



GREENSUN



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A Dedicated BESS(battery energy storage system) Provider

Greensun, is a dedicated BSS (battery storage system) provider, by consolidating our expertise in electrochemistry power electronics and system integration, we have been providing reliable and affordable ESS battery products and solutions to the global market, and been significantly contributing to a 10-years increasing rate by double, enabling our market position as one of the reliable suppliers of lithium battery storage world widely.

Long History&Experienced



10Years
in Energy Storage Industry



100+
Countries & Regions



Residential Energy
Storage System



C&I Energy
Storage System

Wide Product Senario

- 1/ 12.8V 25.6V 48V Low Voltage LFP Bsttery
- 2/ 25.6V 48V Wall Mounted LFP Battery
- 3/ 25.6V 48V Rack Mount LFP Battery
- 4/ High Voltage Stacked LFP Battery System
- 5/ High Voltage Rack Mount LFP Battery System
- 6/ Container Lithium Battery System

Global Cumulative Sales Performance



Obtain certification





12.8V/25.6V

LiFePO4 Battery

- Certified Grade A Cells
- Safety&Reliability with LiFePO4
- Lighter Weight & Easy to Install
- 4500 Cycles Long Life Time
- Multiple Protection
Over charger/
Over discharge/Over-current, etc.
- OEM/ODM Service
Wide application: RV/marine/
Camper Van/Backup/UPS/EPS/
Off Grid Solar System/ESS.....

Specification					
Model	GRB12.8-100Ah	GRB12.8-150Ah	GRB12.8-200Ah	GRB25.6-100Ah	GRB25.6-200Ah
Battery Type	liFePO4(LFP)	liFePO4(LFP)	liFePO4(LFP)	liFePO4(LFP)	liFePO4(LFP)
Nominal Voltage (V)	12.8V	12.8V	12.8V	25.6V	25.6V
Nominal Capacity	100Ah	150Ah	200Ah	100Ah	200Ah
Nominal Capacity (Wh)	1280Wh	1920Wh	2560Wh	2560Wh	5120Wh
Discharge Cut-off Voltage (V)	10V	10V	10V	20V	20V
Charge Voltage (V)	14.4V	14.4V	14.4V	28.8V	28.8V
Dimension (mm)	330x171x214 mm	385*190*245mm	530*207*215 mm	530x207x215 mm	440*442*179mm
Weight (kg)	12Kg	16Kg	24Kg	24Kg	45Kg
MAX Charge/Discharge Current	100A(Max)				
Working Temperature	0℃~50℃ Charge -10℃ ~50℃ Discharge				
Case	ABS	ABS	ABS	ABS	Metal
Design Life	15 years+				
Cycle Life	4500Cycles				

Main Application:
UPS, EPS, Telecom, Solar or Wind Energy Storage, Medical Equipment, Security Equipment, Lighting, LED, Fire Emergency, Energy Storage, RV, Boat.....

RESS

Residential Energy Storage System



Rack Mount

LV LiFePO4 Battery

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Safety
*Adopt LiFePO4 battery
&Multi-protection from BMS*
- 

Compatibility
Compatible with most brands inverter
- 

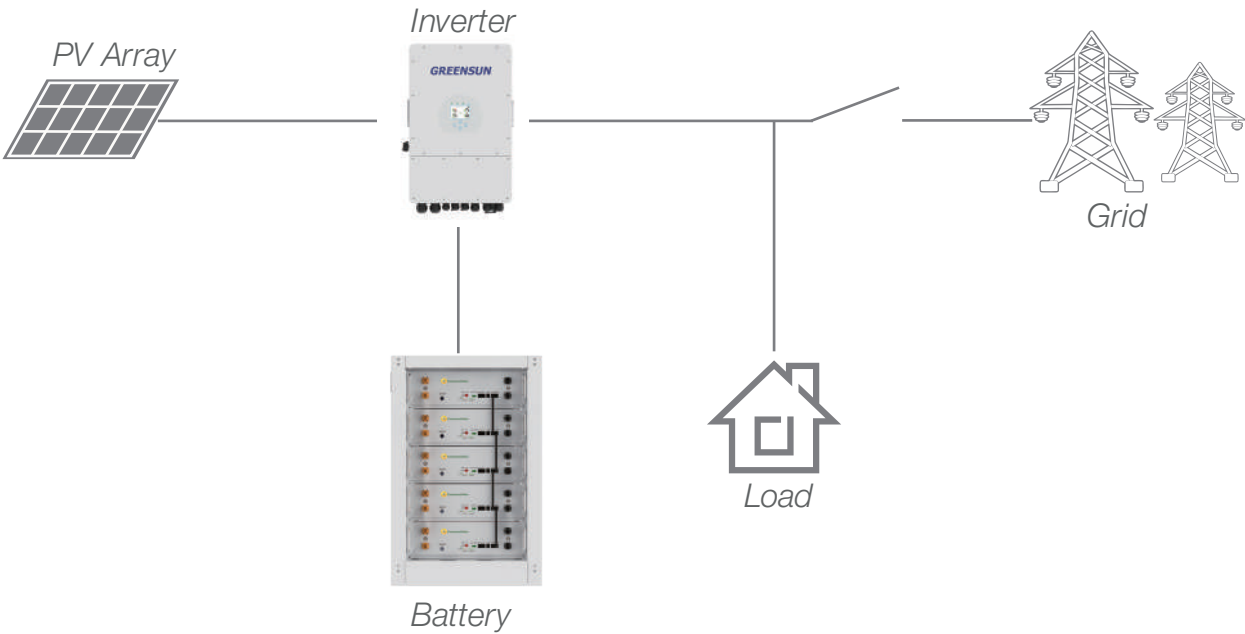
Optimal Electricity Cost
Long cycle life and superior performance
- 

