



Lithium Battery System



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COMPANY PROFILE

JIANGSU GSO NEW ENERGY TECHNOLOGY CO., LTD is a national high-tech enterprise and a technology innovation enterprise dedicated to photovoltaic and energy storage industry with independent R&D capabilities. Relying on the profound technical accumulation of power electronics from its group company, the company deeply integrates digital intelligent technology with core energy storage technology.

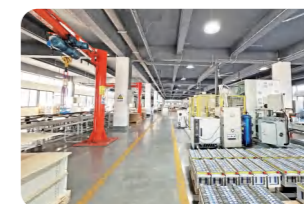
It professionally covers a full industrial chain of products including inverters, lithium battery PACK, residential energy storage, commercial & industrial energy storage, mobile energy storage, energy storage converters, photovoltaic-energy storage systems and smart microgrids, and has built a full-life-cycle photovoltaic & energy storage product matrix covering residential, commercial & industrial and special scenarios.

Our products have obtained a full range of ISO certifications, EU CE certification, UL Certification (USA), UN38.3 test report, MSDS certification, cargo transportation condition identification and other authoritative domestic and international certifications, as well as numerous national patents and software copyrights.

We provide one-stop photovoltaic & energy storage overall deployment, customized system solutions and intelligent energy operation & maintenance services for diversified application scenarios such as new energy power generation in mountainous and island areas, photovoltaic-diesel hybrid microgrids, industrial and commercial parks, peak shaving & valley filling, and wind-photovoltaic-diesel-energy storage integration.

At present, GSO NEW ENERGY' s global sales network covers more than 100 countries and regions worldwide, and has served over 200,000 end users. We keep providing safe, efficient and stable photovoltaic & energy storage products and professional technical services for global customers.

In the future, adhering to technological innovation as the core driving force and the original aspiration of quality commitment, GSO NEW ENERGY will continue to deeply cultivate the clean energy industry. We are committed to providing global users with safe, high-quality, intelligent and integrated comprehensive energy solutions, promoting high-quality development of the energy storage industry with independent core technologies, and joining hands with global partners to build a green and sustainable energy future.



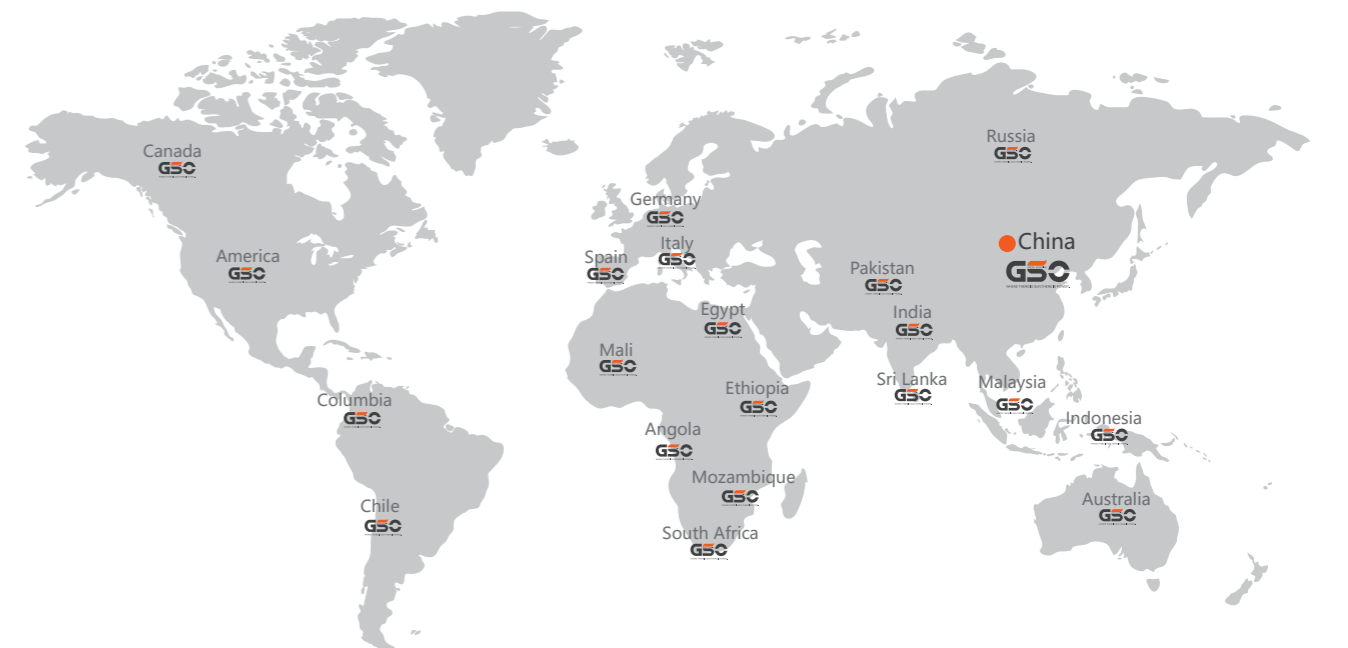
- Mission** Become the evergreen tree in the power supply industry and customers' most trusted power supply expert.
- Vision** To provide quality power solutions and green energy for mankind.
- Values** Responsibility;Innovation;Integrity;Enterprising.
- Quality policy** Customer first, quality oriented, refinement and innovation abide by the agreement.

COMPANY HONOR



SERVICE SYSTEM

GSO New Energy always aims to meet customer needs, is committed to improving service quality and value, takes customer service as the ultimate concept, and establishes an all-round, high-quality and standardized customer service system. It has formed a service structure from pre-sales telephone consultation, on-site environmental survey, power supply scheme design, to after-sales installation and commissioning, use and maintenance, technical training, and spare parts support. A number of professional and skilled engineers are ready to provide you with one-stop service and support at any time, helping customers to truly obtain a power supply solution with high practicability and reliability, maximizing investment value, and allowing customers to enjoy the high-quality service level.



After-sale service >>

GSO New Energy has established after-sales service centers and cooperative branches in many overseas regions, and set up after-sales service networks in multiple provincial capitals and major cities in China, striving to choose the branch closest to customers, provide high-quality and fast services to users, respond quickly, arrive at the service site in a timely manner, and solve problems for customers as soon as possible.

To ensure the implementation of high-quality service levels, GSO New Energy achieves service goals by establishing a four-level service system including headquarters technical support center, regional maintenance center, provincial maintenance center, and municipal maintenance center. At the same time, tailored service plans will be provided for grassroots user units located in mountainous areas and townships during the service process.

Customer training >>

GSO New Energy has a training center with professional and skilled engineers who provide customers with theoretical and practical training services in operation, use, maintenance, and other aspects. In addition, GSO New Energy will also formulate annual training plans for customers to help them better understand and use GSO brand products.



GBP-Pro-I Series

Low-Voltage Energy Storage Series

Product Introduction >>

The product adopts a modular design with higher integration to save installation space. It uses high-performance lithium iron phosphate cathode material with excellent cell consistency. It supports one-key power on/off, front operation, and top wiring for easy installation, maintenance, and operation. It features diverse functions including overtemperature alarm and protection, overcharge/over-discharge protection, and short-circuit protection. With strong compatibility, it can seamlessly connect with main equipment such as UPS and photovoltaic power generation systems. It is equipped with various communication interfaces, including standard RS485 and CAN, enabling flexible remote system monitoring. As a high-energy, low-power-consumption lithium battery device, it delivers higher energy supply, lower energy consumption, and reduced environmental pollution. Comprehensive and multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.

Durability & Safety:

Brand-name cells (≥6000 cycles) + intelligent BMS, anti-drop structure

Ease of Use & Convenience:

Visual interface, compatible with 65 models of inverters, European standard quick-connect wiring

Flexible Adaptability:

Multiple capacities and installation methods optional, supports low-temperature customization

Intelligent Management:

Automatic data statistics, Standard keypad & display screen



Product parameters >>

| Model | GBP-Pro-I Series | | | | | | | |
|---|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 24V100AH | 24V200AH | 48V100AH | 48V200AH | 48V314AH | 51.2V100AH | 51.2V200AH | 51.2V314AH |
| Rated Voltage (V) | 25.6 | | 48 | | | 51.2 | | |
| Rated Capacity (Ah) | 100 | 200 | 100 | 200 | 314 | 100 | 200 | 314 |
| Operating Voltage Range (V) | 22.4~29.2 | | 42~54.75 | | | 44.8~58.4 | | |
| Recommended Charging Voltage (V) | 27.6 | | 51.75 | | | 55.2 | | |
| Recommended Discharge Cut-off Voltage (V) | 24 | | 45 | | | 48 | | |
| Standard Charge/Discharge Current (A) | 0.5C | | | | | | | |
| Max Continuous Charge/Discharge Current (A) | 50/100 | 200 | 50/100 | 200 | 150 | 50/100 | 200 | 150 |
| Allowable Humidity Range (%RH) | 85 | | | | | | | |
| Storage Temperature (°C) | -20~55 (Recommended:10~35) | | | | | | | |
| Charging Temperature (°C) | 0~55/-20~55 (Heating function optional) | | | | | | | |
| Protection Rating | IP20 | | | | | | | |
| Cooling Method | Natural Air Cooling | | | | | | | |
| Cycle Life | ≥6000 | | | | | | | |
| Communication Protocol | CAN/RS485 | | | | | | | |
| Capacity Expansion | Up to 20 modules in parallel (max. 48 modules for special applications) | | | | | | | |
| Dimensions (D×W×H, mm) | 635*375*156 | 635*375*156 | 635*375*156 | 660*400*245 | 972*480*245 | 635*375*156 | 660*400*245 | 972*480*245 |
| Weight (kg) | 34 | 50 | 48 | 94 | 145 | 50 | 98 | 148 |

Note: The above data is for reference only and subject to change without prior notice.

GBP-Pro-II Series

Low-Voltage Energy Storage Series

Product Introduction >>

The product adopts a modular design with higher integration to save installation space. It uses high-performance lithium iron phosphate cathode material with excellent cell consistency. It supports one-key power on/off, front operation, and top wiring for easy installation, maintenance, and operation. It features diverse functions including overtemperature alarm and protection, overcharge/over-discharge protection, and short-circuit protection. With strong compatibility, it can seamlessly connect with main equipment such as UPS and photovoltaic power generation systems. It is equipped with various communication interfaces, including standard RS485 and CAN, enabling flexible remote system monitoring. As a high-energy, low-power-consumption lithium battery device, it delivers higher energy supply, lower energy consumption, and reduced environmental pollution. Comprehensive and multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system.

Durability & Safety:

Brand-name cells (≥6000 cycles) + intelligent BMS, anti-drop structure + light strip alarm

Ease of Use & Convenience:

Three-color visual interface, compatible with 65 models of inverters, European standard quick-connect wiring

Flexible Adaptability:

Multiple capacities and installation methods optional, supports low-temperature customization, standard WiFi/Bluetooth

Intelligent Management:

Automatic data statistics, APP remote monitoring



Product parameters >>

| Model | GBP-Pro-II Series | | | | | | | |
|---|---|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| | 24V100AH | 24V200AH | 48V100AH | 48V200AH | 48V314AH | 51.2V100AH | 51.2V200AH | 51.2V314AH |
| Rated Voltage (V) | 25.6 | | 48 | | | 51.2 | | |
| Rated Capacity (Ah) | 100 | 200 | 100 | 200 | 314 | 100 | 200 | 314 |
| Operating Voltage Range (V) | 22.4~29.2 | | 42~54.75 | | | 44.8~58.4 | | |
| Recommended Charging Voltage (V) | 27.6 | | 51.75 | | | 55.2 | | |
| Recommended Discharge Cut-off Voltage (V) | 24 | | 45 | | | 48 | | |
| Standard Charge/Discharge Current (A) | 0.5C | | | | | | | |
| Max Continuous Charge/Discharge Current (A) | 50/100 | 200 | 50/100 | 200 | 150 | 50/100 | 200 | 150 |
| Allowable Humidity Range (%RH) | 85 | | | | | | | |
| Storage Temperature (°C) | -20~55 (Recommended:10~35) | | | | | | | |
| Charging Temperature (°C) | 0~55/-20~55 (Heating function optional) | | | | | | | |
| Protection Rating | IP20 | | | | | | | |
| Cooling Method | Natural Air Cooling | | | | | | | |
| Cycle Life | ≥6000 | | | | | | | |
| Communication Protocol | CAN/RS485 | | | | | | | |
| Wi-Fi Module | Built-in Wi-Fi + Bluetooth | | | | | | | |
| Capacity Expansion | Up to 20 modules in parallel (max. 48 modules for special applications) | | | | | | | |
| Dimensions (D×W×H, mm) | 635*375*156 | 635*375*156 | 635*375*156 | 660*400*245 | 972*480*245 | 635*375*156 | 660*400*245 | 972*480*245 |
| Weight (kg) | 34 | 50 | 48 | 94 | 145 | 50 | 98 | 148 |

Note: The above data is for reference only and subject to change without prior notice.

GSL-Link I Series

Solar-Storage Lithium All-in-One(Indoor)

Product Introduction >>

This solar-storage lithium battery all-in-one unit is a mobile clean energy power supply device integrating PV, energy storage, inverter, and power distribution. With a wheeled chassis, it enables flexible on-site deployment without complex assembly, greatly simplifying installation and O&M processes. Its compact integrated design maximizes space utilization, making it suitable for diverse scenarios including residential, commercial & industrial, and temporary emergency use. Equipped with an intelligent solar-storage system, it supports multiple operating modes (PV priority, load priority, grid-tie priority) and uses dedicated solar-storage coordination algorithms to maximize self-consumption rates. Built with peak shaving and valley filling functions, it charges during off-peak hours and discharges during peak demand, effectively reducing electricity costs.

Highly Integrated All-in-One Solution:

Combines PV, energy storage, inverter, and power distribution in one unit for easy installation and maintenance. The compact design minimizes footprint and adapts to residential, commercial & industrial scenarios.

Intelligent Solar-Storage Scheduling:

Supports multiple operating modes. Solar-storage coordination algorithms improve self-consumption, while peak shaving & valley filling effectively reduce electricity bills.

Reliable & Durable Safety:

Adopts high-safety cells with multi-level protection and a smart BMS, ensuring comprehensive safeguards for device safety.

User-Friendly Operation & Visualized Management:

HD touchscreen displays core data. Supports both local control and remote monitoring via mobile APP, with standardized wiring to reduce installation complexity.

Versatile Compatibility & Scalability:

Multiple power/capacity options available. Support mains power inverter switching, standard multi-communication interfaces, and remote firmware updates & fault diagnosis.



Product Parameters >>

| Model | 3.5kW+5kWh | 6.6kW+10kWh | 6.6kW+16kWh | 12.5kW+30kWh | 25kW+60kWh | 37.5kW+90kWh | 50kW+120kWh |
|--|---|-------------|-------------|--------------|---------------|----------------|-------------|
| Inverter Output | | | | | | | |
| Rated Output Power (W) | 3500 | 6600 | 6600 | 12500 | 25000 | 37500 | 50000 |
| Max. Peak Power(W) | 6000 | 10000 | 10000 | 19000 | 38000 | 57000 | 76000 |
| Inverter to Bypass Switch Time | 10ms (Typical) | | | | | | |
| Battery | | | | | | | |
| Battery Capacity(kWh) | 5 | 10 | 16 | 30/32 | 60 | 90 | 120 |
| Charge/Discharge Rate(C) | 0.5 | 1 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| PV Charging | | | | | | | |
| Number of MPPT Trackers | 1 | 1 | 1 | 2 | 4 | 6 | 8 |
| Max. PV Array Power(W) | 4000 | 6600 | 6600 | 6600*2 | 6600*4 | 6600*6 | 6600*8 |
| Max. PV Input Current(A) | 13 | 22 | 22 | 22*2 | 22*4 | 22*6 | 22*8 |
| Max. Open Circuit Voltage(VDC) | 500 | 500 | 500 | 500*2 | 500*4 | 500*6 | 500*8 |
| MPPT Operating Voltage Range(VDC) | 120~450 (Single-phase) /200~650 (Three-phase) | | | | | | |
| Grid Input | | | | | | | |
| Input Voltage Range(VAC) | 90~280/170~280 | | | | | | |
| Frequency Range(Hz) | 50/60±0.3 | | | | | | |
| Protection & General Parameters | | | | | | | |
| Protection Level | IP20 | | | | | | |
| Dimensions (W*D*H)mm | 470*700*600 | 410*610*811 | 470*800*610 | 470*800*881 | 1090*900*1770 | 1090*1236*2040 | |
| Weight(kg) | 65 | 140 | 168 | 288 | 540 | 870 | 998 |

Note: The 12.5kW+30kWh option is available with a three-phase inverter; the 25kW+60kWh, 37.5kW+90kWh, and 50kW+120kWh configurations all come with three-phase inverters. The above are reference data. If there are any changes, we reserve the right to make them without prior notice.

