

IDC Li-ion Battery Power Solution



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About Us

As a subsidiary of Sunwoda Electronic Co., Ltd. (SZ 300207), Sunwoda Energy Solution Co., Ltd. (Sunwoda Energy) is a National High-tech Enterprise. With the integration and applied technology of lithium-ion battery energy storage, Sunwoda Energy devotes to utility energy storage, C&I energy storage, residential energy storage, IDC backup power and integrated energy service, providing customers with energy storage system services and all-round energy solutions.

Regarding Shenzhen as the technology innovation center, Sunwoda Energy actively develops both domestic and overseas market and expands global energy storage business. Projects implemented cover various applications including ancillary service for grids, renewable power generation and industrial electricity, large/medium communities, commercial & industrial buildings and energy-efficient home, frontier stronghold and islands, data centers, communication base, and integrated parks.

With the principle of "technology oriented, quality first and service oriented," Sunwoda Energy dedicates to developing energy storage business and providing customers with satisfactory products through continuous innovation in the future. Sunwoda Energy aims to become a world-class energy service provider, contributing to the development of clean, green and efficient energy and the construction of global energy internet.

Industrial Park



Energy Storage Solutions

Founded in 1997, we are a professional energy storage solution provider with solid experience of ESS engineering and manufacturing. We focus on delivering customized cost-efficient energy storage service for grid, industries and buildings, datacenters, households and communities. Our projects implemented worldwide cover various capacity and environment.

IDC Backup Power Solution

Sunwoda Energy IDC backup power solution, which aims to provide Lithium-ion battery energy storage products with high energy density, high power density and high temperature resistance to improve accessibility and economy of IDC backup power application, is characterized with modular design, parallel support and independent maintenance, reducing energy consumption effectively.



Smart Manufacturing

Fully automatic and smart manufacturing, solid experience in battery pack



Abundant Resources of Battery Cells

Abundant resources of battery cells, cover all needs of network energy applications



System Integration

Intelligent technology and application engineering in combination, highly integrated system



Flexible Configuration

Direct power supply and effective power back up

Applications



Datacenter



IoT



Telecom BTS



Public/Private Network

01. Centralized Power Supply

- Large scale datacenter

02. Sectionalized Power Supply

- Containerized datacenter
- Modularized datacenter

03. Distributed Power Supply

- Scorpio cabinet
- OCP

04. Communication Base Power Supply

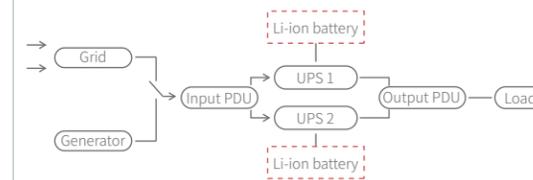
- Communication base
- RASM

05. Special Network Power Supply

- Public security, fire suppression, military force, etc

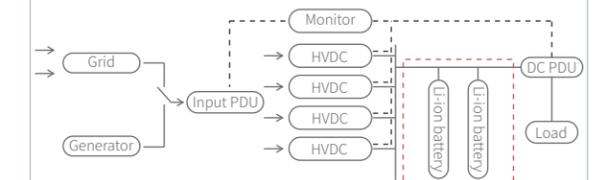
IDC Backup Power Solution

UPS Backup Power Solution



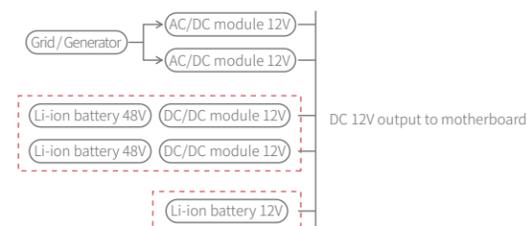
Advantages: safety, high-rate charge, small footprint

HVDC Backup Power Solution



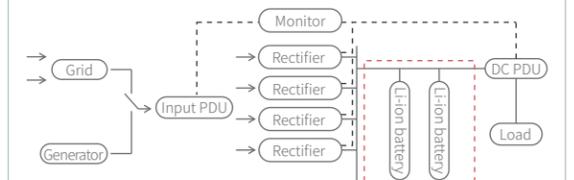
Advantages: modular design, hot swappable, independent maintenance available for parallel