Easy to Scale Up
Be workable to be parallel
- 

Compact Size & East Installation
Module design help for quick installation

Specification		
Model	GRB51.2-100 (Rack Type)	GRB51.2-200 (Rack Type)
Battery Type	liFePO4(LFP)	liFePO4(LFP)
Nominal Voltage (V)	51.2V	51.2V
Nominal Capacity	100Ah	200Ah
Nominal Capacity (KWH)	5.12KWH	10.24KWH
Discharge Voltage (V)	43V	43V
Charge Voltage (V)	57V	57V
Dimension (mm)	440*442*179mm	480*602*250mm
Weight (kg)	50Kg	90Kg
MAX Charge/Discharge Current	50A(Recommended) 100A(Max)	
Communicaiton	RS485/RS232/CAN	
Operating Temp Range	-10℃ ~50℃	
Transport or StorageTemp Range	-20℃ ~45℃	
Design Life	15 years+	
Cycle Life	>6500Cycles. 25℃	

* 15S 48V 100AH/200AH is available



RESS

Residential Energy Storage System



Rack Mount

Low Voltage ESS

- Safety**
Adopt LiFePO4 battery
&Multi-protection from BMS
- Compatibility**
Compatible with most brands inverter
- Optimal Electricity Cost**
Long cycle life and superior performance
- Easy to Scale Up**
Be workable to be parallel
- Compact Size & East Installation**
Module design help for quick installation

Specification		
Model	GRB51.2-100AH	
Battery Chemistry	LiFePO4(LFP)	
Capacity (Ah)	100Ah	
Scalability	Max. 64 pcs pack (327kWh) in parallel (Max. 32 pcs no external setup)	
Nominal Voltage (V)	51.2	
Operating Voltage (V)	43.2~57.6	
Energy (kWh)	5.12	
Usable Energy (kWh)	5.12	
Charge/Discharge Current (A)	Recommend	50
	Max.	100
	Peak(2mins,25℃)	120
Recommend Depth of Discharge		90%
Dimension (W/H/D, mm)		450*133*500
Weight Approximate (kg)		45
Master LED indicator	5LED(SOC:20%~100%)	
	3LED (working, alarming, protecting)	
IP Rating of enclosure		IP20
Working Temperature		Charge:0℃~55℃ ; Discharge:-20℃~55℃
Storage Temperature		0℃~35℃
Humidity		5%~95%
Altitude		≤2000m
Cycle Life		≥6000(25℃±2℃,0.5C/0.5C,90%DOD,70%EOL)
Installation		Wall-Mounted, Floor-Mounted, Rack-Mounted (19-inch standard cabinet, cabinet depth ≥600mm)
Communication Port		CAN2.0, RS485

RESS

Residential Energy Storage System



Powerwall

LiFePO4 Battery

Specification		
Model	GRB51.2-100	GRB51.2-200
Battery Type	liFePO4(LFP)	liFePO4(LFP)
Nominal Voltage (V)	51.2V	51.2V
Nominal Capacity	100Ah	200Ah
Nominal Capacity (KWH)	5.12KWH	10.24KWH
Discharge Voltage (V)	43V	43V
Charge Voltage (V)	57V	57V
Dimension (mm)	535*520*160mm	790*580*215mm
Weight (kg)	49.0Kg	98Kg
MAX Charge/Discharge Current	100A(Max)	
Communicaiton	RS485/RS232/CAN	
Working Temperature	0℃~50℃ Charge -10℃ ~50℃ Discharge	
Shelf Temperature	-20℃ ~60℃	
Design Life	15 years+	
Cycle Life	6500Cycles	

* 15S 48V 100AH/200AH is available

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Energy Storage

 - Best Suitable for ESS HESS Off-grid/Hybrid Solar System UPS
 - >6500Cycles
 - Easy Move&Installation
 - Most Inverters can be matched with our Battery
- 

Outage Protection

 - Intergrated Advanced BMS
- 

Power Your Home

 - Parallel Connection to expand capacity

RESS

Residential Energy Storage System



Mobile Battery

LV LiFePO4 Battery



 Energy Storage

 Outage Protection

 Power Your Home

- Best Suitable for ESS HESS Off-grid/Hybrid Solar System /UPS/EPS/Telecom
- >6500Cycles
- Easy Move&Installation
- Most Inverters can be matched with our Battery
- Intergrated Advanced BMS
- Parallel Connection to expand capacity