GSL-Link II Series

Solar-Storage Lithium All-in-One(Outdoor)

Product Introduction >>

This solar-storage lithium battery all-in-one unit is a mobile clean energy power supply device integrating PV, energy storage, inverter, and power distribution. It enables flexible on-site deployment without complex assembly, greatly simplifying installation and O&M processes. It's compact integrated design maximizes space utilization, making it suitable for diverse scenarios including residential, commercial & industrial, and temporary emergency use. Equipped with an intelligent solar-storage system, it supports multiple operating modes (PV priority, load priority, grid-tie priority) and uses dedicated solar-storage coordination algorithms to maximize self-consumption rates. Built with peak shaving and valley filling functions, it charges during off-peak hours and discharges during peak demand, effectively reducing electricity costs.

Highly Integrated All-in-One Solution:

Combines PV, energy storage, inverter, and power distribution in one unit for easy installation and maintenance. The compact design minimizes footprint and adapts to residential, commercial & industrial scenarios.

Intelligent Solar-Storage Scheduling:

Supports multiple operating modes. Solar-storage coordination algorithms improve self-consumption, while peak shaving & valley filling effectively reduce electricity bills.

Reliable & Durable Safety:

Adopts high-safety cells with multi-level protection and a smart BMS, ensuring comprehensive safeguards for device safety.

User-Friendly Operation & Visualized Management:

HD touchscreen displays core data. Supports both local control and remote monitoring via mobile APP, with standardized wiring to reduce installation complexity.

Versatile Compatibility & Scalability:

Multiple power/capacity options available. Supports grid-tie/off-grid switching, standard multi-communication interfaces, and remote firmware updates & fault diagnosis.



Product Parameters >>

| Model | 25k+50kWh | 37.5k+80kWh | 50k+96kWh |
|-----------------------------------|---|----------------|----------------|
| Inverter Output | | | |
| Rated Output Power (W) | 25000 | 37500 | 50000 |
| Max. Peak Power (W) | 38000 | 57000 | 76000 |
| Inverter to Bypass Switch Time | 10ms (Typical) | | |
| Battery | | | |
| Battery Capacity(kWh) | 50 | 80 | 96 |
| Charge/Discharge Rate (C) | 0.5 | 0.5 | 0.5 |
| PV Charging | | | |
| Number of MPPT Trackers | 4 | 6 | 8 |
| Max. PV Array Power(W) | 6600*4 | 6600*6 | 6600*8 |
| Max. PV Input Current(A) | 22*4 | 22*6 | 22*8 |
| Max. Open Circuit Voltage(VDC) | 500*4 | 500*6 | 500*8 |
| MPPT Operating Voltage Range(VDC) | 120~450 (Single-phase) /200~650 (Three-phase) | | |
| Grid Input | | | |
| Input Voltage Range(VAC) | 90~280/170~280 | | |
| Frequency Range(Hz) | 50/60±0.3 | | |
| Protection & General Parameters | | | |
| Protection Level | IP54 | | |
| Dimensions (W*D*H)mm | 1090*900*1770 | 1090*1236*2040 | 1090*1236*2040 |
| Weight(kg) | 624 | 960 | 1178 |






Note: The above data is for reference only and subject to change without prior notice.

GBP-R 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, with 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.

| | | |
|---|--|--|
|  Small size and light weight |  Screen direct selection of inverter communication |  Standard cycle life is more than 6000 times |
|  Multiple in parallel, easy for expand, Automatic addressing, no need to dial a code |  Easy for installation and maintenance | |



Product parameters >>

| Model | GBP | | | | | | | |
|---|---------------------------------------|-------------|-------------|-------------|-------------|-------------------|-------------|-----------|
| | 24-100R | 24-200R | 48-100R | 48-200R | 48-314R | 51.2-100R | 51.2-200R | 51.2-314R |
| Nominal Voltage (V) | 25.6 | | 48 | | | 51.2 | | |
| Cell Specification | 100 | 100 | 100 | 100 | 314 | 100 | 100 | 314 |
| Nominal Capacity (Ah) | 100 | 200 | 100 | 200 | 314 | 100 | 200 | 314 |
| Nominal Energy (kWh) | 2.56 | 5.12 | 4.8 | 9.6 | 15.1 | 5.12 | 10.24 | 16.1 |
| Operating Voltage Range (V) | 22.4~29.2 | | 42~54.75 | | | 44.8~58.4 | | |
| Recommended Charging Voltage (V) | 27.6 | | 51.75 | | | 55.2 | | |
| Recommended Discharge Cut-off Voltage (V) | 24 | | 45 | | | 48 | | |
| Standard Charge/Discharge Current (A) | 0.5C | | | | | | | |
| Maximum Continuous Charge/Discharge Current (A) | 1C (Customizable) | | | | 0.5C | 1C (Customizable) | | 0.5C |
| Allowable Humidity Range(%RH) | < 85 | | | | | | | |
| Storage Temperature(°C) | -20 ~ 55(Recommend 10 ~ 35) | | | | | | | |
| Charging Temperature(°C) | 0~55 | | | | | | | |
| Discharging Temperature(°C) | -10~55 | | | | | | | |
| Protection Level | IP20 | | | | | | | |
| Cooling Method | Natural Air Cooling / Intelligent Fan | | | | | | | |
| Cycle Life | 6000+Times at 80% DOD | | | | | | | |
| Maximum Dimension (D*W*H)mm | 689*495*162 | 689*495*162 | 682*510*246 | 904*465*252 | 689*495*162 | 682*510*246 | 904*465*252 | |
| Weight(kg) | 28 | 49 | 46 | 93 | 136 | 49 | 96 | 140 |

Note: The maximum charge/discharge rate of models GBP48-200R and BP51.2-200R can be customized to 1C. The above data is for reference only. In case of any changes, no further notice will be given.

GBP51.2 Series (UL Certified)

Rack-Mounted Lithium Iron Phosphate Battery

Product Introduction >>

This product is composed of high-quality lithium iron phosphate cells (series-parallel connected) and an advanced BMS management system. It can be used as an independent DC power source or as a "basic unit" to form energy storage lithium battery power systems of various specifications, featuring high reliability and long service life. It is suitable for backup power supplies in communication base stations, data centers, home energy storage systems, industrial energy storage power supplies, etc., and can seamlessly connect with main equipment such as UPS and photovoltaic power generation systems.

Long Service Life

Designed with high-cycle-life (>6,000 cycles) lithium iron phosphate (LFP) battery cells, it is ideal for general backup power applications and daily energy optimization applications (e.g., peak shaving or load shifting), enabling additional value creation.

Built-in Intelligent BMS

The built-in intelligent Battery Management System (BMS) provides battery status monitoring, automatic protection and optimization functions. Each battery cell is equipped with a dedicated measurement unit, delivering higher precision for peak shaving and ensuring safe and optimal operation throughout its long service life.

Key Features

- RS485/Modbus communication interface
- Electrochemical Impedance Spectroscopy (EIS) measurement for cell health diagnosis
- Compatible with standard telecom rectifiers
- Intelligent charge current limiting and cell balancing
- LED indicators for charging and operating status
- Maintenance-free

Applications

- Power backup for data communications
- Electricity bill optimization based on usage time
- Peak shaving
- Demand response



Product parameters >>

| Model | GBP51.2-100 | GBP51.2-314 |
|---|-------------------------------|-------------|
| Rated Voltage (V) | 51.2 | 51.2 |
| Cell Specification | 100 | 314 |
| Rated Capacity (Ah) | 100 | 314 |
| Rated Energy (kwh) | 5.12 | 16.1 |
| Operating Voltage Range (V) | 44.8~58.4 | |
| Recommended Charging Voltage (V) | 55.2 | |
| Recommended Discharge Cut-off Voltage (V) | 48 | |
| Standard Charge/Discharge Current (A) | 0.5C | |
| Max Continuous Charge/Discharge Current (A) | 1C (Customizable) | 0.5C |
| Allowable Humidity Range (%RH) | < 85 | |
| Storage Temperature (°C) | -20 ~ 55(Recommended:10 ~ 35) | |
| Charging Temperature (°C) | 0~55 | |
| Discharging Temperature (°C) | -10~55 | |
| Protection Rating | IP20 | |
| Cooling Method | Natural Air Cooling | |
| Cycle Life | ≥ 6000 cycles at 80% DOD | |
| Max Dimensions (DxWxH, mm) | 520*435*143 | 560*540*245 |
| Weight (kg) | 49 | 135 |






Note: The above data is for reference only and subject to change without prior notice.

GBP-W Series

Power Wall Type Lithium Ironphosphate Battery

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.

-  Wall-hanging installation, save space.
-  Multiple in parallel, easy for expand, Automatic addressing, no need to dial a code.
-  Standard configuration with LCD display, real time knowing battery status, Screen direct selection of inverter communication.
-  Environmentally friendly non-polluting materials, free of heavy metals, green and environmentally friendly.
-  Standard cycle life is more than 6000 times.



Product parameters >>

| Model | GBP24-100W | GBP24-200W | GBP48-100W | GBP48-200W | GBP51.2-100W | GBP51.2-200W |
|---|---------------------------------------|------------|-------------|------------|--------------|--------------|
| Nominal Voltage (V) | 25.6 | | 48 | | 51.2 | |
| Cell Specification | 100 | 100 | 100 | 100 | 100 | 100 |
| Nominal Capacity (Ah) | 100 | 200 | 100 | 200 | 100 | 200 |
| Nominal Energy (kWh) | 2.56 | 5.12 | 4.8 | 9.6 | 5.12 | 10.24 |
| Operating Voltage Range (V) | 22.4~29.2 | | 42~54.75 | | 44.8~58.4 | |
| Recommended Charging Voltage (V) | 27.6 | | 51.75 | | 55.2 | |
| Recommended Discharge Cut-off Voltage (V) | 24 | | 45 | | 48 | |
| Standard Charge/Discharge Current (A) | 0.5C | | | | | |
| Maximum Continuous Charge/Discharge Current (A) | 1C (Customizable) | | | | | |
| Allowable Humidity Range(%RH) | < 85 | | | | | |
| Storage Temperature (°C) | -20 ~ 55(Recommended 10 ~ 35) | | | | | |
| Charging Temperature (°C) | 0~55 | | | | | |
| Discharging Temperature (°C) | -10~55 | | | | | |
| Protection Level | IP20 | | | | | |
| Cooling Method | Natural Air Cooling / Intelligent Fan | | | | | |
| Cycle Life | 6000+ Times at 80% DOD | | | | | |
| Maximum Dimension (D*W*H)mm | 687*450*186 | | 682*465*276 | | 687*450*186 | 682*465*276 |
| Weight(kg) | 28 | 49 | 46 | 93 | 49 | 96 |






Note: The above data is for reference only. In case of any changes, no further notice will be given. For customization requirements such as Bluetooth function and 1C charge/discharge rate, please consult with the engineer.

GBP-L Series

Wheel Type Lifepo4 Batteries

Product introduction >>

The product adopts wheel design, beautiful shape, and convenient movement; including the mainstream market inverter protocol, directly communicates; adopts a comprehensive and multi-level battery protection strategy and fault isolation measures to ensure the safe operation of the system. Widely used in small commercial and family energy storage.

-  Wheeled design, easy to move.
-  Embedded wiring, safe and reliable.
-  Standard configuration with LCD display screen, to understand battery status in real time, and directly select the inverter communication protocol on the screen.
-  Environmentally friendly and pollution-free materials, no heavy metals, green and environmentally friendly.
-  Standard cycle life over 6,000 times.



Product parameters >>

| Model | GBP48-280L | GBP48-314L | GBP48-560L | GBP48-628L | GBP51.2-280L | GBP51.2-314L | GBP51.2-560L | GBP51.2-628L |
|---|-------------------------------|------------|--------------|------------|--------------|--------------|--------------|--------------|
| Nominal Voltage (V) | 48 | | | | 51.2 | | | |
| Cell Specification | 280 | 314 | 280 | 314 | 280 | 314 | 280 | 314 |
| Nominal Capacity (Ah) | 280 | 314 | 560 | 628 | 280 | 314 | 560 | 628 |
| Operating Voltage Range (V) | 42~54.75 | | | | 44.8~58.4 | | | |
| Recommended Charging Voltage (V) | 51.75 | | | | 55.2 | | | |
| Recommended Discharge Cut-off Voltage (V) | 45 | | | | 48 | | | |
| Standard Charge/Discharge Current (A) | 100 | | 100 | | 100 | | 100 | |
| Maximum Continuous Charge/Discharge Current (A) | 150 | | 200 | | 150 | | 200 | |
| Allowable Humidity Range(%RH) | < 85 | | | | | | | |
| Storage Temperature (°C) | -20 ~ 55(Recommended 10 ~ 35) | | | | | | | |
| Charging Temperature (°C) | 0~55 | | | | | | | |
| Discharging Temperature (°C) | -10~55 | | | | | | | |
| Protection Level | IP20 | | | | | | | |
| Cooling Method | Natural Air Cooling | | | | | | | |
| Cycle Life | 6000+ Times at 80% DOD | | | | | | | |
| Maximum Dimension (D*W*H)mm | 248*680*880 | | 890*350*1060 | | 248*680*880 | | 890*350*1060 | |
| Weight(kg) | 137 | 141 | 280 | 289 | 139 | 144 | 284/293 | |






Note: The above data is for reference only. In case of any changes, no further notice will be given. For special customization requirements, please consult with the engineer.

GBP-H/L Series

Vertical / Wheel Type Lifepo4 Batteries

Product introduction >>

The product adopts vertical / wheel type design, beautiful shape, and convenient movement; including the mainstream market inverter protocol, directly communicates; adopts a comprehensive and multi-level battery protection strategy and fault isolation measures to ensure the safe operation of the system. Widely used in small commercial and family energy storage.

-  Vertical / Wheel Type design, safe and stable.
-  Hidden wiring, beautiful design.
-  Standard LCD display screen, to understand battery status in real time, and directly select the inverter communication protocol on the screen.
-  Environmentally friendly and pollution-free materials, no heavy metals, green and environmentally friendly.
-  Standard cycle life over 6,000 times.