Cabinet-level Backup Power Solution



Advantages: modular design, hot swappable, independent maintenance available for parallel

Telecom BTS Backup Power Solution



Advantages: natural cooling, high power density, front maintenance available for parallel

Cabinet Type



Features

- 

High Rate Charge & Discharge
Battery string supports high rate charge & discharge
- 

Modular Design
PACK with modular design can be maintained independently
- 

Flexible Configuration
Flexible in series or parallel connection, support three-level UPS system if the module quantity is even number
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High Compatibility
Replace lead acid battery without modifying the UPS
- 

Safe and Reliable
Smart BMS control, completed protect functions, the battery system being monitored all the time



Model		SRI-48050A2F1
Cell type	LFP	
Rated voltage range	204.8~614.4V	
Battery string voltage range	176~700.8V	
Battery pack series number	4~12	
Rated capacity	50Ah	
Cell	3.2V/50Ah	
Rated discharge current	80A	
Max. discharge current	100A	
Max. charge current	50A	
Back-up power time	30mins	
Cycle life	≥3500 cycles (@25 C , 0.5C charge/discharge, 100%DOD)	
Cooling	Natural cooling	
Dimension	W	600mm
	H	1200/1600/2000/2500mm
	D	800/1200mm
Weight	270~580kg	
Communication	RS485, CAN	
Max. parallel numbers	10	
Display mode	7-inch LCD screen	
Charging temperature range	0~45 C	
Discharging temperature range	-20~60 C	
Certification	IEC62619/UN38.3	

Model		SRI-48050A4F1
Cell type	LFP	
Rated voltage range	204.8~614.4V	
Battery string voltage range	176~700.8V	
Battery pack series number	4~12	
Rated capacity	50Ah	
Cell	3.2V/50Ah	
Rated discharge current	200A	
Max. discharge current	250A	
Max. charge current	100A	
Back-up power time	15mins	
Cycle life	≥3500 cycles (@25 C , 0.5C charge/discharge, 100%DOD)	
Cooling	Fan cooling	
Dimension	W	600mm
	H	1200/1600/2000/2500mm
	D	900/1200mm
Weight	270~580kg	
Communication	RS485, CAN	
Max. parallel numbers	10	
Display mode	7-inch LCD screen	
Charging temperature range	0~45 C	
Discharging temperature range	-20~60 C	
Certification	IEC62619/UN38.3	

Rack Type



Features

Standard product

-  Standard rack design
-  High energy density
-  Support parallel
-  Perfect protection function
short circuit, over current & voltage & temperature and under voltage, etc

Features

Customized product

-  Standard rack design
-  Built-in power module
-  High Reliability



Model	SMI-4850A1F1	SMI-48100A1F1
Cell type	LFP	LFP
Rated voltage	51.2V	48V
Battery string voltage range	43.2~57.6V	40.5~54V
Rated capacity	50Ah	100Ah
Cell specifications	3.2V/50Ah	3.2V/100Ah
Max. discharge current	50A	100A
Max. charge current	50A	50A
Cycle life	≥3500 cycles (@25°C, 0.5C charge/discharge, 80%DOD)	≥3500 cycles (@25°C, 0.5C charge/discharge, 80%DOD)
Cooling	Natural cooling	Natural cooling
Dimensions (W*H*D)	442*130*320mm	442*130*480mm
Weight	25kg	45kg
Communication	RS485, RS232	RS485, RS232
Max. parallel numbers	8	8
Charging operation temperature range (°C)	0~55°C	0~55°C
Discharging operation temperature range (°C)	-20~60°C	-20~60°C
Certification	IEC62619/UN38.3	IEC62619/UN38.3



Model	B-230012
Cell type	LFP
Modules configuration	72S5P
Rated voltage	230V
Battery string voltage range	180~260V
Rated capacity	12Ah
Rated charging current	0.2C
Rated discharging current	2C
Protection degree	IP20
Operating humidity	10% ~ 90%RH
Cooling	Fan cooling
Dimension (W*H*D)	440*172*656mm
Weight	30kg
Charging temperature range	0~50°C
Discharging temperature range	-20~65°C
Storage temperature	-20~25°C / 12 months
	-20~45°C / 3 months
	-20~60°C / 1 month
Certification	IEC62619, UN38.3