Specification			
Model	GRB51.2-280Ah	GRB51.2-300Ah	GRB51.2-314Ah
Battery Type	liFePO4(LFP)	liFePO4(LFP)	liFePO4(LFP)
Nominal Voltage (V)	51.2V	51.2V	51.2V
Nominal Capacity	280Ah	300Ah	314Ah
Norminal Energy (KWH)	14.33KWh	15.36KWh	16.08KWh
Discharge Voltage (V)	44.0V-58.4V	44.8V-58.4V	44.8V-58.4V
Charge Voltage (V)	56.0V-58.4V	56.0V-58.4V	56.0V-58.4V
Dimension (mm)	435*234*800mm	580*278*900mm	580*278*900mm
Weight (kg)	115Kg	118Kg	120Kg
Installation	Floor Mounted		
Design Life	15+Years(25℃ /77 ℉)		
Cycle Life	>6500Cycles. 25℃		
Charge/Discharge Current (A)	100A(Recommended) 200A(Max)		
Internal Resistance	<30mΩ		
Power Consumption	<2W(Work)<100mw(Sleep)		
Monitoring Parameters	System voltage,current,cell voltage cell temperature,module temperature		
SOC	Intelligent algorithm		
Communicaiton	CAN/RS-485		
Operating Temperature Range	-10℃~50℃		
Transport Storage Temperature Range	-20℃~60℃		
Humidity	15%-85%(No Condensing)		
Warranty	10 Years		



Rack Mount

HV LiFePO4 Battery

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Safety & Reliable
LiFePO4 & Smart BMS
- 

Compact Size & East Installation
Module and Rack design for quick installation
- 

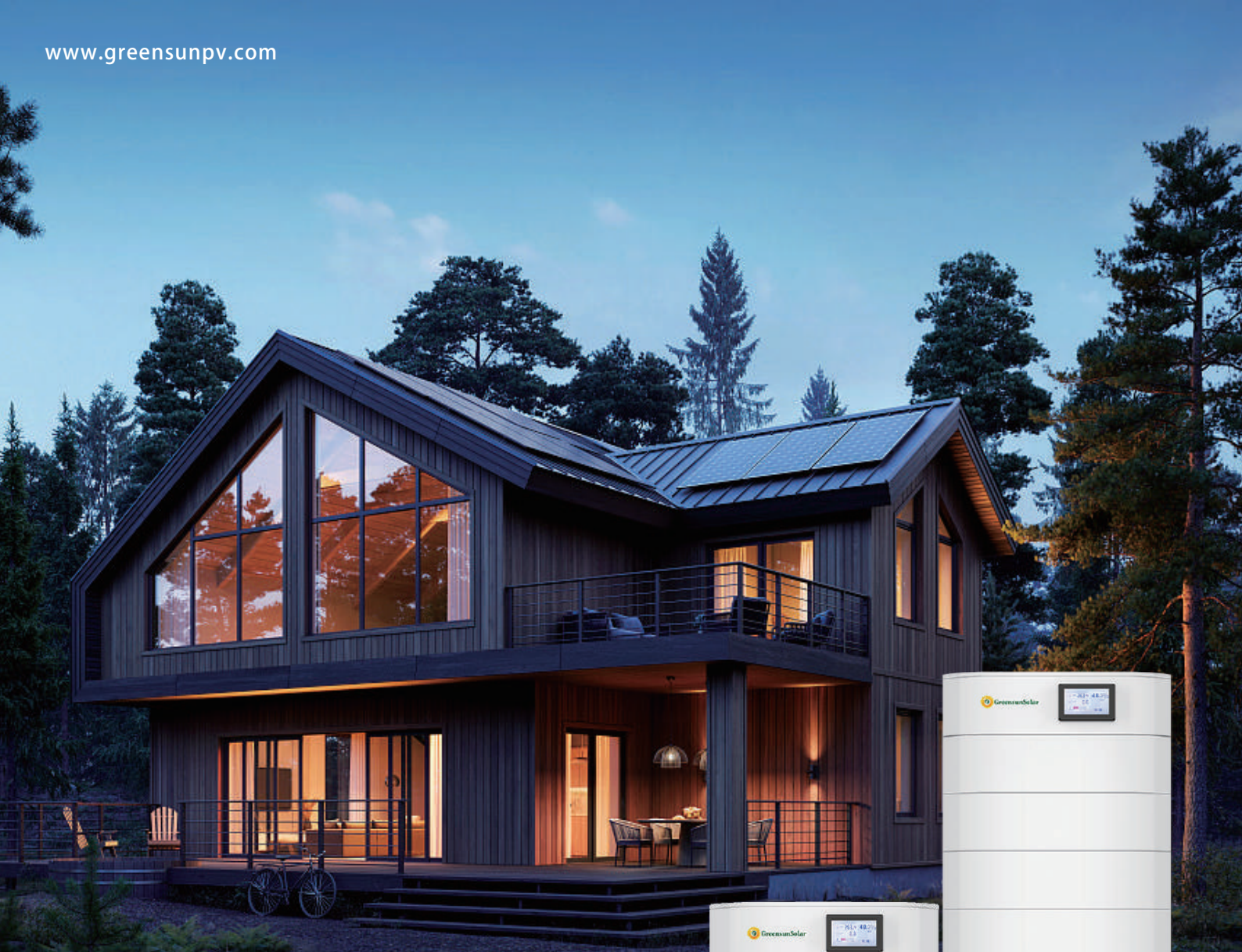
High Compatibility BMS
Seamless communication with most brands inverters
- 