Product parameters >>

| Model | GBP48-280HL | GBP48-314HL | GBP51.2-280HL | GBP51.2-314HL |
|---|-------------------------------|-------------|---------------|---------------|
| Nominal Voltage (V) | 48 | | 51.2 | |
| Cell Specification | 280 | 314 | 280 | 314 |
| Nominal Capacity (Ah) | 280 | 314 | 280 | 314 |
| Operating Voltage Range (V) | 42~54.75 | | 44.8~58.4 | |
| Recommended Charging Voltage (V) | 51.75 | | 55.2 | |
| Recommended Discharge Cut-off Voltage (V) | 45 | | 48 | |
| Standard Charge/Discharge Current (A) | 100 | | | |
| Maximum Continuous Charge/Discharge Current (A) | 150 | | | |
| Allowable Humidity Range(%RH) | < 85 | | | |
| Storage Temperature (°C) | -20 ~ 55(Recommended 10 ~ 35) | | | |
| Charging Temperature (°C) | 0~55 | | | |
| Discharging Temperature (°C) | -10~55 | | | |
| Protection Level | IP20 | | | |
| Cooling Method | Natural Air Cooling | | | |
| Cycle Life | 6000+Times at 80% DOD | | | |
| Maximum Dimension (D*W*H)mm | 480*246*990 | | | |
| Weight(kg) | 139 | 143 | 141 | 145 |

Note: The above data is for reference only. In case of any changes, no further notice will be given. For special customization requirements, please consult with the engineer.

GLV1 Series

Low Voltage Stack System



Product introduction >>

This product adopts stacked design, flexible expansion, beautiful shape; System one-button start, side hidden wiring is convenient for customers to use; Screen direct selection market mainstream inverter protocol, direct communication; Comprehensive and multi-level battery protection strategies and fault isolation measures are adopted to ensure the safe operation of the system, which is widely used in small commercial and home energy storage.

- Chinese and English display summary of all PACK information; Screen direct selection inverter communication protocol;
- Summary switch, to achieve a key switch;
- Stack design allows flexible battery expansion;
- Multiple clusters are parallel. A maximum of eight battery packs can be connected in parallel.



Product parameters >>

| Model | GLV1-P10 | GLV1-P15 | GLV1-P20 | GLV2-P20 | GLV2-P30 | GLV2-P40 |
|--|------------------------------|-------------|--------------|--------------|--------------|--------------|
| Battery Module Model | LFP48V/100Ah | | | LFP48V/200Ah | | |
| Battery Module Nominal Energy(kWh) | 4.8 | | | 9.6 | | |
| Rated Voltage(V) | 48 | | | | | |
| Number of Cell Modules in Single Cluster | 2 | 3 | 4 | 2 | 3 | 4 |
| Single Cluster Battery Energy (kWh) | 9.6 | 14.4 | 19.2 | 19.2 | 28.8 | 38.4 |
| Maximum number of clusters in parallel | 8 | | | | | |
| Operating voltage range(V) | 42~54.75 | | | | | |
| Recommended Charge Voltage(V) | 51.75 | | | | | |
| Recommended discharge cut-off voltage(V) | 45 | | | | | |
| Maximum charge/discharge current(A) | 0.5C | | | | | |
| Unit cluster size (D*W*H)mm | 425*700*672 | 425*700*864 | 425*700*1056 | 479*700*848 | 479*700*1128 | 479*700*1408 |
| Unit cluster weight(kg) | 145 | 199 | 254 | 228 | 324 | 420 |
| Communication mode | CAN/485/Bluetooth | | | | | |
| Storage temperature(°C) | -20 ~ 55(Recommended10 ~ 35) | | | | | |
| Humidity(%RH) | < 85 | | | | | |
| Protection level | IP20 | | | | | |
| Cooling method | Natural Air Cooling | | | | | |
| Number of cycles | ≥6000 | | | | | |
| Standard of security | CE,UN38.3,MSDS | | | | | |





Note: The above data is for reference only and subject to change without prior notice.

GSL Series

Stacked Pv & Battery Energy Storage Integrated Machine

Product introduction >>

This series of products is a stacked all-in-one machine that integrates a hybrid inverter and an energy storage battery. Multiple application modes, high power density, plug-and-play, hidden wiring design are widely used in small commercial and home energy storage.

| | |
|---|--|
|  <p>Multiple application modes Three output modes; Four charging modes.</p> |  <p>Flexible combination method Stacked design; Battery pack capacity expansion on demand.</p> |
|  <p>High security DSP control, advanced control algorithm; Multiple safety warnings and protection.</p> |  <p>Smart and friendly Intelligent battery management system; APP cloud real-time monitoring.</p> |



Product parameters >>

| Model | GSL48 | | | | |
|-------------------------------------|---|--------------|--------------|-------------|--------------|
| | 5.5K-10kWh | 5.5K-20kWh | 5.5K-30kWh | 10K3-10kWh | 10K3-20kWh |
| Inverted Output | | | | | |
| Rated Output Power(W) | 5500 | | 10000 | | |
| Rated Output Powe(VA) | 5500 | | 10000 | | |
| Maximum Peak Power(W) | 10000 | | 15000 | | |
| Rated AC Output | 230VAC (Can be set200/208/220/240VAC) 50/60Hz | | | | |
| Output Voltage Waveform | Pure Sine Wave | | | | |
| Inverter and Bypass Switching Time | 10ms (typical) | | | | |
| Maximum Battery Inverter Efficiency | 93% | | | | |
| Overload Protection | 102%~110%, 5min; 110%~125%, 10s; >125%, 5s | | | | |
| Battery | | | | | |
| Energy Capacity(kWh) | 10 | 20 | 30 | 10 | 20 |
| Battery Module Quantity | 1 | 2 | 3 | 1 | 2 |
| Rated Battery Voltage(VDC) | 48 | | | | |
| Battery Voltage Range(V) | 42~54.75/44.8~58.4 | | | | |
| Rated Charge-Discharge Rate | 0.5C | | 1C | | |
| Max.MPPT Charging Current(A) | 100 | | 200 | | |
| Max.Mains Charging Current(A) | 60 | | 120 | | |
| Maxi.Hybrid Charging Current(A) | 100 | | 200 | | |
| PV Charging | | | | | |
| MPPT Quantity | 1 | | 2 | | |
| Max. PV Array Power(W) | 5500 | | 5500+5500 | | |
| Max. PV Input Current(A) | 22 | | 22+22 | | |
| Max. Open Circuit Voltage(VDC) | 500 | | 500+500 | | |
| MPPT Work Range(V) | 120~450 | | | | |
| MPPT Tracking Efficiency | 99.9% | | | | |
| Mains Input | | | | | |
| Input Voltage Range(VAC) | 90~280/170~280 | | | | |
| Frequency Range(Hz) | 50/60±0.3 | | | | |
| Specifications | | | | | |
| Dimensions(W*D*H)mm | 250*690*850 | 250*690*1310 | 250*690*1770 | 250*690*960 | 250*690*1420 |
| Weight(kg) | 125 | 225 | 325 | 128 | 228 |
| Classification of Waterproof | IP20 | | | | |
| Operating Temperature Range(°C) | -10~55 | | | | |
| Storage Temperature Range(°C) | -20~55 | | | | |
| Noise(dB) | <60 | | | | |
| Heat Dissipation | Inverter forced air cooling (variable speed of fan) / Battery natural air cooling | | | | |

Note: The above data is for reference and subject to change without prior notice. Special voltages can be customized.

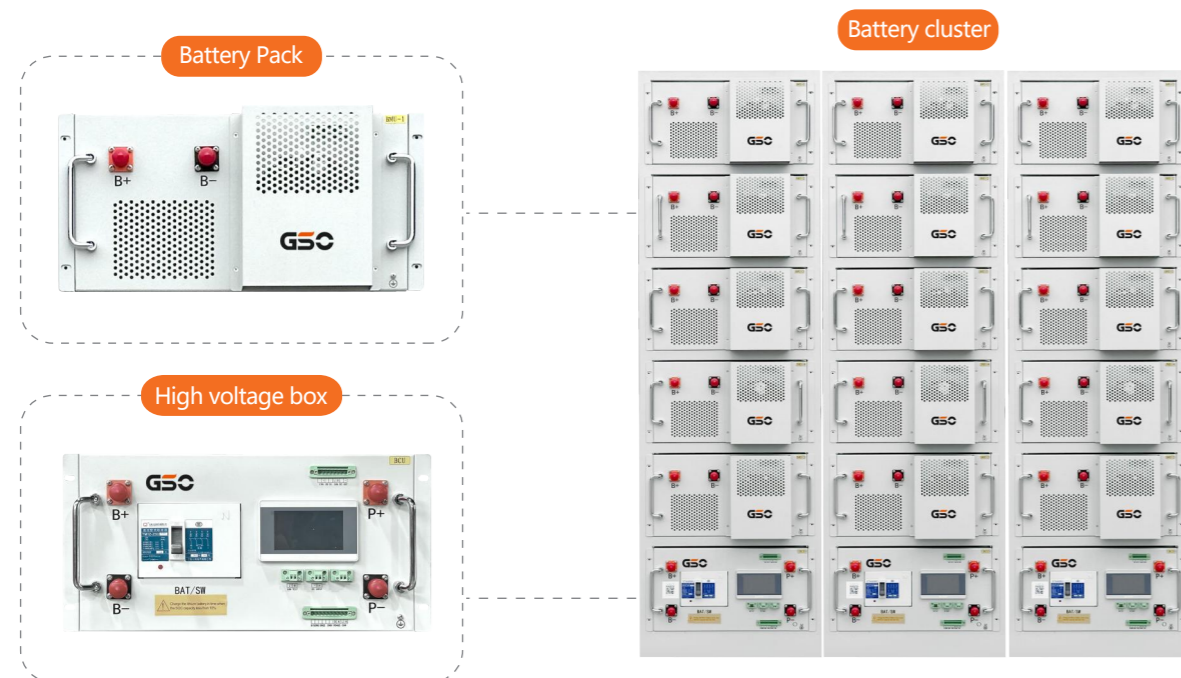
GBP-H2 Series

Lithium Battery Cluster Energy Storage System

Product introduction >>

GBP-H2 series battery products are high-voltage and large-capacity systems developed for industrial and commercial emergency power supply, peak shaving and valley filling, and power supply in remote mountainous areas, islands and other areas without electricity or weak electricity. It uses lithium iron phosphate cells and a customized BMS system to effectively manage the cells. Compared with traditional batteries, it has better product performance and safety and reliability. Diversified communication interfaces and software protocol libraries enable the battery system to directly match and communicate with all mainstream inverters on the market. The product has many charge and discharge cycles, high power density, and a service life of more than 10 years. Unique designs and innovations have been made in compatibility, energy density, dynamic monitoring, safety, reliability, and product appearance, which can bring users a better energy storage application experience.

- Modular design, building-block construction, and automatic ID code recognition.
- Each cluster is equipped with an independent display screen to visually show the operation and alarm status.
- The communication forms are diverse, supporting various types such as TCP/IP, CAN, RS485, dry and wet contacts, etc.
- It is compatible with various types of equipment models currently available in the market, such as inverters, wind power controllers, and chargers.
- Support protocol customization.
- Optional remote DTU is available, which supports online remote upgrades.



Product parameters >>

| Model | GBP96-100 | GBP48-200 | GBP38.4-280 | GBP38.4-314 |
|------------------------------|-------------|-----------|-------------|-------------|
| Cell Type (Ah) | 100 | | 280 | 314 |
| Nominal Energy (kWh) | 9.6 | | 10.7 | 12 |
| Nominal Capacity(Ah) | 100 | 200 | 280 | 314 |
| Nominal Voltage(VDC) | 96 | 48 | 38.4 | |
| Operating Voltage Range(VDC) | 90~106.5 | 45~53.2 | 36~42.6 | |
| Charging Temperature(°C) | 0~55 | | | |
| Discharging Temperature(°C) | -10~55 | | | |
| Protection Level | IP20 | | | |
| Reference Weight (kg) | 87.8 | | 86.5 | 94 |
| Reference Size(D*W*H)mm | 684*510*245 | | | |

Note: The battery pack is used with the system, the cycle life is ≥ 6000 working conditions, 25°C, 80%DOD; special voltage can be consulted and selected; the system with different voltage and capacity registration can be configured according to the battery pack specifications.

Lithium battery cluster voltage platform parameter table >>

| Model | Nominal voltage(V) | Nominal capacity(Ah) | Operating voltage range(VDC) | Recommended charge and discharge current (A) |
|----------------|--------------------|----------------------|------------------------------|--|
| GBP96-100/200 | 96 | 100/200 | 90~106.5 | 50/100 |
| GBP192-100/200 | 192 | | 180~213 | |
| GBP220-100/200 | 220.8/224 | | 207~245 | |
| GBP288-100/200 | 288 | | 270~319.5 | |
| GBP360-100/200 | 358.4 | | 336~397.6 | |
| GBP384-100/200 | 384 | | 360~426 | |
| GBP480-100/200 | 480 | | 450~532 | |
| GBP384-280/314 | 384 | 280/314 | 360~426 | 140/150 |
| GBP460-280/314 | 460.8 | | 432~511 | |
| GBP538-280/314 | 537.6 | | 504~596 | |
| GBP576-280/314 | 576 | | 540~639 | |
| GBP652-280/314 | 652.8 | | 612~724 | |
| GBP692-280/314 | 691.2 | | 648~767 | |
| GBP768-280/314 | 768 | | 720~852 | |

Note: See attachment for detailed parameters, special voltage and capacity can be customized.

GBP-PC Series

Lithium Battery Cluster Energy Storage System

Product introduction >>

GBP-PC series battery products are high-voltage and large-capacity systems developed for industrial and commercial emergency power supply, peak shaving and valley filling, and power supply in remote mountainous areas, islands and other areas without electricity or weak electricity. It uses lithium iron phosphate cells and a customized BMS system to effectively manage the cells. Compared with traditional batteries, it has better product performance and safety and reliability. Diversified communication interfaces and software protocol libraries enable the battery system to directly match and communicate with all mainstream inverters on the market. The product has many charge and discharge cycles, high power density, and a service life of more than 10 years. Unique designs and innovations have been made in compatibility, energy density, dynamic monitoring, safety, reliability, and product appearance, which can bring users a better energy storage application experience.

- Modular design and building block-style assembly, with automatic ID code recognition.
- Each cluster is equipped with an independent display screen, which intuitively shows the operation and alarm status.
- Supports multiple communication types such as TCP/IP, CAN, RS485, and dry/wet contacts.
- Compatible with various types of mainstream equipment on the market, including inverters, wind power controllers, and battery chargers.
- Supports protocol customization; optional remote DTU enables online remote upgrades.
- Removable battery rack to reduce transportation space.



Product parameters >>

| Model | GBP51.2 314 |
|------------------------------|-------------|
| Cell Type (Ah) | 314 |
| Nominal Energy (kWh) | 16.1 |
| Nominal Capacity(Ah) | 314 |
| Nominal Voltage(VDC) | 51.2 |
| Operating Voltage Range(VDC) | 48~56.8 |
| Charging Temperature(°C) | 0~55 |
| Discharging Temperature(°C) | -10~55 |
| Protection Level | IP20 |
| Reference Weight (kg) | 128 |
| Reference Size(D*W*H)mm | 904*510*245 |

Note: The battery pack is used with the system, the cycle life is ≥ 6000 working conditions, 25°C, 80%DOD; special voltage can be consulted and selected; the system with different voltage and capacity registration can be configured according to the battery pack specifications.

Lithium battery cluster voltage platform parameter table >>

| Model | Nominal Voltage(V) | Nominal Capacity(Ah) | Operating Voltage Range(VDC) | Recommended Charge and Discharge Current (A) |
|----------|--------------------|----------------------|------------------------------|--|
| GBP-PC2 | 102.4 | 314 | 96~113.6 | 150 |
| GBP-PC3 | 153.6 | | 144~170.4 | |
| GBP-PC4 | 204.8 | | 192~227.2 | |
| GBP-PC5 | 256 | | 240~284 | |
| GBP-PC6 | 307.2 | | 288~340.8 | |
| GBP-PC7 | 358.4 | | 336~397.6 | |
| GBP-PC8 | 409.6 | | 384~454.4 | |
| GBP-PC9 | 460.8 | | 432~511.2 | |
| GBP-PC10 | 512 | | 480~568 | |
| GBP-PC11 | 563.2 | | 528~624.8 | |
| GBP-PC12 | 614.4 | | 576~681.6 | |
| GBP-PC13 | 665.6 | | 624~738.4 | |
| GBP-PC14 | 716.8 | | 672~795.2 | |
| GBP-PC15 | 768 | | 720~852 | |
| GBP-PC16 | 819.2 | | 768~908.8 | |

Note: See attachment for detailed parameters, special voltage and capacity can be customized.