Model	COMET48C
Cell type	NCM
Voltage range	90~264Vac
Rated frequency	50/60Hz
Input current	15.0A MAX (Fast Fuse)
Bypass efficiency	≥98%
Rated output	220 Vac / 50Hz (<0°C, shift to 110VAC @ low battery)
Rated output power	800/1000Watt/VA
Battery life cycle	≥ 800 times, capacity ≥80% @25°C
Charge current	13.5A Typ
Battery rated capacity	1500Wh
Backup time (@25°C)	≥2h @500W Load
Operating temperature range	-20~55°C
Charge temperature range	0~45°C
cooling	Fan cooling
Dimensions (W*H*D)	440*175.8*375mm
Weight	23kg
Certification	CE, ROHS, REACH, UN38.3

Embedded Type



Features

-  High Rate Discharge
-  Completed Protection Functions
-  Support Hot Swappable
-  High Power Density



Model	B-014002	B-014006	B-012002
Cell type	NCM	NCM	LFP
Modules configuration	4S1P	4S3P	4S1P
Rated voltage	14.4V	14.4V	12.8V
Battery string voltage range	12~16.8V	12~16.8V	12~14.6V
Rated capacity	2Ah	6Ah	2.3Ah
Rated charging current	1C	2C	2C
Rated discharging current	15C	15C	4C
Protection degree	IP20	IP20	IP20
Operating humidity	10%~90%RH	10%~90%RH	10%~90%RH
Cooling	Natural cooling	Natural cooling	Natural cooling
Dimension (W*H*D)	24*32*280mm	70*29*280mm	112*31*78.5mm
Weight	0.27kg	1.04kg	0.4kg
Charging temperature range		0~50 C	
Discharging temperature range		-20~65 C	
Storage temperature		-20~25 C / 12 months	
		-20~45 C / 3 months	
		-20~60 C / 1 month	
Certification		IEC62619, UN38.3	



Model	B-240003	B-055015	
Cell type	LFP	NCM	
Modules configuration	75S1P	15S7P	
Rated voltage	240V	55.5V	
Battery voltage range	210~262V	42~63V	
Rated capacity	3Ah	15Ah	
Rated charging current	0.2C	0.2C	
Rated discharging current	4C	5C	
Protection degree	IP20	IP20	
Operating humidity	10%~90%RH	10%~90%RH	
Cooling	Fan cooling	Fan cooling	
Dimension (W*H*D)	145*124*720mm	245*43*770mm	
Weight	15kg	15kg	
Charging temperature range		0~50 C	
Discharging temperature range		-20~65 C	
Storage temperature		-20~25 C / 12 months	
		-20~45 C / 3 months	
		-20~60 C / 1 month	
Certification		IEC62619, UN38.3	

Rack Type Outdoor



Features

-  IP65
-  Wall or pole installation
-  Wide operating environment temperature
-  High Cycle Life
-  Completed Protection Functions



Model	SMO-4820A1F1	SMO-4825A1F1	SMO-4850A1F1
Cell type	LFP	LFP	LFP
Rated voltage	51.2V	51.2V	51.2V
Rated capacity	20Ah@0.5C	25Ah@0.5C	50Ah@0.5C
Max. charging current	10A (0.5C)	12.5A (0.5C)	25A (0.5C)
End charge voltage	57.6V	57.6V	57.6V
Rated discharging current	10A (0.5C)	12.5A (0.5C)	25A (0.5C)
Max. discharging current	20A (1C)	30A (1.2C)	50A (1C)
End discharging voltage	43.2V	43.2V	43.2V
Operating temperature	-40~55 C	-30~55 C	-40~55 C
Storage Temperature	-20~45 C (in 1 month)	-20~45 C (in 1 month)	-20~45 C (in 1 month)
	15~35 C (in 6 months)	15~35 C (in 6 months)	15~35 C (in 6 months)
Warranty	10 years	10 years	10 years
Humidity	10%~90%RH no condensation	10%~90%RHno condensation	10%~90%RHno condensation
Communication	RS485	RS485	RS485
Protection degree	IP65	IP65	IP65
Cycle Life	1500 cycles@ 0.5C 100%DOD 25 C	1500 cycles@ 0.5C 100%DOD 25 C	1500 cycles@ 0.5C 100%DOD 25 C
Dimensions (W*H*D)	290*400*179mm excluding monting ears	290*400*179mm excluding monting ears	320*450*240mm excluding monting ears
Weight	18kg	19kg	28.5kg