Optimal Electricity Cost
Long cycle life and superior performance
- 

Expand capacity flexibly
Parallel to expand capacity easily
- 

Wide Applications
Self-Use, Peak Shaving, UPS, Backup, ESS, HESS, BESS, Bank, Hospital, School, Hotel, Telecom, Base Station

Specification								
Model	GRB-15.36H	GRB-20.48H	GRB-25.60H	GRB-30.72H	GRB-35.84H	GRB-40.96H	GRB-46.08H	GRB-51.20H
Battery Type	LiFePO4(LFP)							
Battery Module Data								
Nominal Voltage (V)	51.2V							
Nominal Capacity (Wh)	100Ah							
Nominal Energy	51.2KWh							
Dimension (mm)	440*442*133mm							
Battery System Data								
Module Qty& Configuration	3pcs in series	4pcs in series	5pcs in series	6pcs in series	7pcs in series	8pcs in series	9pcs in series	10pcs in series
Nominal Voltage (V)	153.6V	204.8V	256V	307.2V	358.4V	409.6V	460.8V	512V
BatterySystem Energy	15.36KWH	20.48KWH	25.60KWH	30.72KWH	35.84KWH	40.96KWH	46.08KWH	51.20KWH
System Usable Energy 90% DOD	13.82KWH	18.43KWH	23.04KWH	27.64KWH	32.25KWH	36.86KWH	41.47KWH	46.08KWH
Operating Voltage Range	134.4-172.8V	179.2-230.4V	224-288V	268.8-345.6V	313.6-403.2V	358.4-460.8V	403.2-518.4V	448-576V
Dimension (W*D*H)	6*4*6.85cm	6*4*8.35cm	6*4*9.85cm	6*4*11.35cm	6*4*12.85cm	6*4*14.35cm	6*4*15.85cm	6*4*17.35cm
Weight	175Kg	220Kg	265Kg	310Kg	355Kg	400Kg	445Kg	490Kg
Charge Current	100A(MAX); 50A(Recommended)							
Discharge Current	100A(MAX); 50A(Recommended)							
Communication	CAN/RS-485							
Operating Temp. Range	Charge: 0~55℃; Discharge: -20~55℃							
Transport or Storage Temp.Range	-20℃ -45℃							
Humidity	10% - 95% (No Condensing)							
Design Life	15Years+							
Cycle Life	>6000Cycles, 25℃							



Stacked

LiFePO4 Battery

LiFePO4 battery can be widely used in household energy storage, ESS, solar/wind energy system, industrial and commercial energy storage and other application.

- Easy installation with modular and stacked design
- Excellent safety of LiFePO4 battery
- High compatibility BMS, seamless communication with energy storage inverter
- Suitable for long-term charge and discharge cycle

High Voltage Battery System



Specification

Model	GRB-15.36H	GRB-20.48H	GRB-25.6H	GRB-30.72H	GRB-35.84H	GRB-40.96H
Battery Type	LiFePO4(LFP)					
Battery Module	51.2V 100AH					
Number of Modules	3pcs in series	4pcs in series	5pcs in series	6pcs in series	7pcs in series	8pcs in series
Nominal Voltage	153.6V	204.8V	256V	307.2V	358.4V	409.6V
Nominal Capacity	15.36KWH	20.48KWH	25.6KWH	30.72KWH	35.84KWH	40.96KWH
Usable Capacity	13.82KWH	18.43KWH	23.04KWH	27.64KWH	32.25KWH	36.86KWH
Operating Voltage Range	134.4-172.8V	179--230.4V	224-288V	268-345.6V	313.6-403.2V	358-460.8V
Dimension (W*D*H)	600*400*685mm	600*400*835mm	600*400*985mm	600*400*1135mm	600*400*1285mm	600*400*1335mm
Weight	178kg	218kg	258kg	308kg	358kg	408kg
Charge Current	100A(MAX); 20-50A(Recommended)					
Discharge Current	100A(MAX); 20-50A(Recommended)					
Cycle Life	6000Cycles, 25 °C					
Internal Resistance	≤30mΩ					
BMS						
Power Consumpt	<1.5W (Work) < 100mW(Sleep)					
Monitoring Parameters	SOC, System voltage, current, cell voltage,cell temperature, module temperature					
Communication	CAN/RS-485/WIFI					
General						
Operating Temperature Range	-10 °C -50 °C					
Transport or Storage Temperate Rang	-20 °C -45 °C					
Humidity	10% - 95% (No Condensing)					
Design Life	15Years+					



High Voltage

Rack Type LiFePO4 Battery

- Safety & Reliable**
LiFePO4 & Smart BMS
- Compact Size & East Installation**
Module and Rack design for quick installation
- High Compatibility BMS**
Seamless communication with most brands inverters
- Optimal Electricity Cost**
Long cycle life and superior performance
- Expand capacity flexibly**
Parallel to expand capacity easily
- Wide Applications**
Self-Use, Peak Shaving, UPS, Backup, ESS, HESS, BESS, Bank, Hospital, School, Hotel, Telecom, Base Station