GSS-PC Series

Lithium Battery Outdoor Cabinet

Product introduction >>

The battery outdoor cabinet is safe, reliable, intelligent, efficient and flexible to deploy. Through modular design and advanced management technology, it provides users with cost-effective energy storage solutions. From cell-level safety control to system-level intelligent scheduling, it fully meets the energy storage needs of different scenarios, and helps green energy transformation and intelligent upgrade of power systems. It adapts to a variety of hybrid inverter brands, fully adapts to support single-branch and two-branch inverters.

Strong environmental adaptability

- It has the characteristics of waterproof, dustproof, sun-proof, and corrosion-resistant. It can operate stably for a long time in high temperature, humid, dusty and other outdoor environments, protecting the battery from external erosion.

Safety protection design

- Fireproof materials or heat-insulating structures are usually used to reduce the risk of fire caused by battery overheating or short circuit; some products are equipped with anti-theft locks or intelligent monitoring systems to improve safety.

Modularity and scalability

- Supports flexible combination of multiple battery packs to meet different capacity requirements; reserved interfaces are convenient for later upgrades or connection to other devices (such as solar panels, inverters, etc.).

Saving space and flexible deployment

- Outdoor independent installation, no need to occupy indoor space; adaptable to diverse scenarios.



General Parameters >>

| Model | System Composition | Rated Voltage (V) | Operating Voltage (V) | Rated Energy (kWh) | Dimensions(D*W*H)mm | Weight(t) |
|----------|--------------------|-------------------|-----------------------|--------------------|---------------------|-----------|
| GSS-PC4 | 4pack | 204.8 | 192~227.2 | 64.3 | 1300*750*1675 | 0.9 |
| GSS-PC5 | 5pack | 256 | 240~284 | 80.4 | 1300*750*1930 | 1.0 |
| GSS-PC6 | 6pack | 307.2 | 288~340.8 | 96.5 | 1300*750*2185 | 1.1 |
| GSS-PC7 | 7pack | 358.4 | 336~397.6 | 112.5 | 1300*1183*1420 | 1.5 |
| GSS-PC8 | 8pack | 409.6 | 384~454.4 | 128.6 | 1300*1183*1675 | 1.7 |
| GSS-PC9 | 9pack | 460.8 | 432~511.2 | 144.7 | | 1.8 |
| GSS-PC10 | 10pack | 512 | 480~568 | 160.8 | 1300*1183*1930 | 2.0 |
| GSS-PC11 | 11pack | 563.2 | 528~624.8 | 176.8 | | 2.1 |
| GSS-PC12 | 12pack | 614.4 | 576~681.6 | 192.9 | 1300*1183*2185 | 2.3 |
| GSS-PC13 | 13pack | 665.6 | 624~738.4 | 209.0 | | 2.4 |
| GSS-PC14 | 14pack | 716.8 | 672~795.2 | 225.1 | 1300*1183*2440 | 2.5 |
| GSS-PC15 | 15pack | 768 | 720~852 | 241 | | 2.6 |

System Parameters>>

| Cell Parameters | Cell Type | Lithium Iron Phosphate Cell |
|---------------------------------|---------------------------------|----------------------------------|
| | Cell Specification | 3.2V314Ah |
| PACK Parameters | Combination Mode | 16S1P |
| | Rated Voltage (V) | 51.2 |
| | Operating Voltage (V) | 48~56.8 |
| | Rated Energy (kWh) | 16 |
| | Standard Charge/Discharge Power | 0.5P |
| System Parameters | Maximum Charge/Discharge Rate | 0.5P |
| | DC Overcurrent Protection | Yes |
| Protection & General Parameters | DC Short - Circuit Protection | Yes |
| | DC Overvoltage Protection | Yes |
| | Over - temperature Protection | Yes |
| | Fire - fighting System | Aerosol/Perfluoroketone Optional |
| | Wiring Mode | Side - entry Wiring |
| | Ambient Temperature (°C) | -20~50 (>45 requires derating) |
| | Charging Temperature (°C) | 0~55 |
| | Discharging Temperature (°C) | -10~55 |
| | Ambient Humidity (%RH) | <95, No Condensation |
| | Operating Altitude (m) | 5000 (Derated use above 2000m) |
| | Protection Class | IP54(Key Components IP65) |
| | Cooling Method | Industrial Air Conditioning |

Note: Subject to the actual product. If there are any modifications to the parameters, we will not notify separately.

GSO50-100P/GSO100-200P

Out Door Cabinet-On Grid Machine Series

Product introduction >>

The air cooling outdoor cabinet-on grid machine integrates energy storage batteries, PCS, EMS, air conditioning and fire protection systems. It is a product specially launched for the application needs of small industrial and commercial, hospital buildings, and household energy storage peak-shaving and valley-filling applications.

Product Features

- All in one, factory prefabricated design;
- Flexible deployment, plug and play;

Intelligent and friendly

- Programmable working mode, touch screen control;
- Linkage of local and cloud monitoring, rapid digital diagnosis, and intelligent automatic inspection;

Safe and efficient

- High efficient neutral point clamped;
- No parallel circulation, reduce energy loss significantly;
- 3S collaboration,EMS closed-loop safety logic,make sure system security;

Cost effective

- Multiple charging and discharging logic, support peak and valley arbitrage
- System comprehensive conversion efficiency $\geq 90\%$



Product parameters >>

| Model | GSO50-100P | GSO100-200P |
|--|--|----------------|
| Rated Power(kW) | 50 | 100 |
| Maximum Output Power(kW) | 55 | 110 |
| Rated AC Voltage(V) | AC 400 | |
| AC Voltage Range(V) | AC 380(-20%~+15%) | |
| Rated AC Frequency(Hz) | 50/60±2.5 | |
| Power Factor | -0.99 ~ +0.99 | |
| THDI | ≤3%(Full load) | |
| Charging/Discharging Conversion Time(ms) | < 100 | |
| Isolation Method | None isolation | |
| Connect Method | Three phase four wire | |
| Battery Configuration | 1P225S | 1P210S |
| Battery Cell Type | LFP 150Ah | LFP 300Ah |
| Nominal Voltage(V) | 720 | 672 |
| Operating Voltage(V) | 652.5~798.75 | 609~745.5 |
| Battery Capacity(kWh) | 108 | 201 |
| PCS Maximum Efficiency | ≥98% | |
| System Aximum Efficiency | > 90% | |
| Charging/Discharging Rate | ≤0.5C | |
| AC Input | Yes | |
| PCS AC Protection | Yes | |
| AC Output Protection | Yes | |
| Over Voltage Protection | Yes | |
| Fire Protection | Aerosol / Perfluoro | |
| Dimension(D*W*H) | 1200*1100*2200 | 1200*1600*2200 |
| Weight(t) | 1.8 | 2.6 |
| Incoming Line Method | Side connection(Bottom connection can be customized) | |
| Operating Temperature Range(°C) | -20~50(De-rating power from 45) | |
| Temperature Humidity(%RH) | ≤95%, Non-condensing | |
| Work Altitude(m) | ≤3000(De-rating power from 2000) | |
| IP Grade | IP54(Key Device IP65) | |
| Cooling Method | Industrial air Conditioning(for battery)/Forced air cooling(for electrical equipment) | |
| Communication Interfaces | RS485/Etherne | |
| Communication Rules | RTU/MODBUS-TCP | |

Note: The above data is for reference only and is subject to change without prior notice.

GSO50-100/GSO125-245

Out Door Cabinet-On/off Grid Machine Series

Product introduction >>

The air cooling outdoor cabinet-on/off grid machine integrates energy storage batteries, PCS, EMS, DCDC, air conditioning and fire protection systems. Suitable for various application scenarios, and can be widely applied in small-scale commercial and industrial enterprises, hospital buildings, residential energy storage, etc. Equipped with features such as peak shaving, self-consumption, dynamic scaling, and planned curve response.

Highly integrated

- All in one, factory prefabricated design;
- Flexible deployment, plug and play;
- Incorporating STS , it achieves seamless switching between on off grid.
- Incorporating DCDC, it enables PV integration, saving electricity costs.

Intelligent and friendly

- Programmable working mode, touch screen control;
- Intelligent switching strategies for different scenarios: peak shaving, self-consumption, dynamic scaling, planned curve response;
- Linkage of local and cloud monitoring, rapid digital diagnosis, and intelligent automatic inspection;

Safe and efficient

- High efficient neutral point clamped;
- No parallel circulation, reduce energy loss significantly;
- 3S collaboration,EMS closed-loop safety logic,make sure system security;

Grid friendly

- Equipped with active and reactive power quadrant regulation.
- Equipped with Low Voltage Ride Through (LVRT) and High Voltage Ride Through (HVRT).
- Equipped with precise switching between power, grid, and loading.



Product parameters >>

| Model | GSO50-100 | GSO80-165 | GSO105-200 | GSO105-225 | GSO125-245 | |
|-----------------------|---|---|----------------|------------|------------|--------|
| On grid parameter | Rated power(kW) | 50 | 80 | 105 | 125 | |
| | Maximum output power(kW) | 55 | 88 | 116 | 138 | |
| | Rated grid voltage(V) | 400 | | | | |
| | Rated current(A) | 72 | 115 | 167 | 200 | |
| | Allowable grid voltage(V) | ±15% | | | | |
| | Rated grid frequency(Hz) | 50±5 | | | | |
| | Power Factor | 0.99 | | | | |
| | THDI | < 3% (Rated power) | | | | |
| | Overload capacity | 110% Long term | | | | |
| | Access method | 3P4W | | | | |
| Off grid parameter | Rated output voltage(V) | 400 | | | | |
| | Rated output power(kW) | 50 | 80 | 100 | 125 | |
| | Rated grid frequency(Hz) | 50±5 | | | | |
| | THDU | < 3% (Linear power) | | | | |
| | Unbalanced load capacity | 100% | | | | |
| | Overload capacity | 110% Long term | | | | |
| | Charge and discharge conversion time (ms) | < 20 | | | | |
| | Battery parameter | Battery system configuration | 1P216S | 1P224S | 1P224S | 1P224S |
| | | Cell Type | 150Ah | 230Ah | 280Ah | 314Ah |
| | | Rated voltage(V) | 691.2 | 716.8 | 716.8 | 716.8 |
| Operating voltage(V) | | 672~767 | 672~796 | 672~796 | 672~796 | |
| Battery Capacity(kWh) | | 108 | 170 | 215 | 230 | |
| PV | PV voltage range | 500~620 | 500~620 | 500~620 | 500~620 | |
| | Maximum input power(kW) | 50 | | 100 | | |
| | Rated current on Low voltage side(A) | 100 | | 200 | | |
| | Maximum efficiency | ≥99% | | | | |
| | Number of MPPT tracker | 1 | | 2 | | |
| System efficiency | PCS maximum efficiency | ≥98% | | | | |
| | System maximum efficiency | > 90% | | | | |
| | Battery charge and discharge rate | ≤0.5C | | | | |
| Protection | Battery reverse connection protection | Yes | | | | |
| | DC overcurrent protection | Yes | | | | |
| | AC overcurrent protection | Yes | | | | |
| | AC overvoltage protection | Yes | | | | |
| | Surge protection | Yes | | | | |
| | Fire protection system | Non-stationary pressure perfluoroacetone | | | | |
| | Grid support | L/HVRT, active and reactive power control | | | | |
| General parameter | Dimensions(D*W*H)mm | 1400*1400*2200 | 1400*1950*2200 | | | |
| | Weight (t) | 2.5 | 3 | 3.3 | 3.7 | |
| | Line entry method | Side entry | | | | |
| | Ambient temperature(°C) | -20~50(De-rating power from 45°C) | | | | |
| | Charging temperature(°C) | 0~55 | | | | |
| | Discharge temperature(°C) | -10~55 | | | | |
| | Ambient humidity(%RH) | <95%RH, non-condensing | | | | |
| | Working altitude(m) | 5000 (De-rating power from 2000m) | | | | |
| | Ingress Protection Rating | IP54(IP65 for key components) | | | | |
| | Cooling method | Industrial air conditioning (battery compartment) / forced air cooling (electrical compartment) | | | | |
| Commu-nication | Communication interface | CAN/RS485/Ethernet | | | | |
| | Communication Protocol | RTU/MODBUS-TCP | | | | |

Note: Actual product may vary. Supports US standard three-phase and split-phase systems (customizable). Specifications are subject to change without prior notice.

GLC125-261/GLC250-514

Liquid Cooling Outdoor Cabinet

Performance characteristics >>

Longevity and cost reduction

- Balancing technology improves battery consistency and extends system lifespan.
- The temperature difference of the batteries in the PACK is less than 3°C, which effectively extends the battery life.
- The charge and discharge conversion efficiency is greater than 91%, and the system life is more than 6,000 times.
- Intelligent liquid cooling temperature control reduces auxiliary power consumption by 20%, saving operating costs.
- Pre-installed design for easy transportation, no battery installation work.

Safe and reliable

- AI monitoring of battery cell health and early warning of sick batteries.
- Closed liquid cooling system + cloud management, safer.
- Triple independent fire protection, space-level and PACK-level fire protection, 1.5H fire resistance for the whole cabinet.

Efficient and flexible

- ALL IN ONE design concept, high power, high energy density, and 20% less floor space.
- Intelligent cluster-level management reduces the cask effect of battery clusters and increases discharge capacity.
- Plug and play, Three-phase four-wire.

Lean Intelligence

- SOC high-precision status assessment can dynamically adjust energy efficiency management strategies. Intelligent cloud operation and maintenance, APP terminal, unattended operation.
- Multi-scenario function presets: substation management, industrial and commercial microgrids, oil engine replacement, etc.



Product parameters >>

| Mode | | GLC125-261 | GLC250-514 |
|--------------------------|-----------------------------------|---|----------------|
| DC Battery Parameters | Battery cell Type | LFP3.2V/314Ah | |
| | Battery Pack Configuration | 1P52S/52.249kWh | 1P64S/64.31kWh |
| | Battery System Configuration | 1P260S | 1P256S*2 |
| | Battery Voltage Range | 728~923 | 716.8~908.8 |
| | Battery System Capacity | 261.24 | 514.45 |
| | Temperature Detection | Battery cell + copper busbar | |
| | Battery Charging/Discharging Rate | ≤0.5P | |
| AC Parameters (On grid) | Rated Power | 125 | 250 |
| | Maximum Output Power | 135 | 270 |
| | Rated Grid Voltage | AC380V-15%~+10% | |
| | Rated Grid Frequency | 50/60, ±5 | |
| | Power Factor | -1 (leading) ~ 1 (lagging) | |
| | AC Current Harmonics (THDi) | <3% (rated output power) | |
| | Connect Method | Three-phase, four-wire | |
| AC Parameters (Off grid) | Rated Output Voltage | 380V±3%AC | |
| | Rated Output Power | 125 | 250 |
| | Rated Output Frequency | 50/60Hz | |
| | AC Voltage Harmonics (THDu) | <3% (linear load) | |
| System Parameters | Overload Capacity | 1.1 times rated load (45°C), 1.2 times for 1 min, 1.3 times for 1 s | |
| | Highest System Efficiency | 91% | |
| Protection | DC Input | Load switch + fuse | |
| | Overvoltage Protection | DC Type II/AC Type II | |
| | Fire Protection System | PACK-level fire protection, full cabinet fire protection | |
| Incoming Line Method | | AC power input from bottom | |
| Environment Requirements | Allowable Ambient Temperature | -30~+55 (derating at 45) | |
| | Allowable Ambient Humidity | 0~95%RH | |
| | Maximum Working Altitude | 3000 (derating above 2000) | |
| | Protection Level | IP54 | |
| | Corrosion Resistance Grade | C3 | |
| | Cooling Method | Liquid cooling | |
| | Weight | 2.3 | 6 |
| Dimension(W*D*H) mm | 982*1380*2657 | 1360*2380*2394 | |

Note: The actual product shall prevail. Parameters are subject to modification without prior notice.

