

## LOW VOLTAGE LITHIUM BATTERY MODULE

GBP-L1 Model Series Rack Type Lithium Iron Phosphate Battery



### Product introduction

This product is composed of high-quality lithium iron phosphate cells (by series and parallel) and advanced BMS management system. It can be used as an independent DC power supply or as a "basic unit" to form a variety of energy storage lithium battery power systems. High reliability and longer life. It can be used as backup power supply of communication base station, backup power supply of digital center, household energy storage power supply, industrial energy storage power supply, etc. It can be seamlessly connected with main equipment such as UPS and photovoltaic power generation.

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- ### Performance characteristics
- Small size and light weight
  - Maintenance-free
  - Standard cycle life is more than 5000 times
  - Accurately estimate the state of charge of the battery pack, that is,the remaining power of the battery, to ensure that the power of the battery pack is maintained within a reasonable range
  - Multiple in parallel, easy for expand
  - Easy for installation and maintenance

### Technical parameters

Model	GBP24V-200AH	GBP48V-100AH-R (Voltage Optional 51.2V)	GBP48V-200AH-R (Voltage Optional 51.2V)
Nominal Voltage (V)	24	48	
Nominal capacity (AH)	210	105	210
Nominal energy capacity (KWH)	5.3	5.3	10
Operating voltage range	22.4-30	42-56.25	
Recommended charging voltage (V)	27.6	51.75	
Recommended discharge cut-off voltage (V)	24	45	
Standard charging current (A)	50	25	50
(A)Maximum continuous charging current (A)	100	50	100
Standard discharge current (A)	50	25	50
Maximum discharge current (A)	100	50	100
Applicable temperature (℃)	-30℃ ~ 60℃ (Recommended 10℃ ~ 35℃)		
allowable humidity range	0 ~ 95% no condensation		
Storage temperature (℃)	-20℃ ~ 65℃ (Recommended 10℃ ~ 35℃)		
Protection level	IP20		
cooling method	natural air cooling		
Life cycles	5000+ times at 80% DOD		
Maximum size (W*D*H)mm	545*600*156	545*540*156	465*682*252
Weight	50KG	50KG	90KG

Remarks: The above data are for reference only and are subject to change without prior notice. Special voltage can be customized.

## LOW VOLTAGE LITHIUM BATTERY MODULE

GBP-L2 model series Power wall type lithium iron phosphate battery



Right angle



Rounded

### Product introduction

The product adopts modular design, higher integration, saves installation space; adopts high-performance lithium iron phosphate positive electrode material, the battery cell has good consistency, and the designed service life is more than 10 years; one-key switch machine, front operation, front wiring, easy installation Convenient maintenance and operation; various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection; strong compatibility, seamless connection with UPS, photovoltaic power generation and other main equipment; various forms of communication interfaces. CAN/RS485, etc. can be customized according to customer needs, which is convenient for remote monitoring and flexible use of the system. High-energy, low-power lithium-ion battery equipment achieves higher energy supply, lower energy consumption, and reduces environmental pollution; all-round, multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.

### Performance characteristics

- Wall-hanging installation,save space
- Multiple in parallel, easy for expand
- Easy for installation and maintenance
- Standard configuration with LCD display, real time knowing battery status
- Environmentally friendly non-polluting materials, free of heavy metals, green and environmentally friendly
- Standard cycle life is more than 5000 times
- Remote viewing of errors and online software upgrades

### Technical parameters

Type	GBP48V-100AH-W ( Voltage Optional 51.2V )	GBP48V-200AH-W ( Voltage Optional 51.2V )
Nominal Voltage (V)	48	
Nominal capacity (AH)	105	210
Nominal energy capacity (KWH)	5	10
Operating voltage range	42-56.25	
Recommended charging voltage (V)	51.75	
Recommended discharge cut-off voltage (V)	45	
Standard charging current (A)	25	50
Maximum continuous charging current (A)	50	100
Standard discharge current (A)	25	50
Maximum discharge current (A)	50	100
Applicable temperature (℃)	-30℃ ~ 60℃(Recommended 10℃ ~ 35℃)	
allowable humidity range	0 ~ 95% no condensation	
Storage temperature (℃)	-20℃ ~ 65℃(Recommended10℃ ~ 35℃)	
Protection level	IP20	
cooling method	natural air cooling	
Life cycles	5000+ times at 80% DOD	
Maximum size (W*D*H)mm	410*630*190	465*682*252
Weight	50KG	90KG

Remarks: The above data are for reference only and are subject to change without prior notice. Special voltage can be customized.