Specification				
Model	GRB-100H	GRB-200H	GRB-344H	GRB-516H
Battery Type	liFePO4(LFP)	liFePO4(LFP)	liFePO4(LFP)	liFePO4(LFP)
Battery Module Data				
Nominal Voltage (V)	25.6V	51.2V	51.2V	51.2V
Nominal Capacity (Wh)	200Ah	280Ah	280Ah	280Ah
Nominal Energy	5.12KWh	14.33KWh	14.33KWh	14.33KWh
Dimension (mm)	440*442*179mm	435*234*800mm	435*234*800mm	435*234*800mm
Battery System Data				
Module Qty& Configuration	20pcs in series	14pcs in series	12pcs in series as a cluster 2 Clusters in parallel	12pcs in series as a cluster 3 Clusters in parallel
Nominal Voltage (V)	512V	716.8V	614.4V	614.4V
Battery System Energy	102.4KWH	200.72KWH	344.06KWH	516.09KWH
System Usable Energy 90% DOD	92.16KWH	180.65KWH	309.65KWH	464.48KWH
Operating Voltage Range	448-576V	627.2-806.4V	537.6-691.2V	537.6-691.2V
Dimension (W*D*H)	1250*800*2200mm	1050*820*2200mm	2*1052*797*1990mm	3*1052*797*1990mm
Weight	1070Kg	1730Kg	3200Kg	4800Kg
Max. charge current	100A	140A	280A	420A
Max. discharge current	100A	140A	280A	420A
Ip grade	IP20	IP20	IP20	IP20
Discharge temp	-20℃~45℃	-20℃~45℃	-20℃~45℃	-20℃~45℃
Charge temp	0℃~45℃	0℃~45℃	0℃~45℃	0℃~45℃
Humidity	10% - 95% (No Condensing)			
Design Life	15Years+			
Cycle Life	>6000Cycles, 25℃			

ALL IN ONE HYBRID ESS

All-in-One Integrated System
inside the outdoor Cabinet to fullfill C&I Application



GRS-F100

GRS-F200

- PV Input Optional(it can connect with or without pv panels)
- Ultra-high energy density, small size, easy installation and transportation
- Lithium Iron Phosphate (LFP) Battery with smart BMS, safe and reliable
- The battery pack and system adopt an aerosol fire extinguishing solution
- Supports battery expansion to meet various demand
- EMS, PCS and BMS integrated technology, power supply redundancy design, support black start function,Off grid operation,etc
- 100% unbalanced output, each phase; Max. output up to 50% rated power
- Multiple communication methods support remote upgrade



Apartment



Factory



Charge Station



Commercial



Hospital



Farm

ESS System Configuration

MODEL	GRS-F100(30KW)	GRS-F100(50KW)	GRS-F200
Nominal Output Power	30KW	50KW	50KW
AC Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac		
Grid Type	Three Phase		
AC Output Rated Current	45.5A	75.8A	75.8A
System Energy	100.35KWH	100.35KWH	200.48KWH
Battery Chemistry	LiFePO4	LiFePO4	LiFePO4
Battery System Nominal Voltage	358.4Vdc	358.4Vdc	716.8Vdc
Battery Operating Voltage	313.6-403.2Vdc	313.6-403.2Vdc	627.2-806.4Vdc
Max. charging/discharging efficiency	140A	140A	140A
Dimension (W*D*H,mm)	804*2180*1104mm	804*2180*1104mm	1626*1245*2175mm
Installation Site	Outdoor	Outdoor	Outdoor
Communication port	CAN	CAN	CAN
Air conditioner, Firefighting aerosol	Included	Included	Included
Integrated Lighting, Smoke detector	Included	Included	Included
IP Rating of Enclosure	IP55	IP55	IP55
Operation Temperature Range	-30℃ ~ +50℃	-30℃ ~ +50℃	-30℃ ~ +50℃
Operation Humidity Range	0~95%(NO Condensing)	0~95%(NO Condensing)	0~95%(NO Condensing)
Altitude	≤3000m	≤3000m	≤3000m
PV Input Data			
Max. DC Input Power	39KW	65KW	65KW
Max. DC Input Voltage	1000VDC	1000VDC	1000VDC
MPPT Range	450-850VDC	450-850VDC	450-850VDC
PV Input Current	36A+36A+36A	36A+36A+36A+36A	36A+36A+36A+36A
No.of MPP Trackers	3	4	4
No.of Strings per MPP Tracker	2	2	2
AC Specification(ON GRID)			
Rated AC Power	30KW	50KW	50KW
Rated AC Output Voltage& Frequency	400Vac, 50/60HZ	400Vac, 50/60HZ	400Vac, 50/60HZ
Grid Type	Three Phase	Three Phase	Three Phase
AC Output Rated Current	45.5A	72.5A	72.5A
Power Factor Adjustment Range	0.8 leading to 0.8 lagging		
Total Harmonic Distortion (THD)	<3% (of nominal power)		
AC Specifcaton(OFF GRID)			
Rated AC Power	30KW	50KW	50KW
Rated AC Output Voltage& Frequency	400Vac, 50/60HZ		
Grid Type	Three Phase		
Peak Power (Off Grid)	1.5 time of rated power, 10 S		
Total Harmonic Distortion (THD)	<3% (of nominal power)		
Battery Module Specification			
Nominal Voltage	51.2V		
Nominal Energy	14.33KWH		
Max. charging/discharging efficiency	140A		
Size&Weight	418*770*235mm; 110kg		

Outdoor Battery Cabinet

50kW/100kWh outdoor All-in-one ESS cabinet
100kW/200kWh outdoor All-in-one ESS cabinet



