*1328mm	520*350*1504mm
Weight	64kg	89kg	114kg	139kg	164kg	189kg
Protection level	IP65					
Installation	Ground stacking					
Certification	UN38.3、MSDS、IEC 62619、IEC 62477-1、IEC 61000-6-1、IEC 61000-6-3、ROHS、WEEE					

2P32S CELLS
LiFePO4 Cells

102.4 V
High Voltage

3.072 kWh
Battery Energy

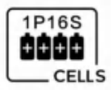
≥6000
Battery Cycles

5 YEARS
Warranty

RAJA FD3000A

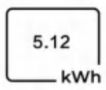
FD3000A High Voltage Stackable Battery System

High Voltage Stackable Battery System					FD5000C
Number of modules	4	5	6	7	8
Rated energy	20.48kWh	25.60kWh	30.72kWh	35.84kWh	40.96kWh
Battery capacity	100Ah				
Rated voltage	204.8V	256V	307.2V	358.4V	409.6V
Working voltage range	160~233.6V	200~292V	240~350.4V	280~408.8V	320~467.2V
Configuration	1P64S	1P80S	1P96S	1P112S	1P128S
Battery type	LFP				
Cycle life	>6000				
Rated charging current	50A				
Rated discharging current	100A				
Display	LCD				
Communication	CAN				
Working temperature	Charging: 0-55℃ Discharging: -20-60℃				
Storage temperature	10-35℃				
Environmental humidity	0~95%				
Application altitude	2000m				
Size	520X350X1016mm	520X350X1202mm	520X350X1388mm	520X350X1574mm	520X350X1760mm
Weight	200kg	245kg	290kg	335kg	380kg
Protection level	IP55				
Installation	Ground stacking				
Certification	UN38.3、MSDS、IEC 62619、IEC 62477-1、IEC 61000-6-1、IEC 61000-6-3、ROHS、WEEE				



LiFePO4 Cells

High Voltage



Battery Energy

Battery Cycles

Warranty

RAJA FD5000C

FD5000C High Voltage Stackable Battery System

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Liquid cooling battery cabinet

- Liquid cooling design: advanced liquid cooling system with full process temperature control management
- Safety design: Complete electrical and fire protection systems, Use high-temperature and high-pressure resistant fireproof materials
- Simple design: fast installation, convenient maintenance, EMS automatic diagnosis and fault location regularly
- Durability design: Long life battery system, capable of thousands of charging and discharging cycles

Project	Specifications			
	System technical parameters			
Battery capacity	Lithium iron phosphate battery (LFP) /280Ah			
Number of modules	5	6	7	8
Configuration	1P240S	1P288S	1P336S	1P384S
Rated energy	215kWh	258kWh	301kWh	344kWh
Rated voltage	768V	921.6V	1075.2V	1228.8V
Working voltage range	672Vdc~864Vdc	806.4V~1036.8Vdc	940.8~1209.6Vdc	1075.2~1382.4Vdc
Rated charging/discharing power	0.5P			
Storage time	2h			
Grid type	380V AC(± 15%)			
Output frequency	50/60HZ (±5%)			
System efficiency	>90%			
	General parameters			
Communication	CAN/RS485/Ethernet			
EMS	Integrated			
Cycle life	>6000			
Cooling method	Liquid cooling			
weight	2300~3200kg			
Size	1300*1300*2300mm			
Protection level	IP66/C5Hanticorrosive			
Working temperature	Charging0-55° C, Discharging-20-55° C			
Application altitude	≤2000m			
Environmental humidity	0%~95%, No condensation			
Floor area	5m²			
Noise level	≤75dB			
Fire protection system	Aerosol automatic fire extinguishing system			
Certification	UN38.3、MSDS、IEC62619、IEC62477-1、IEC62109、IEC61000-6-1、IEC61000-6-3、ROHS、WEEE			

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100kW/215kWh integrated cabinet

