# AB-G24S Series Data sheet

12V 100Ah

12V 120Ah

][∦Bluetooh]

HEAT"







## Models Included:

ABG24S-12100BT 12V 100Ah LiFePO4 Battery with Bluetooth

12V 100Ah LiFePO4 Battery with ABG24S-12100BH Bluetooth and Heat (cold-weather performance battery)

ABG24S-12120BT 12V 120Ah LiFePO4 Battery with Bluetooth

12V 120Ah LiFePO4 Battery with ABG24S-12120BH Bluetooth and Heat (cold-weather performance battery)

|                               |                          | Model AB G24S-12100BT                            | AB G24S-12100BH                | AB G24S-12120BT              | AB G24S-12120BH              |
|-------------------------------|--------------------------|--|--------------------------------|------------------------------|------------------------------|
| Electrical<br>Specifications  | Nominal Voltage          | 12.8V  | 12.8V                          | 12.8V                        | 12.8V                        |
|                               | Nominal Capacity         | 100Ah  | 100Ah                          | 120Ah                        | 120Ah                        |
|                               | Parallel Connection      | Max. 4units                                      | Max. 4units                    | Max. 4units                  | Max. 4units                  |
|                               | Serial Connection        | Max. 4units                                      | Max. 4units                    | Max. 4units                  | Max. 4units                  |
|                               | BMS                      | 4S100A   | 4S100A                         | 4S150A                       | 4S150A                       |
|                               | Bluetooth                | Android/IOS                                      | Android/IOS                    | Android/IOS                  | Android/IOS                  |
|                               | Heat                     | No   | Yes                            | No                           | Yes                          |
|                               | Circuit Protection       | Over charge, Ov                                  | er discharge, Over current, Ov | ver temp, Short, Balance,Low | temp                         |
|                               | Cycle Life               | 3000times Cycles @100%DOD and 6000times @80% DOD |                                |                              |                              |
|                               | Self Discharge           | Less than 3% per month                           |                                |                              |                              |
|                               | Charge Efficiency        | 100% @0.2C                                       |                                |                              |                              |
|                               | Discharge Efficiency     | 98-100% @1C                                      |                                |                              |                              |
| Charge<br>Specifications      | Charge Voltage           | 14.4±0.2V  | 14.4±0.2V                      | 14.4±0.2V                    | 14.4±0.2V                    |
|                               | Standard Current         | 20A  | 20A                            | 24A                          | 24A                          |
|                               | Fast Current             | 50A  | 50A                            | 60A                          | 60A                          |
| Discharge<br>Specifications   | Standard Current         | 20A  | 20A                            | 24A                          | 24A                          |
|                               | Max. Con. Current        | 100A   | 100A                           | 120A                         | 120A                         |
|                               | Peak Current             | 700A(300ms)                                      | 700A(300ms)                    | 800A(300ms)                  | 800A(300ms)                  |
|                               | Cut-off Voltage          | 10V  | 10V                            | 10V                          | 10V                          |
| Mechanical<br>Specifications  |                          | 260×170×208mm (Group 24)                         |                                |                              |                              |
|                               | Dimensions (mm)          | 11.5   | 12                             |                              | 12.5                         |
|                               | Approx Weight(KG)        | 11.5   | <u>.</u>                       | 13                           | 13.5                         |
|                               | Terminal Type            | M8  Black Plastic case (ABS)                     |                                |                              |                              |
|                               | Case Color/material      | IP65   |                                |                              |                              |
|                               | IP Rating                | Cylindrical LiFePO4 cell                         |                                |                              |                              |
|                               | Cell Type<br>Cell holder | Yes  |                                |                              |                              |
| Temperature<br>Specifications |                          | 0C to 55C  | -20C to 55C                    | 0C to 55C                    | -20C to 55C                  |
|                               | Charge Temp              | (32F to 131F)                                    | -20C to 55C<br>(-4F to 131F)   | (32F to 131F)                | -20C to 55C<br>(-4F to 131F) |
|                               | Discharge Temp           |  | -20C to 60C                    | (-4F to 140F)                |                              |
|                               | Storage Temp             |  | -5C to 45C                     | (23F to 113F)                |                              |



## **Key Points for Quality control:**

- Cell matching:
  - Strict cell matching standard, the difference of Internal resistance is  $1m\Omega$  and voltage is 5mV.
- Automatic cell welding:
  - Cells are assembled with Automatic welding equip-ment to ensure quality, reliability, and consistency.
- 100% Cycle test:
  - All battery packs are 100% cycle tested (Fully Discharged→Fully Charged→Fully Discharged→60% Charged) before package and all test reports are stored.

#### Unique tracking number:

All battery packs are lasered with a unique serial number on the case side for quality tracking.