Safe&Reliable

- LFP battery cell
- Double fire suppression system design

Economical&Efficient

- Save Capex, expanding as required
- Efficient and energy-saving HVAC design

Simple&User-friendly

- Pre-installed in factory for easy installation on site
- Integrated BMS/EMS, suitable for various applications
- Effortless operation, cloud control

ESS System Configuration		
MODEL	ESS 100.3-50KW	ESS 200.7-100KW
Battery System Data		
Battery Type	Li-ion (LFP)	Li-ion (LFP)
Nominal Capacity (kWh)	100.3KWH	200.7KWH
Nominal Voltage (V)	358.4V	716.8V
DC Voltage Range (V)	313.6-392V	627.2-806.4V
Battery Module Data		
Battery Module	51.2V 280AH	51.2V 280AH
Battery Module Qty.	7pcs	14pcs
Max. Charge/Discharge Current (A)	0.5C/0.5C	0.5C/0.5C
DoD	90%	90%
PCS DC/AC Data On-grid Mode		
Rated AC Power (KW)	50KW	100KW
Rated AC Output Voltage (V)	400V	400V
Rated AC Output Frequency (Hz)	50/60Hz	50/60Hz
AC Output Rated Current (A)	75.8/72.5A	144A
AC PF	0.8lagging~0.8leading	1lagging~1leading
THDi	<3%	<3%
PCS DC/AC Data Off-grid Mode		
Rated Power (KW)	50KW	100KW
AC Output Rated Current (A)	75.8/72.5A	144A
Rated Voltage (V)	400V	400V
Rated Frequency (Hz)	50/60Hz	50/60Hz
THDU	<3% (of nominal power)	1% linear; ors5% nonlinear
Overload Capacity	1.5 time of rated power, 10s	110% long-term
PV DC/DC Data Parameter		
Max.PV Input Voltage (V)	1000V	1000V
Max. PV Power (KW)	65KW	120KW
MPPT Voltage Range (V)	150-850V	250-850V



Container

ENERGY STORAGE SYSTEM

- Vertical industry integration chain
- Modular design with different density, suits all scenarios.
- Flexible voltage range from 100VDC to 1500VDC.
- Three levels management system design delivers highest reliablitiy.
- Rack mounted or container based system configuration

Specification	
Basic Parameters	1003.52KWH 70PCS 51.2V 280Ah LiFePO4 Battery Modules
Battery System Capacity (kWh)	1003.52
Battery System Voltage (Vdc)	716.8
System Voltage Range (Vdc)	644-784
Efficiency	96%
Depth of Discharge	90%
System Charge Rate	0.5℃
System Discharge Rate	0.5℃-1℃
Design Life	15+Years
Operation Temperature (℃)	0~50
Humidity	5%~95%
Altitude	<2000m
Battery Module Qty	70pcs 51.2v 280ah
Combination	14pcs 51.2V 280Ah as one battery cluster, 5 Battery Clusters in Parallel
Communication	CANBUS/Modbus TCP/IP

12V Lead Acid Battery

AGM/GEL Series



Applications:

- Solar and wind energy storage system
- EPS and UPS battery backup
- Signal system,emergency lighting system,security system
- Telecommunication equipment
- Power plant and transmission system

AGM Series

Model	Voltage(V)	Capacity(Ah)	Dimension(mm)			
			Length	Width	Height	Total Height
FM4-12	12	4	90	70	101	105
FM5-12	12	5	90	70	101	105
FM7-12	12	7	151	65	95	100
FM9-12	12	9	151	65	110	115
FM12-12	12	12	151	98	98	103
FM17-12	12	17	181	76	170	170
FM24-12	12	24	165	125	175	175
FM33-12	12	33	195	130	164	178
FM38-12	12	38	197	165	170	170
FM55-12	12	55	229	138	205	211
FM65-12	12	65	348	167	178	178
FM80-12	12	80	259	168	208	214
FM90-12	12	90	330	173	212	220
FM100-12	12	100	330	173	212	220
FM120-12	12	120	408	177	225	225
FM150-12	12	150	483	170	238.5	238.5
FM180-12	12	180	532	207	214	220
FM200-12	12	200	522	240	218	224
FM250-12	12	250	522	268	220	226

GEL Series

Model	Voltage(V)	Capacity(Ah)	Dimension(mm)			
			Length	Width	Height	Total Height
JFM17-12	12	17	181.5	77	167.5	167.5
JFM38-12	12	38	197	165	170	170
JFM65-12	12	65	348	167	178	178
JFM100-12	12	100	330	173	212	243
JFM150-12	12	150	483	170	238.5	238.5
JFM200-12	12	200	522	240	218	224
JFM250-12	12	250	522	268	220	226

12V Front Terminal Battery

Front Terminal Series



Applications:

- Solar and wind energy storage system
- EPS and UPS battery backup
- Telecommunication equipment
- Power source for portable devices or tools
- Signal system,emergency lighting system,security system

Front Terminal Series

Model	Voltage(V)	Capacity(Ah)	Dimension(mm)			
			Length	Width	Height	Total Height
JFM100-12	12	100	410	110	295	295
JFM150-12	12	150	550	110	288	288
JFM180-12	12	180	560	125	316	316
JFM200-12	12	200	560	125	316	316