Energy Storage System

Containerized



Product Introduction >>

The containerized energy storage system includes: BESS, bidirectional power conversion system (PCS), DC conversion system (PDS), microgrid switching system (STS), energy management system (EMS), auxiliary power distribution system, air conditioning system, and fire protection.

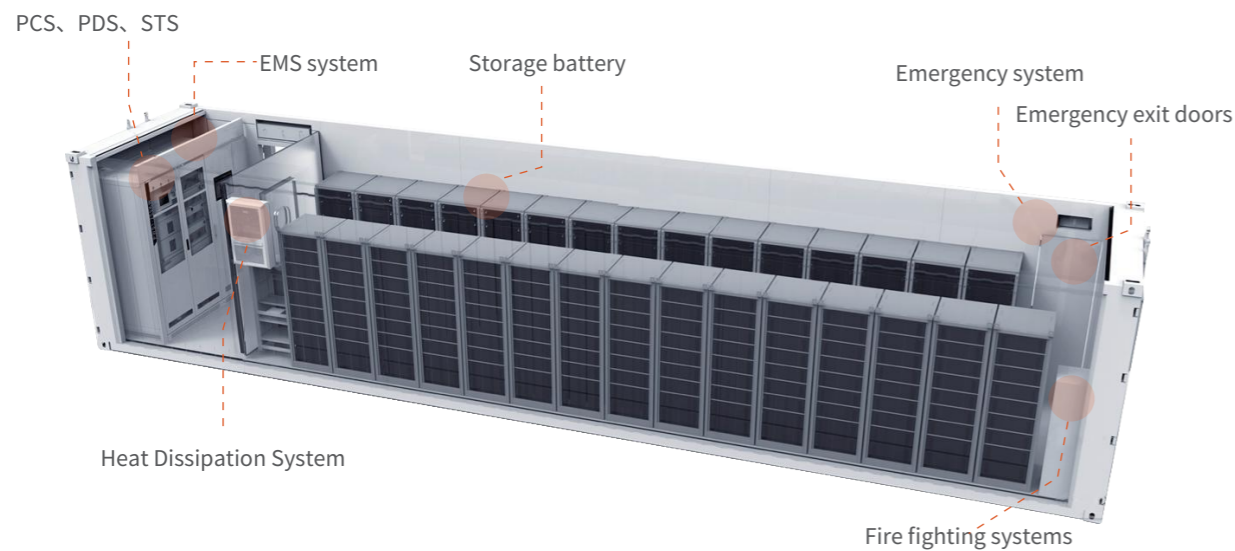
Performance advantage >>

- According to customer needs, the type and capacity of the battery system can be flexibly configured
- PCS adopts modular, power frequency overall architecture, simple maintenance, flexible configuration, and can realize multiple parallel machines
- Supports on-grid and off-grid operation mode, seamless switching, and supports black start
- EMS unattended system, local control, cloud monitoring operation, with highly customizable functions
- With peak shaving and valley filling, demand response, anti-reverse flow operation, backup power supply, command response and other modes
- With a complete gas fire extinguishing system and automatic fire monitoring and alarm system, sound and light alarm and fault transmission
- With a complete heat dissipation and temperature control system to ensure that the temperature of the battery compartment is within the optimal working range
- The access control system has remote control and on-site operation functions

Product parameters >>

| Model | 10ft | 20ft | 40ft |
|----------------------------|--------------------------------|----------------------|-----------------------|
| Output Voltage (V) | 380/400±15% | | |
| Grid Frequency (Hz) | 50/60(±2.5) | | |
| Output Power (kW) | 50~100 | 50~500 | 250~630 |
| Battery Capacity(kWh) | 50~400 | 200~1500 | 800~3000 |
| Battery Type | Lithium Iron Phosphate Battery | | |
| Dimensions(D*W*H)mm | Inner:2831*2352*2385 | Inner:2352*5898*2385 | Inner:2352*12032*2385 |
| | Outer:2438*2991*2591 | Outer:2438*6058*2591 | Outer:2438*12192*2591 |
| Protection Level | IP54 | | |
| Humidity Range (%RH) | 0~95 | | |
| Altitude (m) | 3000 | | |
| Operating Temperature (°C) | -20~50 | | |
| Battery Voltage Range (V) | 250~850 | | |
| Maximum DC Current (A) | 200 | 750 | 1500 |
| Connection Method | 3P4W | | |
| Power Factor | -1~1 | | |
| Communication Method | RS485,CAN,Ethernet | | |
| Isolation Method | Power Frequency Isolation | | |

Note: The above data are subject to change without prior notice.



Battery Combiner Box Regular Version



Product Introduction >>

This product is used with low-voltage lithium iron phosphate battery pack. It is compact and easy to install. It can effectively solve the problem of inconsistent battery pack capacity when multiple low-voltage battery packs are running in parallel. It is widely used in small-scale industrial and commercial and household energy storage.

Performance advantage >>



Indoor installation



Use multiple batteries in parallel



Easy and quick installation

Product parameter >>

| Model | GSBD3-8-250A | GSBD3-10-500A | GSBD4-12-800A | GSBD6-20-1250A |
|-------------------------------|--------------|---------------|---------------|----------------|
| Number of connected batteries | 3~8 | 3~10 | 4~12 | 6~20 |
| Maximum allowable current (A) | 250 | 500 | 800 | 1250 |
| Working temperature(°C) | -10~55 | | | |
| Chassis size (D*W*H)mm | 410*310*180 | | 500*600*250 | |
| Weight(kg) | 12~26 | | | |

Note: The above data is for reference only and is subject to change without prior notice.

Battery Combiner Box Customized Version



Product Introduction >>

This product is used with low-voltage lithium iron phosphate battery pack. It is compact, easy and quick to install, and has over-current and over-voltage protection measures, making the system operation more efficient and safer. At the same time, it effectively solves the problem of inconsistent battery pack capacity when multiple low-voltage battery packs are running in parallel. It is widely used in small-scale industrial and commercial and household energy storage.

Performance advantage >>



Use multiple batteries in parallel



Easy and quick installation



Overcurrent and overvoltage protection

Product parameter >>

| Model | GSBC2-5-100A | GSBC3-8-300A | GSBC6-10-500A | GSBC11-16-500A |
|-------------------------------|--------------|--------------|---------------|----------------|
| Number of connected batteries | 2~5 | 3~8 | 6~10 | 10~16 |
| Maximum allowable current (A) | 100 | 300 | 500 | 500 |
| Withstand voltage(VDC) | 250 | 500 | | |
| Overcurrent protection | Yes | | | |
| Working temperature(°C) | -10~55 | | | |
| Chassis size (D*W*H)mm | 500*600*250 | | | 500*700*220 |
| Weight (kg) | 18~20 | | | |

Note: The above data is for reference only and is subject to change without prior notice.



PHOTOVOLTAIC POWER ENERGY STORAGE SYSTEMS

JIANGSU GSO NEW ENERGY TECHNOLOGY CO. LTD

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JIANGSU GSO NEW ENERGY
TECHNOLOGY CO. LTD

SEARCH



COMPANY PROFILE

JIANGSU GSO NEW ENERGY TECHNOLOGY CO., LTD is a national high-tech enterprise and a technology innovation enterprise dedicated to photovoltaic and energy storage industry with independent R&D capabilities. Relying on the profound technical accumulation of power electronics from its group company, the company deeply integrates digital intelligent technology with core energy storage technology.

It professionally covers a full industrial chain of products including inverters, lithium battery PACK, residential energy storage, commercial & industrial energy storage, mobile energy storage, energy storage converters, photovoltaic-energy storage systems and smart microgrids, and has built a full-life-cycle photovoltaic & energy storage product matrix covering residential, commercial & industrial and special scenarios.

Our products have obtained a full range of ISO certifications, EU CE certification, UL Certification (USA), UN38.3 test report, MSDS certification, cargo transportation condition identification and other authoritative domestic and international certifications, as well as numerous national patents and software copyrights.

We provide one-stop photovoltaic & energy storage overall deployment, customized system solutions and intelligent energy operation & maintenance services for diversified application scenarios such as new energy power generation in mountainous and island areas, photovoltaic-diesel hybrid microgrids, industrial and commercial parks, peak shaving & valley filling, and wind-photovoltaic-diesel-energy storage integration.

At present, GSO NEW ENERGY's global sales network covers more than 100 countries and regions worldwide, and has served

over 200,000 end users. We keep providing safe, efficient and stable photovoltaic & energy storage products and professional technical services for global customers.

In the future, adhering to technological innovation as the core driving force and the original aspiration of quality commitment, GSO NEW ENERGY will continue to deeply cultivate the clean energy industry. We are committed to providing global users with safe, high-quality, intelligent and integrated comprehensive energy solutions, promoting high-quality development of the energy storage industry with independent core technologies, and joining hands with global partners to build a green and sustainable energy future.

Mission

Become the evergreen tree in the power supply industry and customers' most trusted power supply expert.

Vision

To provide quality power solutions and green energy for mankind.

Values

Responsibility; Innovation; Integrity; Enterprising.

Quality policy

Customer first, quality oriented, refinement and innovation abide by the agreement.

COMPANY HONOR



SERVICE SYSTEM

GSO New Energy always aims to meet customer needs, is committed to improving service quality and value, takes customer service as the ultimate concept, and establishes an all-round, high-quality and standardized customer service system. It has formed a service structure from pre-sales telephone consultation, on-site environmental survey, power supply scheme design, to after-sales installation and commissioning, use and maintenance, technical training, and spare parts support. A number of professional and skilled engineers are ready to provide you with one-stop service and support at any time, helping customers to truly obtain a power supply solution with high practicability and reliability, maximizing investment value, and allowing customers to enjoy the high-quality service level.



After-sale service >>

GSO New Energy has established after-sales service centers and cooperative branches in many overseas regions, and set up after-sales service networks in multiple provincial capitals and major cities in China, striving to choose the branch closest to customers, provide high-quality and fast services to users, respond quickly, arrive at the service site in a timely manner, and solve problems for customers as soon as possible.

To ensure the implementation of high-quality service levels, GSO New Energy achieves service goals by establishing a four-level service system including headquarters technical support center, regional maintenance center, provincial maintenance center, and municipal maintenance center. At the same time, tailored service plans will be provided for grassroots user units located in mountainous areas and townships during the service process.

Customer training >>

GSO New Energy has a training center with professional and skilled engineers who provide customers with theoretical and practical training services in operation, use, maintenance, and other aspects. In addition, GSO New Energy will also formulate annual training plans for customers to help them better understand and use GSO brand products.





Product introduction

GST series is a new all-in-one solar charge inverter, which integrates solar energy storage & utility charging energy storage and AC sine wave output. Thanks to DSP control and advanced control algorithm, it has high response speed, high reliability and high industrial standard. Four charging modes are optional, i.e. Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging; and two output prior are available to meet different application requirements.

Performance characteristics

High energy conversion efficiency

High charging and inversion efficiency, low loss and energy saving.

Four charging modes

Mains priority charging, solar priority charging, mains solar hybrid charging and solar only charging.

Emergency function

Support battery-free output, only PV start and loading, with battery activation function.

The host computer and the APP cloud communication

The host computer and the APP cloud can display the operating data and status of the system in real time and control and modify the parameters.

Parallel function

It can be flexibly combined to achieve up to 9 parallel machines, and the parallel system can output single-phase and three-phase AC voltage.

Protection function

Perfect hardware and software protection function, can display the fault type for easy removal.

Timed charging and discharging function

Allowing for segmented charging and discharging at different times.

Technical parameters

| MODEL | GST48-3.5K-P1 | GST48-6.6K-P1 | GST48-8.5K-P1 | GST48-10.5K-P1 | GST48-12.5K-P1 |
|-------------------------------------|---|---------------|---------------|----------------|----------------|
| INVERTER OUTPUT | | | | | |
| Rated output power (W) | 3500 | 6600 | 8500 | 10500 | 12500 |
| Rated output power (VA) | 3500 | 6600 | 8500 | 10500 | 12500 |
| Maximum Peak Power (W) | 6000 | 12000 | 13000 | 16000 | 19000 |
| Load Capacity with Motors (HP) | 2 | 4 | 5 | 6 | 7 |
| Rated AC Output | 230 VAC (200 / 208 / 220 / 240VAC), 50 / 60Hz | | | | |
| Output Voltage Waveform | Pure Sine Wave | | | | |
| Inverter and Bypass Switching Time | 10ms (typical) | | | | |
| Parallel Capacity | 9 | | | | |
| Maximum Battery Inverter Efficiency | 93% | | | | |
| Overload Protection | 102%~110%, 5min; 110%~125%, 10s; >125%, 5s | | | | |
| BATTERY | | | | | |
| Battery Type | Lithium / Lead-acid / User Defined | | | | |
| Rated Battery Voltage (VDC) | 48 | | | | |
| Battery Voltage Range (VDC) | 40~60 | | | | |
| Max.MPPT Charging Current (A) | 60 | 120 | 200 | 220 | 240 |
| Max.Mains Charging Current (A) | 60 | 60 | 100 | 120 | 120 |
| Max.Hybrid Charging Current (A) | 80 | 120 | 200 | 220 | 240 |
| Charging current error (ADC) | ±3 | | | | |
| Charging Short Circuit protection | Blown Fuse | | | | |
| PV CHARGING | | | | | |
| MPPT Quantity | 1 | | 2 | | |
| Max. PV array power (W) | 4000 | 6600 | 6600+6600 | | |
| Max. PV input current (A) | 15 | 22 | 22+22 | | |
| Max. Open Circuit Voltage (VAC) | 500 | | 500+500 | | |
| MPPT Voltage Range (VDC) | 120~450 | | | | |
| MPPT Tracking Efficiency | 99.9% | | | | |
| MAINS INPUT | | | | | |
| Input Voltage Range (VAC) | 90~280/170~280 | | | | |
| Frequency Range (Hz) | 50/60±0.3 | | | | |
| Input Short Circuit Protection | Circuit breaker | | | | |
| Bypass Overload Current (A) | 30 | 40 | 63 | | |
| SPECIFICATIONS | | | | | |
| Dimensions (D*W*H)mm | 130*350*455 | | 130*445*630 | | |
| Weight (kg) | 11 | 12 | 27 | | |
| Classification of waterproof | IP20 | | | | |
| Operating Temperature Range (°C) | -10~55 | | | | |
| Storage Temperature Range (°C) | -25~60 | | | | |
| Noise (dB) | <60 | | | | |
| Heat Dissipation | Forced air cooling (variable speed of fan) | | | | |
| COMMUNICATION | | | | | |
| Embedded interface | RS485 / CAN / USB / Dry contact | | | | |
| External module | WIFI/4G | | | | |
| CERTIFICATION | | | | | |
| Safety | CE(IEC62109-1) | | | | |
| EMC | EN61000 | | | | |



Product introduction

GST series is a new all-in-one solar charge inverter, which integrates solar energy storage & utility charging energy storage and AC sine wave output. Thanks to DSP control and advanced control algorithm, it has high response speed, high reliability and high industrial standard. Four charging modes are optional, i.e. Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging; and two output prior are available to meet different application requirements.