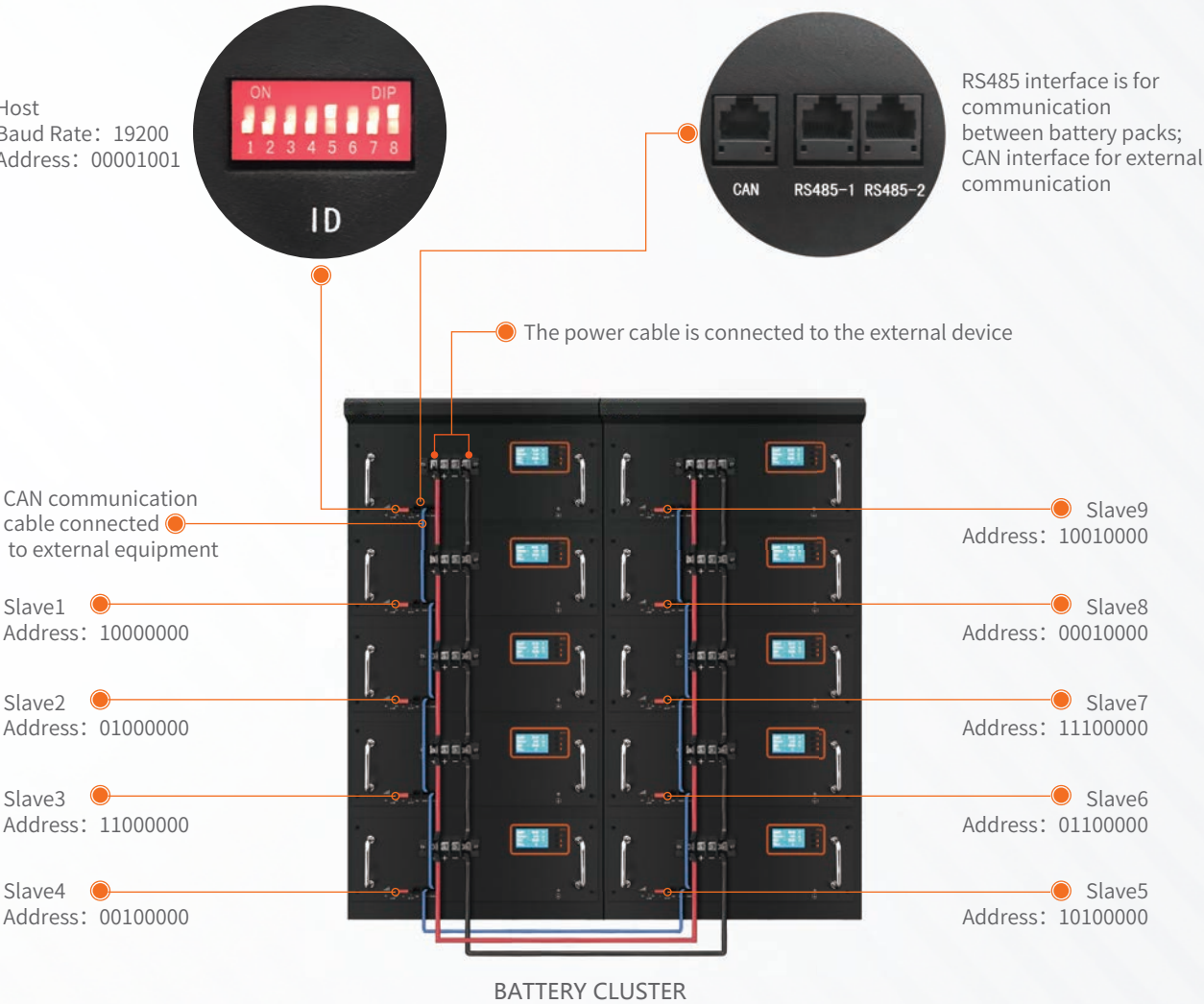
# LOW VOLTAGE LITHIUM BATTERY MODULE

low-voltage multi-parallel system

The above low-voltage series battery pack can be paralleled by dialing the address. The RS485 communication cable is connected to each battery pack, and the RS485 output interface can be connected to the host computer. The CAN interface is used for external communication, and can be connected in parallel at most 16 battery packs.