2V Lead Acid Battery

AGM/GEL Series



Applications:

- Solar and wind energy storage system
- EPS and UPS battery backup
- Telecommunication equipment
- Power source for portable devices or tools
- Signal system,emergency lighting system,security system

AGM Series

Model	Voltage(V)	Capacity(Ah)	Dimension(mm)			
			Length	Width	Height	Total Height
GFM200-2	2	200	170	110	328	350
GFM300-2	2	300	170	150	328	350
GFM400-2	2	400	210	175	330	350
GFM500-2	2	500	240	175	330	350
GFM600-2	2	600	300	175	330	350
GFM800-2	2	800	410	175	330	350
GFM1000-2	2	1000	475	175	328	350
GFM1200-2	2	1200	475	175	328	350
GFM1500-2	2	1500	403	354	339	349
GFM2000-2	2	2000	490	350	339	349
GFM3000-2	2	3000	709	350	337	347

GEL Series

Model	Voltage(V)	Capacity(Ah)	Dimension(mm)			
			Length	Width	Height	Total Height
JFM200-2	2	200	170	110	328	337
JFM300-2	2	300	170	150	328	337
JFM400-2	2	400	210	175	330	339
JFM500-2	2	500	240	175	330	340
JFM600-2	2	600	300	175	330	340
JFM800-2	2	800	410	175	330	340
JFM1000-2	2	1000	475	175	328	338
JFM2000-2	2	2000	490	350	339	349
JFM3000-2	2	3000	709	350	337	349

2V OPZV Battery

OPZV Series



Applications:

- Solar and wind energy storage system
- EPS and UPS battery backup
- Telecommunication equipment
- Power source for portable devices or tools
- Signal system,emergency lighting system,security system

OPZV Series

Model	Voltage(V)	Capacity(Ah)	Dimension(mm)			
			Length	Width	Height	Total Height
GFM200-2	2	200	103	206	356	389
GFM300-2	2	300	145	206	356	389
GFM400-2	2	400	145	206	473	505
GFM500-2	2	500	166	206	473	505
GFM600-2	2	600	145	175	646	678
GFM800-2	2	800	191	210	646	678
GFM1000-2	2	1000	233	210	646	678
GFM1200-2	2	1200	275	210	646	678
GFM1500-2	2	1500	275	310	795	827
GFM2000-2	2	2000	399	212	770	802
GFM2500-2	2	2500	487	212	770	802
GFM3000-2	2	3000	567	212	770	802



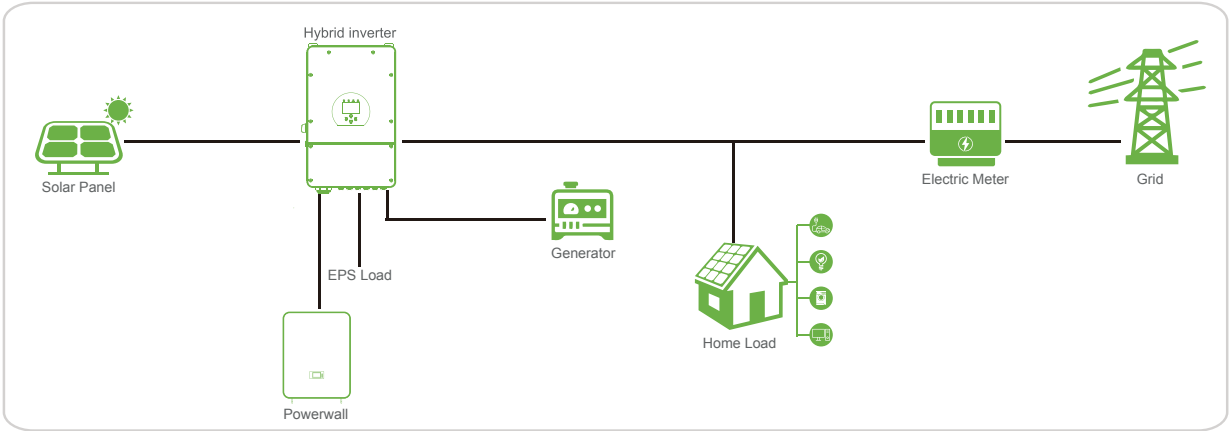
Residential Energy Storage Solution

Residential Energy Storage Inverter(5-20KW) +
Battery Storage (LiFePO4 Battery/Lead Acid)