Performance characteristics

High energy conversion efficiency

High charging and inversion efficiency, low loss and energy saving.

Four charging modes

Mains priority charging, solar priority charging, mains solar hybrid charging and solar only charging.

Emergency function

Support battery-free output, only PV start and loading, with battery activation function.

The host computer and the APP cloud communication

The host computer and the APP cloud can display the operating data and status of the system in real time and control and modify the parameters.

Parallel function

It can be flexibly combined to achieve up to 9 parallel machines.

Protection function

Perfect hardware and software protection function, can display the fault type for easy removal.

Timed charging and discharging function

Allowing for segmented charging and discharging at different times.

Technical parameters

| MODEL | GST48-8.5K-P3 | GST48-10.5K-P3 | GST48-12.5K-P3 |
|-------------------------------------|--|----------------|----------------|
| INVERTER OUTPUT | | | |
| Rated Output Power (W) | 8500 | 10500 | 12500 |
| Rated Output Power (VA) | 8500 | 10500 | 12500 |
| Maximum Peak Power (W) | 13000 | 16000 | 19000 |
| Load Capacity with Motors(HP) | 5 | 6 | 7 |
| Rated AC Output | 400 VAC Three phase, 50 / 60Hz | | |
| Output Voltage Waveform | Pure Sine Wave | | |
| Inverter and Bypass Switching Time | 10ms (typical) | | |
| Maximum Battery Inverter Efficiency | ≥93% | | |
| Overload Protection | 102%~110%, 5min; 110%~125%, 10s; >125%, 5s | | |
| BATTERY | | | |
| Battery Type | Lithium / Lead-acid / User Defined | | |
| Rated Battery Voltage(VDC) | 48 | | |
| Battery Voltage Range(VDC) | 40~60 | | |
| Max.Mains Charging Current(A) | 100 | 120 | 120 |
| Max.Hybrid Charging Current(A) | 200 | 220 | 240 |
| Charging current error(ADC) | ±3 | | |
| Charging Short Circuit protection | Blown Fuse | | |
| PV INPUT | | | |
| MPPT Quantity | 2 | | |
| Max. PV array power(W) | 6000+6000 | 7500+7500 | 9000+9000 |
| Max. PV input current(A) | 22+22 | | |
| Max. Open Circuit Voltage(VDC) | 800+800 | | |
| MPPT Voltage Range(VDC) | 200~650 | | |
| MPPT Tracking Efficiency | 99.9% | | |
| MAINS INPUT | | | |
| Input Voltage Range(VAC) | Phase Voltage170~280, Line Voltage305~485 | | |
| Frequency Range(Hz) | 50/60±0.3 | | |
| Input Short Circuit Protection | Circuit breaker | | |
| Bypass Overload Phase Current(A) | 23 | 29 | 35 |
| SPECIFICATIONS | | | |
| Dimensions (D*W*H)mm | 130*445*630 | | |
| Weight(kg) | 27 | | |
| Classification of waterproof | IP20 | | |
| Operating Temperature Range(°C) | -10~55 | | |
| Storage Temperature Range(°C) | -25~60 | | |
| Noise(dB) | <60 | | |
| Heat Dissipation | Forced air cooling (variable speed of fan) | | |
| COMMUNICATION | | | |
| Embedded interface | RS485/CAN/USB/Dry contact | | |
| External module | WIFI/4G | | |
| CERTIFICATION | | | |
| Safety | CE(IEC62109-1) | | |
| EMC | EN61000 | | |

Note: Above data are subject to change without notice. Special voltage could be customized.



HYBRID INVERTER >>>

US GST series

Product introduction

US GST series is a new all-in-one solar charge inverter, which integrates solar energy storage & utility charging energy storage and AC sine wave output. Thanks to DSP control and advanced control algorithm, it has high response speed, high reliability and high industrial standard. Four charging modes are optional, i.e. Only Solar, Mains Priority, Solar Priority and Mains & Solar hybrid charging; and two output prior are available to meet different application requirements.

Performance characteristics

High energy conversion efficiency

High charging and inversion efficiency, low loss and energy saving.

Four charging modes

Mains priority charging, solar priority charging, mains solar hybrid charging and solar only charging.

Emergency function

Support battery-free output, only PV start and loading, with battery activation function.

The host computer and the APP cloud communication

The host computer and the APP cloud can display the operating data and status of the system in real time and control and modify the parameters.

Parallel function

It can be flexibly combined to achieve up to 9 parallel machines, and the parallel system can output single-phase and three-phase AC voltage.

Protection function

Perfect hardware and software protection function, can display the fault type for easy removal.

Timed charging and discharging function

Allowing for segmented charging and discharging at different times.

Technical parameters

| MODEL | GST48-6.6K-U | GST48-8.5K-U | GST48-10.5K-U | GST48-12.5K-U |
|-------------------------------------|--|---|---------------|---------------|
| INVERTER OUTPUT | | | | |
| Rated output power (W) | 6600 | 8500 | 10500 | 12500 |
| Rated output power (VA) | 6600 | 8500 | 10500 | 12500 |
| Maximum Peak Power (W) | 12000 | 13000 | 16000 | 19000 |
| Load Capacity with Motors (HP) | 4 | 5 | 6 | 7 |
| Rated AC Output | 120Vac, 50/60Hz | 120/240Vac (single phase/split phase) , 50/60Hz | | |
| Output Voltage Waveform | Pure Sine Wave | | | |
| Inverter and Bypass Switching Time | 10ms (typical) | | | |
| Parallel Capacity | 9 channels | | | |
| Maximum Battery Inverter Efficiency | 93% | | | |
| Overload Protection | 102%~110%, 5min; 110%~125%, 10s; >125%, 5s | | | |
| BATTERY | | | | |
| Battery Type | Lithium / Lead-acid / User Defined | | | |
| Rated Battery Voltage(VDC) | 48 | | | |
| Battery Voltage Range(VDC) | 40~60 | | | |
| Max.MPPT Charging Current(A) | 120 | 200 | 220 | 240 |
| Max.Mains Charging Current(A) | 60 | 100 | 120 | 120 |
| Max.Hybrid Charging Current(A) | 120 | 200 | 220 | 240 |
| Charging current error(ADC) | ±3 | | | |
| Charging Short Circuit protection | Blown Fuse | | | |
| PV CHARGING | | | | |
| MPPT Quantity | 1 | 2 | | |
| Max. PV array power(W) | 6600 | 6600+6600 | | |
| Max. PV input current(A) | 22 | 22+22 | | |
| Max. Open Circuit Voltage(VDC) | 500 | 500+500 | | |
| MPPT Voltage Range(V) | 120~450 | | | |
| MPPT Tracking Efficiency | 99.9% | | | |
| MAINS INPUT | | | | |
| Input Voltage Range(VAC) | 90~140 | | | |
| Frequency Range(Hz) | 50/60±0.3 | | | |
| Input Short Circuit Protection | Circuit breaker | | | |
| Bypass Overload Current(A) | 40 | 50 | 63 | |
| SPECIFICATIONS | | | | |
| Dimensions (Width*Depth*Height-mm) | 350*130*455 | 445*130*630 | 445*130*630 | |
| Weight (kg) | 12 | 26 | 27 | |
| Classification of waterproof | IP20 | | | |
| Operating Temperature Range(°C) | -10 ~55 | | | |
| Storage Temperature Range(°C) | -25 ~60 | | | |
| Noise(dB) | <60 | | | |
| Heat Dissipation | Forced air cooling (variable speed of fan) | | | |
| COMMUNICATION | | | | |
| Embedded interface | RS485 / CAN / USB / Dry contact | | | |
| External module | WIFI/4G | | | |
| CERTIFICATION | | | | |
| Safety | CE(IEC62109-1) | | | |
| EMC | EN61000 | | | |

Note: Above data are subject to change without notice. Special voltage could be customized.



PV INVERTER & CONTROLLER INTEGRATED MACHINE >>> Single-phase power frequency GSA series



Product introduction

The photovoltaic control and inverter integrated machine (hereinafter referred to as the inverter control integrated machine) is a new type of photovoltaic power generation device that organically combines a photovoltaic charge controller and an inverter. It consists of a charge controller, an inverter and a protection circuit, and the output is a pure sine wave voltage. It has the advantages of small total installation space, few connection lines, safety and reliability.

Photovoltaic charge controller is a high-performance step-down device that uses MPPT (Maximum Power Point Tracking) algorithm to make full use of solar photovoltaic energy. The PV input voltage range is wide, which can charge a variety of batteries, and the three-stage charging effectively improves the life of the battery.

This series of integrated control and inverter power supplies is the first choice to solve the daily electricity consumption of residents in areas without public power grids or underdeveloped power grids.

Performance characteristics

| |
|--|
| MPPT solar charging controller, which can make the most use of solar photovoltaic |
| Three-stage charging, effectively prolonging the life of the battery |
| It has the functions of power generate record, Event recording, Time switch, Auto sleep function |
| Photovoltaic priority or utility power priority mode can be set by users |
| Pure sine wave output & completely protection |
| Low frequency circuit design, good system reliability, low breakdown rates and long life time |
| Higher ability to anti-attack from the loads |
| Supporting city power / Diesel generator input port(Optional) |
| AC charger function (Optional) |

Technical parameters

| Series | GSA96 | GSA192/220 | | |
|--|--|-------------|-------------|-------------|
| Output Power (kVA) | 6/8 | 6 | 10/15 | 20/25/30 |
| BATTERY | | | | |
| Rated Voltage (VDC) | 96 | 192/220 | | |
| PV INPUT | | | | |
| Maximum Input Power (kWp) | 6 | 12/24 | | |
| Maximum Charge Current (A) | 50/100 | | | |
| Start Voltage (VDC) | 120 | 270 | | |
| MPPT Voltage Range (VDC) | 110~280 | 260~450 | | |
| Maximum Open Circuit Voltage(VDC) | 300 | 480 | | |
| Floating Voltage(VDC) | Adjustable | 108.0 | | |
| Bulk Charge Voltage(VDC) | | 227.2/255.6 | | |
| AC BYPASS(OPTIONAL) | | | | |
| Allowable Input Voltage Range(VAC) | 220±15%/110±15% (Other input voltage can be customized) | | | |
| Input Frequency (Hz) | 50/60±3% | | | |
| AC charger | Optional | | | |
| AC OUTPUT | | | | |
| Output Waveform | Pure Sine Wave | | | |
| Output Voltage (VAC) | 220±1%; 110±1%(Other output voltage can be customized) | | | |
| Output Frequency (Hz) | 50/60±1% | | | |
| Output waveform distortion rate(THD) | ≤2%(Liner Load) | | | |
| Convert Efficiency(80% Resistive load) | ≥85% | | | |
| Current Peak Factor | 3:1 | | | |
| Overload Ability | 105%~110%, 10min; 110%~125%, 1min; >125%, 1s | | | |
| Display Method | LCD+LED | | | |
| Protection | Input reverse protection, input low voltage protection, Input over voltage protection; Output overload protection; Output short circuit protection (do not recovery automatically need to restart machine); Machine over heating protection. | | | |
| Communication Function | Optional | | | |
| SURROUNDINGS | | | | |
| Protective Level | IP20 | | | |
| Applied Altitude(m) | 5000(Reduce capacity for use above 2000 meters) | | | |
| Allowable relative humidity(%RH) | <95% (Non-condensing) | | | |
| Environment temperature(°C) | -10~40 | | | |
| Noise(dB) | ≤60 | | | |
| APPEARANCE | | | | |
| Dimensions(D*W*H)mm | 645*305*770 | 585*210*565 | 645*305*770 | 700*405*980 |
| Weight(kg) | 80~85 | 55 | 90~100 | 135~155 |

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



PV INVERTER & CONTROLLER INTEGRATED MACHINE >>>

Three phase power-frequency GSA model series



Product introduction

The solar photovoltaic control inverter integrated power supply is a new generation of dedicated power supply for new energy power generation systems. It is mainly designed and manufactured according to the characteristics and requirements of new energy power generation systems, and is suitable for the high quality and high reliability requirements of solar photovoltaic power generation systems for power supply equipment. The system uses photovoltaic cells to convert light energy into electrical energy, and charges the battery through the charging circuit. At the same time, the battery supplies power to the inverter, and the inverter provides AC power to the AC load.

This series of control inverter integrated power supplies has a wide input DC voltage and stable output voltage and frequency. The products are widely used in homes, substations, communication service industries or comprehensive system power generation, etc., and can realize real-time and online observation of remote data through remote communication functions. They are core products in modern new energy power generation systems.

Performance characteristics

| |
|--|
| Advanced DSP digital control technology can effectively improve product performance and system reliability |
| Excellent industrial environment protection performance |
| Perfect protection function to provide safe and reliable power protection for the load |
| Intelligent battery management function, can effectively detect whether the battery is good or bad, prolong the battery life |
| High-performance large-screen LCD interface, intuitive and convenient operation |
| Powerful communication interface and network remote monitoring, etc |
| A wealth of optional accessories, which can be flexibly configured according to actual needs |

Technical parameters

| Series | GSA/192/220/240/360/384 | | | | | |
|----------------------------|---|----|----|--------------|----|----|
| Output power(kVA) | 10 | 20 | 30 | 40 | 50 | 60 |
| AC input | | | | | | |
| Phase | Three phase+N+G | | | | | |
| Volt range(VAC) | 380/400/415±20% | | | | | |
| Frequency range(Hz) | 50/60±5% | | | | | |
| PV input | | | | | | |
| MPPT volt range(VDC) | 230~450 (Rated voltage: 192/220/240) | | | | | |
| | 450~700 (Rated voltage: 360) | | | | | |
| | 480~750 (Rated voltage: 384) | | | | | |
| Max.Open circuit volt(VDC) | 480 (Rated voltage: 192/220/240) | | | | | |
| | 800 (Rated voltage: 360/384) | | | | | |
| Input paths | 1/2 (More than 360V one input) | | | | | |
| Max.Input power(kWp) | 12/24 (Rated voltage: 192/220/240) | | | | | |
| | 42 (Rated voltage: 360) | | | | | |
| | 45 (Rated voltage: 384) | | | | | |
| DC | | | | | | |
| Nominal volt(VDC) | 192/220/240/360/384 | | | | | |
| Inverter | | | | | | |
| Phase | Three phase+N+G | | | | | |
| Nominal volt(VAC) | 380/400/415 | | | | | |
| Nominal frequency(Hz) | 50/60 | | | | | |
| Frequency Stability(Hz) | < ±0.05% | | | | | |
| Peak factor | 3:1 | | | | | |
| Output wave | Pure sine wave | | | | | |
| THD | Line load<3%;Non-line load<5% | | | | | |
| Voltage transient | <+3%(steady state load), <±5%(dynamic load) | | | | | |
| Over-load ability | 125% 10min, 150% 1min | | | | | |
| System | | | | | | |
| Communication interface | RS485(RS232、Network remote monitoring Option) | | | | | |
| Interface and instructions | 7-inch color touch screen, LED status indication, dry contacts(optional) | | | | | |
| Operating environment | Temperature:-10~40°C; Relative Humidity:<95(non-condensing); Altitude:5000m(Reduce capacity for use above 2000 meters) | | | | | |
| Cooling method | Forced ventilation | | | | | |
| Noise(dB) | ((According to load size and ambient temperature)40~65 | | | | | |
| Size(DxWxH)mm | 600*600*1600 | | | 600*800*2000 | | |

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

PHOTOVOLTAIC MPPT CONTROLLER >>>

Low pressure system

Performance characteristics

- Memory function, save the settings, date and time, power generation etc function
- Charging mode: three-stage charging (constant current, constant voltage, float), effectively extending the battery life
- LCD and LED display various parameters, such as model, PV input voltage, the battery type, charging voltage, charging current, charging power, working condition etc
- Photovoltaic input adopts MPPT tracking technology
- Can be operated in parallel, expanding the range of use and meeting the charging requirements under high power
- Available for communication power supply field

Technical parameters

| MODEL | GSM48 | GSM96 |
|-------------------------------------|--|--|
| Rated voltage(VDC) | 48 | 96 |
| Over voltage protection point (VDC) | 62.0 | 124.0 |
| Over voltage resumption point (VDC) | 60.0 | 120.0 |
| Float voltage(VDC) | 54.0 | 108.0 |
| Bulk voltage(VDC) | 56.8 | 113.6 |
| Maximum charging current(A) | 60/120 | (50/100) / (150/200) |
| Charging mode | Three-stage: constant current(MPPT), constant voltage, float | |
| Maximum input power(kWp) | 3.4/6.8 | 5.7/11.4/17.1/22.8 |
| Starting voltage(VDC) | 60 | 120 |
| MPPT voltage range(VDC) | 50~150 | 110~280 |
| Maximum open-circuit voltage(VDC) | 170 | 300 |
| Maximum efficiency | > 98% | |
| MPPT efficiency | > 99% | |
| Noise(dB) | < 55 | |
| Display | LCD+LED | |
| Communication | RS485(optional) | |
| Working temperature(°C) | -10~40 | |
| Relative humidity | < 95 (Non-condensing) | |
| Altitude(m) | 5000(Reduce capacity for use above 2000 meters) | |
| Degree of protection | IP20 | |
| Dimension(D*W*H)mm | 225*475*640(Wall-mounted type) | (225*475*640)/(530*530*1150)(vertical) |
| Weight(kg) | 13~16 | 13~50 |
| Protection | PV array reverse polarity protection; Reverse battery protection; Nighttime anti-anti-charge protection; Battery overcharge protection, over-discharge protection; Output overload protection, output short circuit protection | |

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



▲ GSM192/220/240-50 ARack type (Tape screen)



▲ GSM360/384-100 ARack type



▲ GSM360/384-100 wall-mounted

Product introduction

MPPT series photovoltaic controller is a high-performance step-down solar power generation equipment, which adopts MPPT (Maximum Power Point Tracking) algorithm to make full use of solar photovoltaic energy. The PV input voltage range is wide, which can charge a variety of batteries, and the three-stage charging effectively improves the life of the battery. The modular design of the controller allows multiple units to be used in parallel, allowing customers to configure freely and flexibly.