Battery packs



The above is the connection scheme of 10 battery packs in parallel, the system supports up to 16 parallel

# LOW VOLTAGE LITHIUM BATTERY MODULE

Household stacked lithium battery system

## Product introduction

The product is mainly composed of high-quality lithium iron phosphate battery and smart energy storage inverter. When the sunlight is sufficient during the day, the excess power generation of the rooftop photovoltaic system is stored in the energy storage system, and the energy of the energy storage system is released at night to supply power for household loads, so as to achieve self-sufficiency in household energy management and greatly improve the economical performance of the new energy system. At the same time, in the event of a sudden power outage/power failure of the power grid, the energy storage system can take over the electricity demand of the whole house in time. The capacity of a single battery is 5.32kWh, and the total capacity of the largest battery stack is 26.6kWh, providing a stable power supply for the family.



## Technical parameters

Model	GHV1-5.32	GHV1-10.64	GHV1-15.96	GHV1-21.28	GHV1-26.6
Battery module	BAT-5.32(32S1P102.4V52Ah)				
Module number	1	2	3	4	5
Rated power[kWh]	5.32	10.64	15.96	21.28	26.6
Module Size (W*D*Hmm)	625*420*450	625*420*625	625*420*800	625*420*975	625*420*1150
Weight[kg]	50.5	101	151.5	202	252.5
Rated volt[V]	102.4	204.8	307.2	409.6	512
Working volt[V]	89.6-116.8	179.2-233.6	268.8-350.4	358.4-467.2	358.4-584
Charging volt[V]	115.2	230.4	345.6	460.8	576
Standard charging current[A]	25				
Standard discharging current[A]	25				
Control module	PDU-HY1				
Working temperature	Charge:0-55°C;Discharge:-20-55°C				
Working ambient humidity	0-95% No condensation				
Cooling method	Natural heat dissipation				
Communication method	CAN/485/Dry-contact				
Bat volt range[V]	179.2-584				



# LITHIUM BATTERY ENERGY STORAGE SYSTEM

GBP-H2 Lithium battery cluster energy storage system



▲ High voltage box



▲ Battery pack



▲ Battery clusters

## Product introduction

The product adopts modular design, higher integration, saves installation space; adopts high-performance lithium iron phosphate positive electrode material, the battery cell has good consistency, and the designed service life is more than 10 years; one-key switch machine, front operation, front wiring, easy installation Convenient maintenance and operation; various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection; strong compatibility, seamless connection with UPS, photovoltaic power generation and other main equipment; various forms of communication interfaces. CAN/RS485, etc. can be customized according to customer needs, which is convenient for remote monitoring and flexible use of the system. High-energy, low-power lithium-ion battery equipment achieves higher energy supply, lower energy consumption, and reduces environmental pollution; all-round, multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.

## Product advantages

- Modular design, higher integration, saving installation space;
- High-performance lithium iron phosphate cathode material, with good consistency of the core and a design life of more than 10 years.
- One-touch switching, front operation, front wiring, ease of installation, maintenance and operation.
- Various functions, over-temperature alarm protection, over-charge and over-discharge protection, short-circuit protection.
- Highly compatible, seamlessly interfacing with mains equipment such as UPS and photovoltaic power generation.

- Various forms of communication interfaces, CAN/RS485 etc. can be customized according to customer requirements, easy for remote monitoring.
- Flexible using range, can be used as a stand-alone DC power supply, or as a basic unit to form a variety of specifications of energy storage power supply systems and container energy storage systems. Can be used as a backup power supply for communication base stations, backup power supply for digital centers, home energy storage power supply, industrial energy storage power supply, etc.

## Performance characteristics

- Equipped with a touchable screen to visually display the operating status of the battery pack
- Modular convenient installation
- Special voltage, flexible matching of capacity system
- Cycle life of over 5000 cycles.
- With low power consumption mode, one-key restart is guaranteed within 5000 hours during standby, and data is retained;
- Fault and data records of the whole life cycle, remote viewing of errors, online software upgrades.

## Technical parameters

Model Number	GBP9650	GBP48100	GBP32150	GBP96100	GBP48200	GBP32300
Cell version	52AH			105AH		
Nominal power (KWH)	5	5	5	10	10	10
Nominal capacity(AH)	52	104	156	105	210	315
Nominal voltage (VDC)	96	48	32	96	48	32
Operating voltage range(VDC)	87-106.5	43.5-53.2	29-35.5	87-106.5	43.5-53.2	29-35.5
Operating temperature	-20~65℃					
IP grade	IP20					
Reference weight(Kg)	50			90		
Reference size ( D*W*H mm)	475*630*162			510*640*252		

Note: Battery pack is used in a system, cycle life≥5000, under working condition of 25℃ , 80%DOD.  
Systems with different voltage capacity levels can be configured according to battery pack specifications