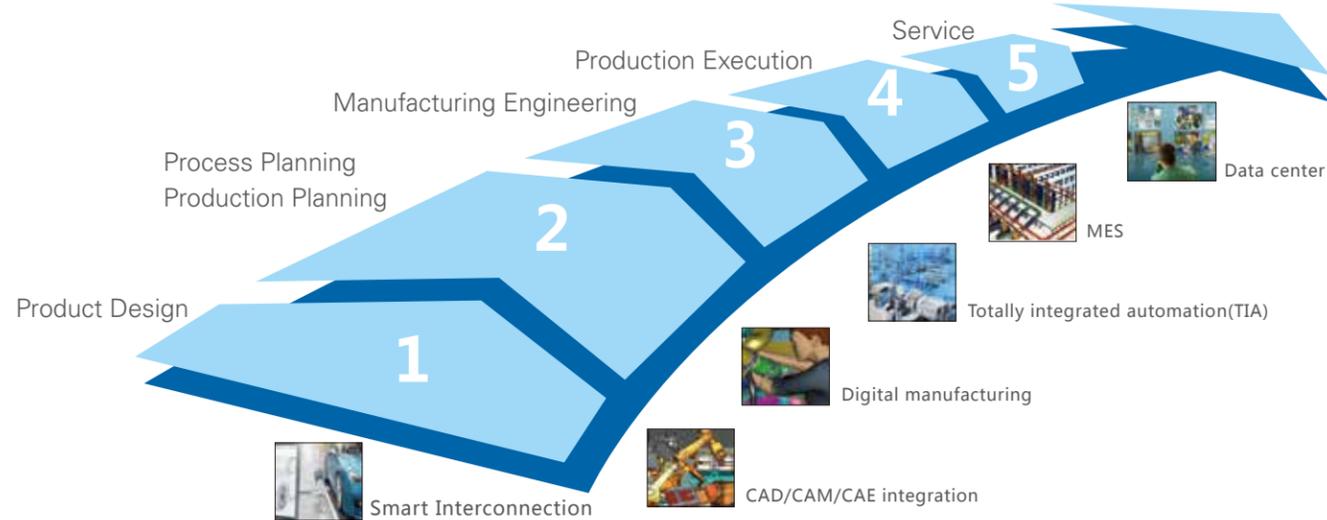
Smart Interconnection

Internally, we build a smart factory with lower production costs and higher product profitability. We optimize production management and provide digital factory system solution through automated production line upgrade and R&D on core equipment. Manufacturing process including fully flexible and automated assembly line, battery charge-discharge testing equipment and AGV automated logistics system, MES, big data collection and analysis system is integrated effectively.

Externally, we actively take advantage of global automation and intelligent manufacturing resources and develop smart manufacturing business. Deploying business intelligence (BI) and building an industrial IoT platform based on convergence of IoT, cloud computing and big data, we provide smart factory solution, strive to become the leading equipment and solution provider of smart factory continuously improve the core competitiveness and achieve the performance growth in the intelligent manufacturing field.



Smart Manufacturing



Testing Services

- Battery cell material testing
- International battery safety certification
- Environmental reliability testing
- Various types of battery testing
- Chemical and environment protection testing
- QI certification



Project Reference

Micro Grid



National "863 Subject" 250kW/580kWh Campus Smart Microgrid Key Technology Research and Integration Demonstration Project



Haining 100 kW/200 kWh Active Distribution Network Project



Antarctic Research Station 100 kW/160 kWh wind/PV/diesel energy storage microgrid project

C&I



Shenran Building 100kW/200kWh Energy Storage Project



Tibet 50kW/240kWh Smart Microgrid Project



Shanxi 72kWh Wind and Solar Storage Microgrid Demonstration Project

Datacenter



Ali datacenter 768Wh HVDC Li ion battery project, Zhangjiakou, China



Huizhou Sunwoda Boluo park 40 kVA UPS Li-ion battery project



Shenzhen Sunwoda Guangming information center 120Wh datacenter UPS backup power project



30kVA Information Center Backup Power Project in Sunwoda Jinye Creative Park



Taiwan Yibang International 400kWh Data Center Backup Power Project



South Korea Amogreentech 300kVA data center backup power project