PHOTOVOLTAIC MPPT CONTROLLER >>>

High pressure system



▲ GSM 360/384 Series Controller Cabinet

▲ GSM192/220/240Series Controller Cabinet

Performance characteristics

In order to increase reliability, multiple protections are used:

- ※ Input overvoltage protection
- ※ Input under voltage protection
- ※ Output overvoltage protection
- ※ Output overcurrent protection
- ※ Stand-alone two-phase current unbalance protection
- ※ Single-phase output overcurrent hardware protection

Display mode can be LED light or LCD screen

Supports power generation statistics function, which can calculate daily power generation and total power generation

Supports CAN communication function, enabling real-time interaction with the lithium battery BMS (Battery Management System);

Support multi-module parallel work

Relevant parameters can be set freely

A controller cabinet is optional. and control cabinets of different specifications can be selected according to the required charging power.

The control cabinet comes standard with photovoltaic input circuit breakers, battery circuit breakers, fuses input and output terminal blocks.etc

Technical parameters

| Model | GSM192 | GSM220 | GSM240 | GSM360 | GSM384 |
|------------------------------------|--|--------------|---------|----------------------------|--------------|
| Rated volt(VDC)(Settable) | 192 | 220 | 240 | 360 | 384 |
| Float charging volt(VDC)(Settable) | 216 | 243 | 270 | 390 | 416 |
| Bulk charging volt(VDC)(Settable) | 224 | 252 | 280 | 420 | 448 |
| Maximum Charge Current (A) | wall type50/100; rack type50 | | | wall type100; rack type100 | |
| Charging mode | Three stage: Constant current, constant voltage, floating | | | | |
| Max, Input power(kWp) | 12/24 | | | 42 | 45 |
| Start voltage(VDC) | 240 | 270 | 300 | 470 | 500 |
| MPPT volt range(VDC) | 230~450 | 260~450 | 290~450 | 450~700 | 480~750 |
| Max. open circuit voltage(VDC) | 480 | | | 800 | |
| Max. efficiency | >98% | | | | |
| MPPT efficiency | >99% | | | | |
| Noise(dB) | <65 | | | | |
| Display | LCD+LED | | | | |
| Communication | RS485 | | | | |
| Working temperature | -10~40 | | | | |
| Relative humidity | <95(Non-condensing) | | | | |
| Altitude(m) | 5000(Reduce capacity for use above 2000 meters) | | | | |
| Protection level | IP20 | | | | |
| Protection function | PV array anti-reverse connection protection, Night anti-reverse charging protection. Battery over-charging and over-temperature protection, etc. | | | | |
| Dimension(D*W*H)mm | wall type50A | 470*360*100 | | wall type100A | 490*365*202 |
| | wall type100A | 517*400*181 | | rack type100A | 527*480*219 |
| | rack type50A | 403*482*87 | | | |
| Weight(kg) | 50A : 9; 100A : 18 | | | 25 | |
| Optional cabinet size (D*W*H)mm | 4Modules | 550*550*900 | | 3Modules | 700*550*1300 |
| | 6Modules | 600*600*1600 | | | |

Note: Above data are subject to change without notice. Special voltage could be customized.



Product introduction

GSI series inverter power supply is the fourth generation power frequency intelligent inverter power supply developed with new digital technology. The system adopts SPWM pulse width modulation technology, IGBT power module and output isolation transformer, so that the output of the inverter power supply is a pure sine wave power supply with stable frequency and voltage regulation, filtering noise and low distortion. It has the characteristics of strong load capacity, good load compatibility, and wide DC input voltage range, which greatly meets the needs of various electrical environments. The perfect protection device improves the stability and reliability of the system operation: the user-friendly LCD liquid crystal interface design enables man-machine communication zero-distance.

Performance characteristics

Pure sine wave output, sufficient power output

Complete protection functions: output overload protection, output short circuit protection, input overvoltage and undervoltage protection, over temperature protection, etc

Power frequency circuit design, good system stability, low failure rate and long life

Good transient response, low waveform distortion, high inverter efficiency, stable output voltage, and excellent EMI indicators

Strong load resistance and carrying capacity. In addition to driving various resistive loads, it can also carry various inductive devices such as motors, air conditioners, drills, gas lamps, etc

Technical parameters

| Series | GSI96 | | GSI220 | |
|--------------------------------------|---|-------------|-------------|-------------|
| Output power (kVA) | 6/8 | 6 | 10/15 | 20/25/30 |
| Battery | | | | |
| Rated voltage(VDC) | 96 | | 220 | |
| Mains bypass (optional) | | | | |
| Input voltage allowable range(VAC) | 220±15% | | | |
| Input frequency(Hz) | 50/60±3% | | | |
| Mains charging | Optional | | | |
| AC output | | | | |
| Output waveform | Pure sine wave | | | |
| Output voltage(VAC) | 220±1% | | | |
| Output frequency(HZ) | 50/60±1% | | | |
| Output waveform distortion rate(THD) | ≤2%(Linear load) | | | |
| Inverter efficiency | ≥85% | | | |
| Current peak factor | 3:1 | | | |
| Overload capacity | 105%~110%, 10min;;110%~125%, 1min;>125%, 1s | | | |
| Display method | LCD+LED | | | |
| Protective function | Input reverse connection protection, input undervoltage protection, input overvoltage protection, output overload protection. Output short circuit protection (not automatically restored, the machine needs to be restarted), machine overheating protection. | | | |
| Communication function | RS485/GPRS (Optional) | | | |
| Environment | | | | |
| Protection level | IP20 | | | |
| Operating altitude(m) | 5000(Reduce capacity for use above 2000 meters) | | | |
| Allowable relative humidity(%RH) | <95(No condensation) | | | |
| Environment temperature(°C) | -10~40 | | | |
| Noise((dB) | ≤50 | | | |
| Appearance | | | | |
| Dimensions((D*W*H)mm) | 645*305*770 | 585*210*565 | 645*305*770 | 700*405*980 |
| Weight(kg) | 75~85 | 50 | 90~100 | 135~155 |

Note: Above data are subject to change without notice.



OFF GRID INVERTER >>>

GSI series three phases inverter



Product introduction

This series of three-phase off-grid inverters are high-efficiency and high-performance three-in-three-out inverter products. They are a new generation dedicated power supplies for new energy power generation systems. They integrate digitization informatization and networking. They have powerful information acquisition system, signal processing system, detection system and perfect protection system, They have wide input DC voltage, stable output voltage and frequency, which are mainly used in photovoltaic power stations, wind power stations, wind, light, oil, storage complementary power generation systems, household photovoltaic power supply system and other fields, especially places that require three-phase four-wire AC power.

Performance characteristics

- Advanced DSP digital control technology effectively improve the product feature and system stability
- Excellent industrial ambient protection performance, applicable to all kinds of working environment
- High performance big LCD screen, smart boot prompts and operation error alert function, operate visually and easily
- Powerful communication interfaces and network remote monitoring
- Wealth of options can be flexibly configured according to the actual needs
- Independent airtight duct, optimized ventilation design, internal modular installation, all devices required maintenance can be maintained from the front side. Machine can be installed three faces against the wall or parallel

Technical parameters

| Series | GSI | | | | | |
|----------------------------|---|--------------|--------------|---------------|----------------|----------------|
| Output Power(kVA) | 10/15/20/30 | 40/50/60 | 80/100/120 | 160/200 | 250/300 | 400 |
| Rated DC voltage(VDC) | 192/220/360/384 | | 360/384 | | 384 | |
| AC input | | | | | | |
| Phase | three phase+N+G | | | | | |
| Nominal voltage(VAC) | 380/400/415±20% | | | | | |
| Frequency Range(Hz) | 50/60±5% | | | | | |
| Inverter | | | | | | |
| Phase | Three phase+N+G | | | | | |
| Rated voltage(VAC) | 380/400/415 | | | | | |
| Rated Frequency (Hz) | 50/60 | | | | | |
| Frequency stability(Hz) | < ±0.05% | | | | | |
| Crest Factor | 3:1 | | | | | |
| Output waveform | Sine Wave | | | | | |
| Total Harmonic Distortion | Linear load <3%; non-linear load < 5% | | | | | |
| Voltage transients | < ±3%(steady-state load), < ±5% (dynamic load) | | | | | |
| Overload capacity | 125% 10min, 150% 1min | | | | | |
| system | | | | | | |
| Communication Interface | RS485(RS232, Network remote monitoring option) | | | | | |
| Interface and instructions | 7-inch color touch screen, LED status indicator, dry contact (optional) | | | | | |
| Temperature(°C) | temperature:-10~40 | | | | | |
| Humidity(%RH) | <95(No condensation) | | | | | |
| Altitude(m) | 5000(Reduce capacity for use above 2000 meters) | | | | | |
| Cooling method | Forced ventilation | | | | | |
| Noise(dB) | (According to the load size and ambient temperature)40 ~ 65 | | | | | |
| Exterior | | | | | | |
| Cabinet color | Available in different colors | | | | | |
| Weight(kg) | 220~390 | 490~780 | 850~1050 | 1200~1400 | 1600~1800 | 2100 |
| Dimensions(D*W*H)mm | 600*600*1350 | 600*800*1350 | 800*805*1800 | 900*1005*1800 | 1100*1150*1920 | 1100*1250*1920 |

Note: Above data are subject to change without notice.



Product introduction

GSI series is two-phase product of INV with double conversion and on line of high efficiency and performance. It advised perfect power protection solution, solved many power problems such as power cut, high voltage of mains supply, low voltage of mains supply, the instantaneous voltage sag, oscillation of amplitude reduction, high voltage pulse, surging voltage, THD, noise wave interference, frequency fluctuation, etc. The product can be widely used in computer equipment, communications equipment and other control equipment. So GSI is the best choice for the field of telecommunications, finance, government, transportation, manufacturing, energy, etc. Various functions of GSI series product can provide high quality power supply for your equipments.

Performance characteristics

Advanced DSP digital control technique effectively improved the reliability of the product performance and system

Excellent protective function of industrial environment

Perfect protective function advised safe and reliable power protection for load

High-performance large-screen LCD interface, intuitive and convenient operation

Powerful function of communication interface and network remote monitoring etc.

Abundant accessories can be configured flexibly according to the actual demand

Technical parameters

| Series | GSI | | | | | |
|----------------------------|--|----|----|----|----|----|
| Rated capacity (KVA) | 10 | 20 | 30 | 40 | 60 | 80 |
| Working method | Power supply , static bypass switch | | | | | |
| AC input | | | | | | |
| Phase quantity | Two-phase +N+G | | | | | |
| Rated voltage | 120(240)VAC±20% | | | | | |
| Rated frequency | 50/60Hz±5% | | | | | |
| DC | | | | | | |
| Rated voltage | 12*N VDC | | | | | |
| Flot voltage | 13.5*N VDC | | | | | |
| INVERTER | | | | | | |
| Rated power | rated power *0.8 | | | | | |
| Phase quantity | Two-phase+N+G | | | | | |
| Rated voltage | 120(240)VAC±3% (static load) | | | | | |
| Rated frequency | 50/60±0.5 Hz (battery powered) | | | | | |
| Frequency tracking range | < ±5%rated frequency | | | | | |
| Frequency stability | < ±0.5 Hz (battery mode) | | | | | |
| Crest factor | 3: 1 | | | | | |
| Output wave | pure sine wave | | | | | |
| THD | Linear load < 3%; non-linear load < 5% | | | | | |
| Load voltage | < ±3% (balance load voltage) ; < ±5% (unbalance load voltage) | | | | | |
| Overload ability | 125% 10min 150% 1min | | | | | |
| SYSTEM | | | | | | |
| Communication interface | RS485(MODBUS)/RS232 | | | | | |
| Interface and instructions | 320*240 large screen LCD touch screen, LED status display, dry contact(optional) | | | | | |
| Running environment | temperature: 0~40°C; relative humidity: 20%~90% (non- condensing); < 1000metres (power decrease 1% when additional 100 metres increased, the highest is 4000metres) | | | | | |
| Cooling method | forced draft(automatic speed regulation, temperature control mode) | | | | | |
| Noise(dB) | (Depend on the size of the load and ambient temperature) 40~65 | | | | | |
| Body color | color black,white(optional) | | | | | |
| Install base and other | Due to various kinds of related dimensions(base dimension, air passage location ,etc), please download from company website or obtain from the distributor | | | | | |

Note:We will keep on product design,technical specifications,the right of the manual update without any note.products refer to material object.



US STANDARD THREE-PHASE OFF-GRID INVERTER >>>

Three-phase GSI-UA series inverter



Product introduction

American standard series three-phase off-grid inverter is a high-efficiency, high-performance three-phase inverter products developed and designed to meet the needs of overseas markets. It is a new generation of special power supply for new energy power generation system. It integrates digitalization, informatization and networking, and has a powerful information acquisition system, signal processing system, detection system and perfect protection system. The output voltage and frequency are stable, mainly used in photovoltaic power stations, wind power stations, wind, light, oil, storage and complementary power generation systems and household photovoltaic power supply systems.

Performance characteristics

Advanced DSP digital control technology, effectively improve product performance and system reliability;

Excellent industrial environmental protection performance, perfect protection function, suitable for various working environments;

Built-in power frequency isolation transformer, strong impact resistance, suitable for various types of loads;

Rich accessories, flexible configuration requirements, inverter priority or bypass priority mode can be arbitrarily set;

High performance large screen touch screen interface, intuitive and convenient operation;

Powerful communication interface and network remote monitoring function;

Intelligent, modular design, simple structure and easy maintenance.