### **Certifications:**

- UL1642 (Cell)
- CE (Pack)
- IEC62619 (Cell)

IEC62133 (Cell)

- UN38.3 (Cell / Pack)
- ROHS (Cell)















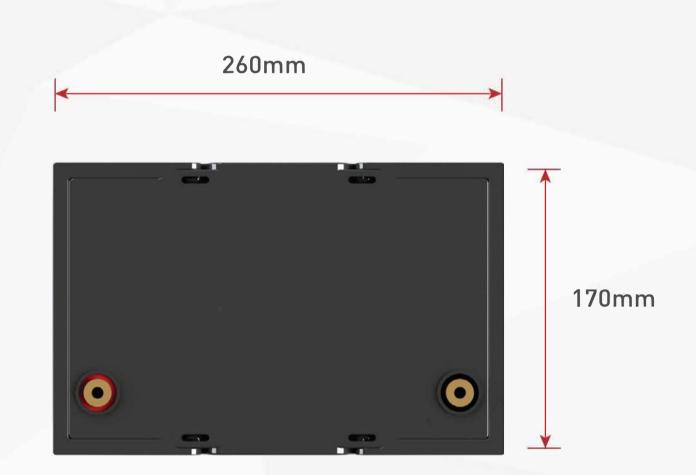




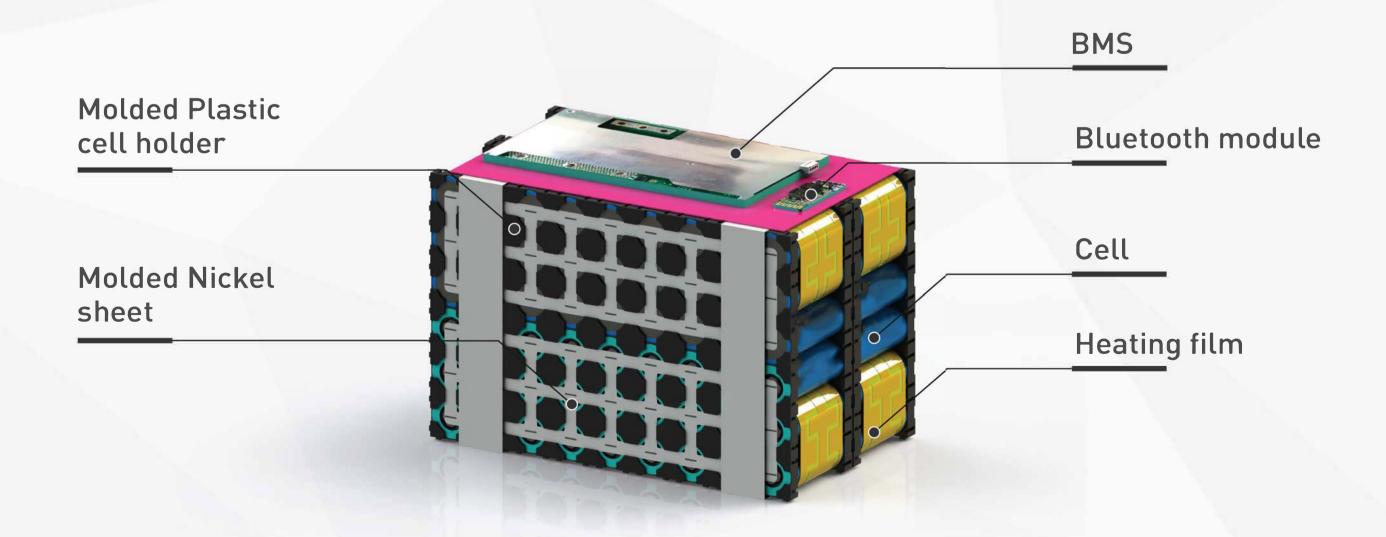


## **Dimensions:**





## **Internal Structure:**







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## **Key Benefits:**

#### Higher qualified cylindrical cells:

UL1642, IEC62619, IEC62133 listed with Cycle life more than 3000times and excellent consistency.

#### Bluetooth Integration:

Monitor battery status (charge, discharge, current, temperature, cycle life and so on) Manage/change the data for different applications.

#### Heating Function:

Uniform internal heating is an important feature of our cold-weather performance batteries, as many external heating blanket options currently available cannot sense the internal temperature of the cells and may not be completely effective at heating the battery throughout. The system features proprietary technology that draws power from the charger itself, requiring no additional components. The entire process of heating and charging is completely seam-less. Simply plug the battery into the regular lithium charger and the internal heating and monitoring system takes care of the rest.

#### More stable and firm internal structure:

Our Cell holder design construction protects and separates each cell within the battery to avoid any circuit short risk caused by vibration or impact or over current, while also improving heat dissipation.

#### Smaller size + less weight:

The size of our battery is just 3/4 size of the standard 12V 100Ah battery from other Lithium Battery Companies.

## Package: 20' Container=10Pallets=750Cartons=750Units; 40' Container=20Pallets=1500Cartons=1500Units;

## **Market Applications:**



RV



Marine



Golf cart



Cleaning



Light EV



Energy storage

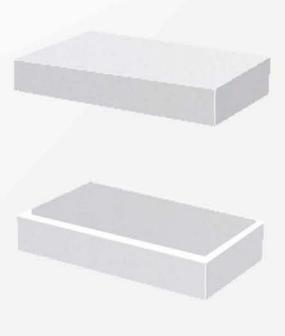


Robotics



Lighting





Internal Package Forming pearl foam



Weight: 13Kg/carton Size(L×W×H): 320×230×282mm



Weight: 985Kg/pallet  $Size(L\times W\times H)=1.2\times 1\times 1.6m\approx 2CBM$ 