- Integrated design: The inverter and battery module allows for direct conversion of AC and DC power
- Backup power design: It can serve as a backup power source to provide emergency power supply in case of grid failure or power outage. It can provide continuous power for critical equipment or important loads
- Intelligent management design: The intelligent management system monitors and manages the storage, release, and distribution of energy in real-time. Intelligent scheduling based on algorithms and data analysis to achieve optimal energy management
- Energy supply design: Advanced battery technology, reliable energy storage solutions, maintaining stable energy supply, helping enterprises overcome energy shortages

Project	Specifications
	System technical parameters
Battery capacity	Lithium iron phosphate battery (LFP) /280Ah
Configuration	1P240S
Rated energy	215kwh
Rated voltage	768V
Working voltage range	672Vdc~864Vdc
Rated charging/discharing power	0.5P
	AC section parameters
Storage time	2h
Rated AC power	100KW
Maximum output power	110KW
Rated AC current	152A
Maximum output current	167A
Rated grid voltage	380V AC(± 15%)
Rated grid frequency	50/60HZ (±5%)
Power factor	-1~1 (leading~lagging)
Total harmonic current distortion (THDi)	<3% (Rated power)
System efficiency	>90%
Overload capacity	1.1times(long-term)
	General parameters
Communication	CAN/RS485/Ethernet
EMS	Integrated
Cycle life	>6000
Cooling method	Liquid cooling
weight	2.7T
Size	1300*1300*2100mm
Protection level	IP54/C5H anticorrosive
Working temperature	Charging0-55° C，Discharging-20-55° C
Application altitude	≤2000m
Environmental humidity	0%~95%，No condensation
Floor area	8 m^2
Noise level	≤75dB
Fire protection system	Aerosol automatic fire extinguishing system
Certification	UN38.3、MSDS、IEC62619、IEC62477-1、IEC62109、IEC61000-6-1、IEC61000-6-3、ROHS、WEEE
Grid standard	England: G99; Germany: VDE-AR-N 4105; Spain: NTS 631,UNE 217001 relegation un 217002; RD647; RD413: RD1699; Italy: CEI 0-21; Hungary: MSZ EN 50438; IEC 62109; EU: EN 50549

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20Ft 3.4MWh Liquid cooling container

- Integrated in a 20ft standard container, easy transportation and project delivery
- Pre-installation design, greatly reduces the workload of site installation
- Non-walk-in design, more convenient maintenance
- Three-level pressure relief valve design: battery cell explosion-proof valve, pack explosion-proof valve, container pressure reliefplate

Project	Specifications
	System technical parameters
Battery capacity	Lithium iron phosphate battery (LFP) /280Ah
Configuration	10P384S
Rated energy	3400kwh
Rated voltage	1228.8V
Working voltage range	1036.8V~1401.6V
Rated charging/discharing power	0.5P
	AC section parameters
Storage time	2h
Rated AC power	3150kVA
Rated grid voltage	10~35kV
Rated grid frequency	50/60HZ (±5%)
Power factor	-1~1 (leading~lagging)
Total harmonic current distortion (THDi)	<3% (Rated power)
System efficiency	>90%
Overload capacity	1.1times(long-term)
	Transformer parameters (Optional)
Rated power	3150kVA
LV/MV voltage	0.63kV/10-35kV
Transformer vector	Dy11
Cooling method	Liquid cooling
	General parameters
Communication	CAN/RS485/Ethernet
EMS	Integrated
Cycle life	>6000
Cooling method	Liquid cooling
weight	35T
Size	6058*2896*2438mm
Protection level	IP54
Working temperature	Charging0-55° C, Discharging-20-55° C
Application altitude	≤2000m
Environmental humidity	0%~95%, No condensation
Floor area	15 m^2
Noise level	≤75dB
Fire protection system	Aerosol automatic fire extinguishing system
Certification	UN38.3、MSDS、IEC62619、IEC62477-1、IEC62109、IEC61000-6-1、IEC61000-6-3、ROHS、WEEE

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Power Your Green Life