Technical parameters

| Model | GSI-UA | | | | | |
|-------------------------------|---|--------------|--------------|---------------|----------------|---------------|
| Nominal Capacity (kVA) | 10/15/20/30 | 40/50/60 | 80/100/120 | 150/200 | 250 | 300 |
| Rated DC voltage(VDC) | 192/220/360/384 | | 360/384 | | 384 | |
| Working mode | The bypass/inverter preferred power supply mode is optional, and the static bypass switch is optional | | | | | |
| AC input | | | | | | |
| Phase number | Three phase+N+G | | | | | |
| Voltage range(VAC) | 208/220/230/240±20% | | | | | |
| Nominal frequency (Hz) | 50/60±5% | | | | | |
| Inverter | | | | | | |
| Phase number | Three phase+N+G | | | | | |
| Rated Voltage(VAC) | 208/220/230/240 | | | | | |
| Voltage stability(VAC) | ±1% | | | | | |
| Rated frequency(Hz) | 50/60 | | | | | |
| Frequency stability(Hz) | ±0.05% | | | | | |
| Crest factor | 3:1 | | | | | |
| Output waveform | Sine wave | | | | | |
| Total harmonic distortion | < 3% (linear load); < 5% (nonlinear load) | | | | | |
| Voltage transient | < ±3% (steady state load); < ±5% (dynamic load) | | | | | |
| Recovery time | < 40ms | | | | | |
| Overload capacity | 125% 10min 150%1min | | | | | |
| System | | | | | | |
| Communication interface | RS485 (RS232, SNMP network monitoring card option) | | | | | |
| Interface and indication | 7 " color touch display, LED status indicator, dry contact (optional) | | | | | |
| Ambient temperature (°C) | -10 ~ 40 | | | | | |
| Humidity (%RH) | < 95(no condensation) | | | | | |
| Altitude (m) | 5000(capacity reduction above 2000 meters) | | | | | |
| Cooling type | Forced ventilation | | | | | |
| Noise (dB) | ((Depending on the load size and ambient temperature) 40 ~ 65 | | | | | |
| Dimensions (D*W*H)mm | 600*600*1350 | 600*800*1350 | 800*805*1800 | 915*1115*1810 | 1115*1330*1920 | |
| Input/output cabinet(D*W*H)mm | / | / | / | 1090*705*1810 | 1115*705*1920 | 1115*900*1920 |

Note: The above data is for reference, subject to adjustment and change without prior notice, the specific product shall prevail.



Product introduction

GPCS50/100/150/250Kenergystorageconverter is a product developed for industrial and commercial energy storage applications, which can meet the diversified needs of users and provide assistance for comprehensive energy services. GPCS500/630Kenergystorage converter can be applied to various scenarios such as power generation side and power grid side, and can quickly realize AC/DC bidirectional energy conversion. The multi branch input technology can reduce the battery parallel numbers, reduce battery circulation, and extend the service life of battery packs.

Performance characteristics

Modular design

The product adopts the modular design concept. Each module can operate independently, providing n+1 redundancy and improving system stability. The capacity can be expanded according to the users needs.

Intelligent matching

The product is suitable for various types of batteries. The system can realize different charging and discharging strategies according to different battery types, to prolong the battery life span.

Distributed in demand

The energy dispatching can be regulated, and the user can change the charging and discharging logic according to the power consumption policies in different periods of time in the region.

Independent regulation of active and reactive power

The product can realize independent regulation of active and reactive power, meet different load requirements, ensure power factor and avoid fines.

On/Off grid seamless switching

Realize seamless switching between grid and off grid connection, ensure the continuity of power consumption, and avoid economic losses caused by power failure.

Technical parameters

| Model | GPCS 50kW | GPCS 100kW | GPCS 150kW | GPCS 250kW | GPCS 500kW | GPCS 630kW |
|-----------------------------------|---------------------------|------------|------------|---------------|---------------|------------|
| DC side parameters | | | | | | |
| DC voltage range(V) | 500-850 | | | 600-900 | | |
| Maximum DC current(A) | 110 | 220 | 330 | 550 | 873 | 958 |
| Battery branches Number | 1 | | | | 1/2/4/8 | 1 |
| AC grid connection parameters | | | | | | |
| Rated output power(kW) | 50 | 100 | 150 | 250 | 500 | 630 |
| Rated grid voltage(V) | 400±15% | | | | 380±15% | |
| Rated grid frequency(Hz) | 50/60±2.5 | | | | | |
| AC rated current(A) | 72 | 144 | 216 | 360 | 727 | 916 |
| System parameter | | | | | | |
| Wiring mode | Three phase four wire | | | | | |
| Isolation | Power frequency isolation | | | | | |
| Cooling | Forced air cooling | | | | | |
| Temperature range(°C) | -20~45 | | | | | |
| Protection level | IP20 | | | | | |
| Size (D*W*H)mm | 800*800*2160 | | | 800*1200*2160 | 800*1100*2260 | |
| Communication | | | | | | |
| Upper computer communication mode | ModBusTCP/IP | | | | | |
| Communication interface | Net port, RS485, CAN | | | | | |

Note: Above data are subject to change without notice, Special voltage could be customized.



ENERGY STORAGE SYSTEM >>>

GDS DC converter



Product introduction

The GDS 400kW DC-DC converter converts the DC power from the PV module array into DC power that can be used to charge the batteries. The GDS400kW DC-DC converter has a single-stage topology with a wide PV voltage input range of 250-840V and an output voltage range of 600-900V to the batteries, with MPPT PV maximum power tracking.

Performance characteristics

For the DC conversion protection strategy, it meets the relevant standards and regulations of the photovoltaic industry, and has but is not limited to the following protection functions:

| | |
|----------------------------------|---------------------------------|
| PV input overvoltage protection | Output current control |
| PV input undervoltage protection | Output short circuit protection |
| Over load protection | DC reverse protection |

At the same time, according to the BMS requirements of different batteries, the charging status of the battery side is protected based on its control strategy, including overcharge, overdischarge, capacity protection, etc.

Technical parameters

| Model | GDS |
|--|---|
| Rated power(kW) | 400 |
| Low voltage side to PV input | |
| High voltage DC bus voltage(V) | 750[(LV side voltage+40)~850] |
| High voltage DC bus current(A) | 67*8(maximum100*8) |
| DC bus power(kW) | 50*8 |
| Low-voltage charge/discharge voltage(V) | 500(250~840) |
| Low voltage charge/discharge current(A) | 100*8(maximum120*8) |
| Low voltage side connection battery input | |
| High voltage DC bus voltage(V) | 750[(LV side voltage+40)~850] |
| High voltage DC bus current(A) | 67*8(最大100*8) |
| DC bus power(kW) | 50*8 |
| Low-voltage charge/discharge voltage(V) | 500(250~840) |
| Low voltage charge/discharge current(A) | 100*8(maximum120*8) |
| System parameters | |
| Protection | Over-temperature protection, overload protection, emergency stop protection, fan failure protection |
| Maximum efficiency (refer to efficiency curve) | Maximum 98.6% |
| Isolation | Isolation-free |
| Cooling | Forced air cooling |
| Noise(dB) | ≤70 |
| Communication Interface | S485/Can/Ethernet network port |
| operating temperature(°C) | -20~45 |
| Operating humidity(%RH) | < 95 (No condensation) |
| Altitude(m) | 5000 (Reduce capacity for use above 2000 meters) |
| Protection level | IP20 |
| Size(D*W*H)mm | 800*1100*2060 |
| Weight(kg) | 600 |
| Accreditation | |
| Certificates | UL Listed (Module) |

Note: Above data are subject to change without notice, Special voltage could be customized.



ENERGY STORAGE SYSTEM >>>

PWD on-grid and off-grid switch cabinet system



Product introduction

The PWD on-grid and off-grid switch cabinet system consists of AC power distribution cabinet, photovoltaic inverter (optional), local load and energy storage converter to form a set of AC micro-grid system. The micro-grid switching cabinet can work in different modes as required.

The PWD on-grid and off-grid switching cabinet plays a core role in the whole system, with the characteristics of energy dispatch management, fast on-grid and off-grid switching and convenient maintenance. At the same time, it has perfect protection functions, such as over temperature, AC over and under-voltage, AC reverse sequence, emergency shutdown, fan failure, output overload, etc., to meet the requirements of off-grid operation. The micro-grid switching cabinet includes one road power grid input, When the thyristor of the micro-grid switching cabinet breaks down, the bypass switch can be closed for emergency power supply. Note: the bypass switch and the grid switch cannot be closed at the same time. The micro grid switching cabinet includes a PCS switch, which is specially used to connect the energy storage converter. It is equipped with four load switches at most, and can be optionally connected to Photovoltaic grid-connected inverters, wind turbines, diesel generators and local loads. The external communication of the switching cabinet includes RS485, and the Ethernet can exchange data with the background PC to form an energy management system, which can dispatch and manage energy and switch between on-grid and off-grid.

Technical parameters

| Model | PWD-800kW |
|-------------------------------|-------------------|
| Rated power(kW) | 800 |
| Rated volt(V) | 400 |
| Input voltage range | -25%~15% |
| Input voltage range | -25%~15% |
| Rated input current(A) | 1155 |
| Maximum input current(A) | 1270(1.1 times) |
| Rated Frequency(Hz) | 50/60 |
| Frequency Range(Hz) | 47~52/57~62 |
| On and off grid switching(ms) | <20 |
| Overall efficiency | 99.5% (full load) |

| Model | PWD-800kW |
|-------------------------------------|---|
| Protection class | IP20 |
| Design life | 10 years |
| Cooling method | Air cooling |
| Grid access | 1 road |
| PCS/PV access | 1 road(not more than 500kW) |
| Load access | 4 road |
| Maximum load switching power(kW) | 300(RCD load,pure capacitive or inductive load is less than 100) |
| Wiring | Three-phase four-wire system |
| Protection | System protection: over temperature, AC over and under voltage, AC reverse sequence, emergency shutdown, fan failure, output overload. The safety protection conditions can be set, and the setting parameters include: upper limit of AC voltage protection, lower limit of AC voltage protection, AC frequency protection upper limit, AC frequency protection lower limit. |
| Upper computer communication method | ModBus TCP/IP protocol |
| Communication Interface | Ethernet port/RS485 |
| Cabinet Size((D*W*H)mm) | 800*800*2160 |
| Noise(dB) | 70 |
| Temperature range(°C) | -20~45 |
| Height(m) | 5000 (use with reduced capacity above 2000 meters) |
| Humidity(%RH) | < 95 (No condensation) |
| Weight(kg) | 300 |

Remarks : The above data are for reference only and are subject to change without prior notice.

ENERGY STORAGE SYSTEM >>>

STS Micro grid Controller

Product introduction

Rapid Grid Disconnection: The on-grid to off-grid switching time is less than 20ms, enabling swift separation and connection between the main grid and micro grid.

Active On-Grid/Off-Grid Switching: When the (PCS) detects abnormal voltage on the grid side, it controls the STS to disconnect, while simultaneously providing voltage support to the micro grid from the PCS. The system then operates in island mode. Upon detecting the grid voltage has returned to normal, the micro grid system synchronizes with the grid voltage, closes the STS to reconnect with the grid, and resumes grid-tied operation.

Passive On-grid/Off-Grid Switching: Upon receiving a command to initiate island operation, the PCS directs the STS to disconnect, with the PCS also supplying voltage support to the micro grid, entering island mode. When the PCS receives a command to exit island operation, the micro grid system synchronizes with the grid voltage and closes the STS to reestablish the connection with the grid, thus transitioning back to on-grid operation.

Technical parameters

| Model | STS-100kW | STS-200kW | STS-300kW | STS-400kW | STS-800kW | Remark |
|---------------------------|-------------------|-----------|-----------|-----------|----------------|--------------|
| Input voltage range (VAC) | 340~460 | | | | | |
| Rated output voltage(V) | 400 | | | | | |
| Rated output current(A) | 144 | 288 | 433 | 580 | 1215 | |
| Communication method | PCS control | | | | CAN | Internal use |
| Size(D*W*H)mm | 440*370*200 | | | | 800*800*2160 | |
| Installation method | Integrated in PCS | | | | Single cabinet | |

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

ENERGY STORAGE SYSTEM >>>

EMS-IMGCB01 Microgrid Controller



Product introduction

The advanced micro grid controller IMGCB01 uses ARM Cortex-A7, 4-core 1.2GHz processor as the core, adopts full industrial-grade devices, has complete interface protection functions and electrical isolation measures, can operate stably for a long time in harsh environments, and has passed the telecontrol terminal equipment type test and CE certification. The product has multiple interfaces and functions such as RS485, CAN, Ethernet, 4G, wifi, input and output, voltage and frequency direct acquisition, etc. to meet the needs of different occasions. It is mostly used for data collection, transmission and control in electrical systems, integrated energy systems, enterprise parks, etc.

Technical parameters

| Model | IMGCB01 |
|---------------------------------------|--|
| CPU | ARM Cortex-A7 4 cores 1.2GHz |
| RAM | DDR3 1G |
| ROM | eMMC 8G (Additional expansion possible) |
| Ethernet | 2-way, standard RJ45 socket, 100Mbps |
| RS485 | 5-way, magnetically isolated; configurable baud rate; interface: 3.81mm Phoenix terminal |
| CAN | 2-way, magnetic isolation; configurable baud rate; interface: 3.81mm Phoenix terminal |
| Switch output | 5-way, relay isolation. Contact capacity: 5A 250VAC/30VDC Rated coil power: 180mW Action time: <10ms Return time: <5ms |
| Switch input | 5-way, optocoupler isolation. DC 24V standard input rated current: 1.1mA |
| Voltage and frequency direct sampling | AC voltage 10-380V, frequency 40-70Hz |
| RTC | Onboard Farad capacitor can maintain running time for at least 7 days in case of power failure |
| 4G | 4G full network access, support GNSS positioning function |
| wifi | Supports IEEE 802.11b/g/n standards |
| Power supply | Rated voltage 24VDC, ±10% fluctuation allowed |
| Indicator Lights | The power indicator light is always on after power-on; the operation indicator light is always on when the device is running; |
| Screen | Supports expansion of touch screen via network port or DVI: supports 7-inch screen, 10-inch screen, 15-inch screen and other models |
| size(mm) | 190*170*46 |

Note: The above data is for reference only and is subject to change without prior notice.

GSB SERIES >>>

Photovoltaic combiner box



Product introduction

For photovoltaic power generation systems, in order to reduce the connection lines between photovoltaic modules and photovoltaic controllers or inverters, facilitate maintenance and improve reliability, it is generally necessary to add a DC bus device between photovoltaic modules and photovoltaic controllers or inverters.

Performance characteristics

- Meet indoor and outdoor installation requirements
- Amaximum of 16 photovoltaic strings can be connected, with a single-channel rated
- Wide DC voltage input, the maximum input voltage of the photovoltaic array can reach
- Photovoltaic special fuse
- Photovoltaic dedicated high-voltage lightning arrester, both positive and negative poles have lightning protection function
- Easy and quick maintenance

Technical parameters

| Model | GSB-A | GSB-B |
|---|--|-------|
| Maximum open circuit voltage(VDC) | 500 | 1000 |
| Number of photovoltaic array input channels (N) | 2~16 channels (Customizable) | |
| Rated current of single array(A) | 20 | |
| DC output circuit breaker | YES | |
| Photovoltaic lightning protection | YES | |
| Chassis size (D*W*H) mm | 155*400*300/175*620*420 | |
| Reference weight (kg) | 15~25 | |
| Protection level | IP65 | |
| Operating altitude(m) | 5000 (Reduce capacity for use above 2000 meters) | |
| Working temperature(°C) | -25 ~ 65 | |

Note: The above data is for reference only and is subject to change without prior notice.