ESS + Solar

ESS without Solar

ESS System Configuration					
MODEL	ESS 5.12-5KW	ESS 10.24-8KW	ESS 20.48-10KW	ESS 20.48-12KW	ESS 30.72-20KW
Battery Input Data					
Battery Type	Lithium-ion LiFePO4 (Lead-acid or Lithium-ion)				
Battery Capacity	5.12KWH	10.24KWH	20.48KWH	20.48KWH	30.72KWH
Battery Voltage Range (V)	40-60V				
External Temperature Sensor	Yes				
Charging Curve	3 Stages / Equalization				
Charging Strategy for Li-Ion Battery	Self-adaption to BMS				
PV String Input Data (Optional)					
Max. DC Input Power (W)	6500	10400	13000	15600	26000
Rated PV Input Voltage (V)	370(125-500)	550 (160-800)	550 (160-800)	550 (160-800)	180-900
Start-up Voltage (V)	125	160	160	160	180
MPPT Voltage Range (V)	150-425	200-650	200-650	200-650	180-900
Full Load DC Voltage Range (V)	300-425	350-650	350-650	350-650	
PV Input Current (A)	13+13	13+13	26+13	26+13	23/23
Max. PV Isc (A)	17+17	17+17	34+17	34+17	30/30
No.of MPP Trackers	2				
No.of Strings per MPP Tracker	1+1	1+1	2+1	2+1	2/2
AC Output Data And UPS					
Rated AC Output Power (W)	5000	8000	10000	12000	20000
Max AC Output Power (W)	5500	8800	11000	13200	20000
AC Output Rated Current (A)	22.7	12.1	15.2	18.2	31
Max AC Current (A)	25	18.2	22.7	27.3	31
Peak Power (off grid)	2 time of rated power, 10 S				
Power Factor	0.8 leading to 0.8 lagging				
Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three Phase				
Total Harmonic Distortion (THD)	<3% (of nominal power)				
DC current injection	<0.5% In				





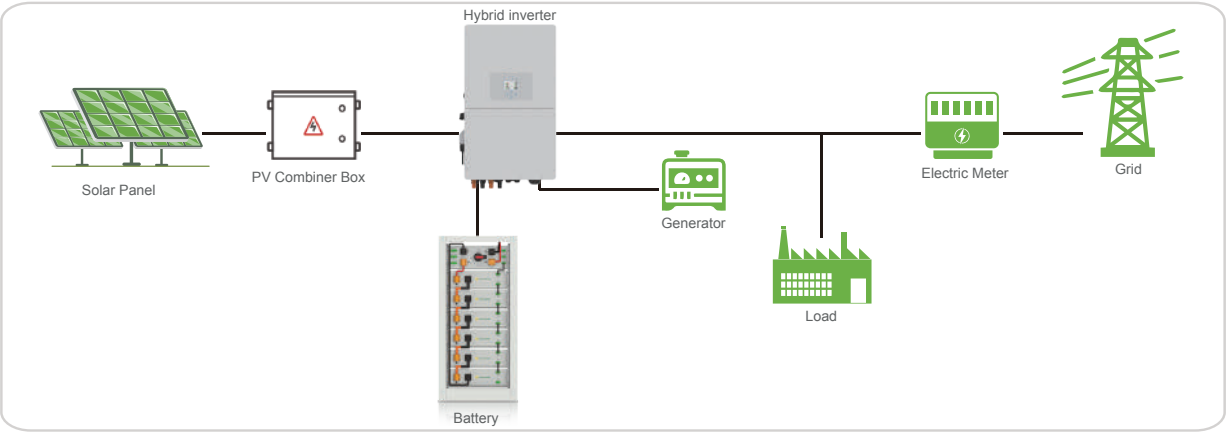
ESS

Energy storage systems have been proven to be "extremely lucrative" for commercial and industrial (C&I) field.

Dedicated Commercial & Industrial ESS

- 
Self-Consumption
- 
Demand Charge
- 
Micro-grid
- 
Off grid
- 
DG+BESS
- 
V2G
- 
Back Up
- 
Peak Shifting

ESS System Configuration					
MODEL	ESS 48-30KW	ESS 102.4-50KW	ESS 204.8-100KW	ESS 368.64-150KW	ESS 516.09-250KW
Battery System Data					
Battery Type	Li-ion (LFP)				
Nominal Capacity (kWh)	48KWH	102.4KWH	204.8KWH	368.64KWH	516.09KWH
DC Voltage Range (V)	450-540V	480-560V	480-560V	576-672V	576-672V
Battery Module Data					
Battery Module	48V 100AH	51.2V 200AH	51.2V 200AH	51.2V 200AH	51.2V 280AH
Battery Module Qty.	10pcs	10pcs	20pcs	36pcs	36pcs
Max. Charge/Discharge Current (A)	1C/1C	1C/1C	1C/1C	1C/1C	1C/1C
Efficiency	95%				
PCS DC/AC Data On-grid Mode					
Rated AC Power (KW)	30KW	50KW	100KW	150KW	250KW
Rated AC Output Voltage (V)	400V	400V	400V	400V	400V
Rated AC Output Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Rated Current (A)	43A	72A	144A	217A	361A
AC PF	0.8lagging~0.8leading				1lagging~1leading
THDi	<3%				
PCS DC/AC Data Off-grid Mode					
Rated Power (KW)	30KW	50KW	100KW	150KW	250KW
Rated Current (A)	43A	72A	144A	217A	361A
Rated Voltage (V)	400V	400V	400V	400V	400V
Rated Frequency (Hz)	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
THDU	≤2%Linear				<1% Linear; or<5% nonlinear
Overload Capacity	110%-10 mins 120%-1min				
PV DC/DC Data Parameter					
Max.PV Input Voltage (V)	1000VDC				
Max. PV Power (KW)	45KW	75KW	150KW	225KW	300/360KW
MPPT Voltage Range (V)	480-800VDC				450-850VDC



Project Case

Global Delivery



Project Case

Global Delivery



Project Case

Global Delivery



Project Case

Global Delivery



Project Case

Global Delivery



Project Case

Global Delivery

