

# 12V Solar Gel Battery

**Sohigh Solar**  
High Technology, High Quality



## Solar Front Terminal Battery

Sohigh BAT

Power 12V 105AH / 150AH / 210AH

**SOHIGH  
SOLAR**



Low Self Discharge



Excellent Discharge  
Performance



Maintenance-Free Absorbent  
Glass Mat Technology



Long Designed service  
Life ,Deep Cycles



Environment Friendliness



Wide suitability of ambient  
temperature range

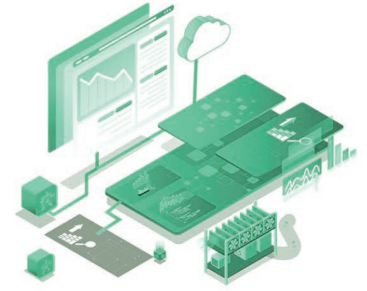
NOTICE: Manual measurement, product specifications and dimensions may have errors, subject to actual receipt.



## Sohigh Battery Assembly and Construction

Sohigh Solar has always been at the very top of the short-duration, high energy, lead acid battery technology. Their thin-plate, pure lead Absorbed Glass Mat (AGM) batteries and battery packs are used in Telecom Power Systems (cell tower backup), uninterruptible power supplies, and mission-critical Engine Start applications.

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### Solar Battery Workshop



01

#### Assemble Pb Plate

Plate Sets Positive & Negative Plates

2-a: Negative Plate (Grid)  
Paste

Paste electrically active mass onto Grids

2-b: Positive Plate (Grid)  
Paste

Negative Plate Electrically active mass into Grids  
Insert pasted positive plates into microporous  
pocket separator

02



#### Welding Pb Plate

Connection of Plates with Same Polarity

03



#### Put Plates Into Containers

Injection Molded Plastic Case  
Holes punched for intercell connectors  
Plate Sets (Positive & Negative)

04



### Strengthen Structure



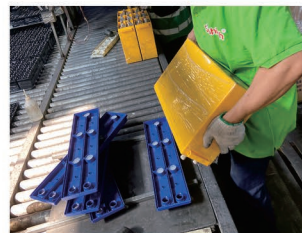
07

### Add Glue To Battery Lid



08

### Seal The Lid



09

### Welding Plate Groups

Cell to cell & Connectors

05



### Qualification Test

06

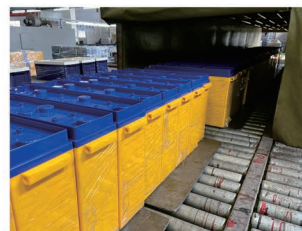


### Acid Filling



10

### Drying Rapidly



11

### Label & Finish

Formation Initial Battery Charging  
High Rate Discharge Test  
Cleaning

(Addition of Barcode) Impedance Baseline tracked,  
via serial number or other unique identifier)

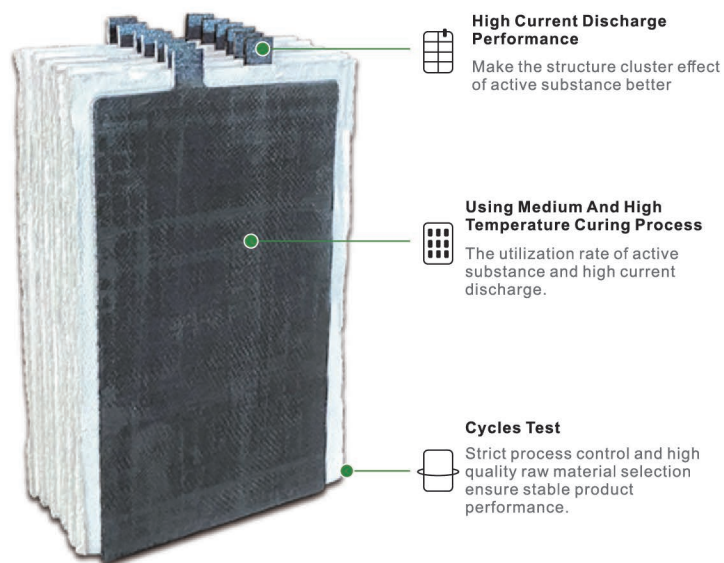
12



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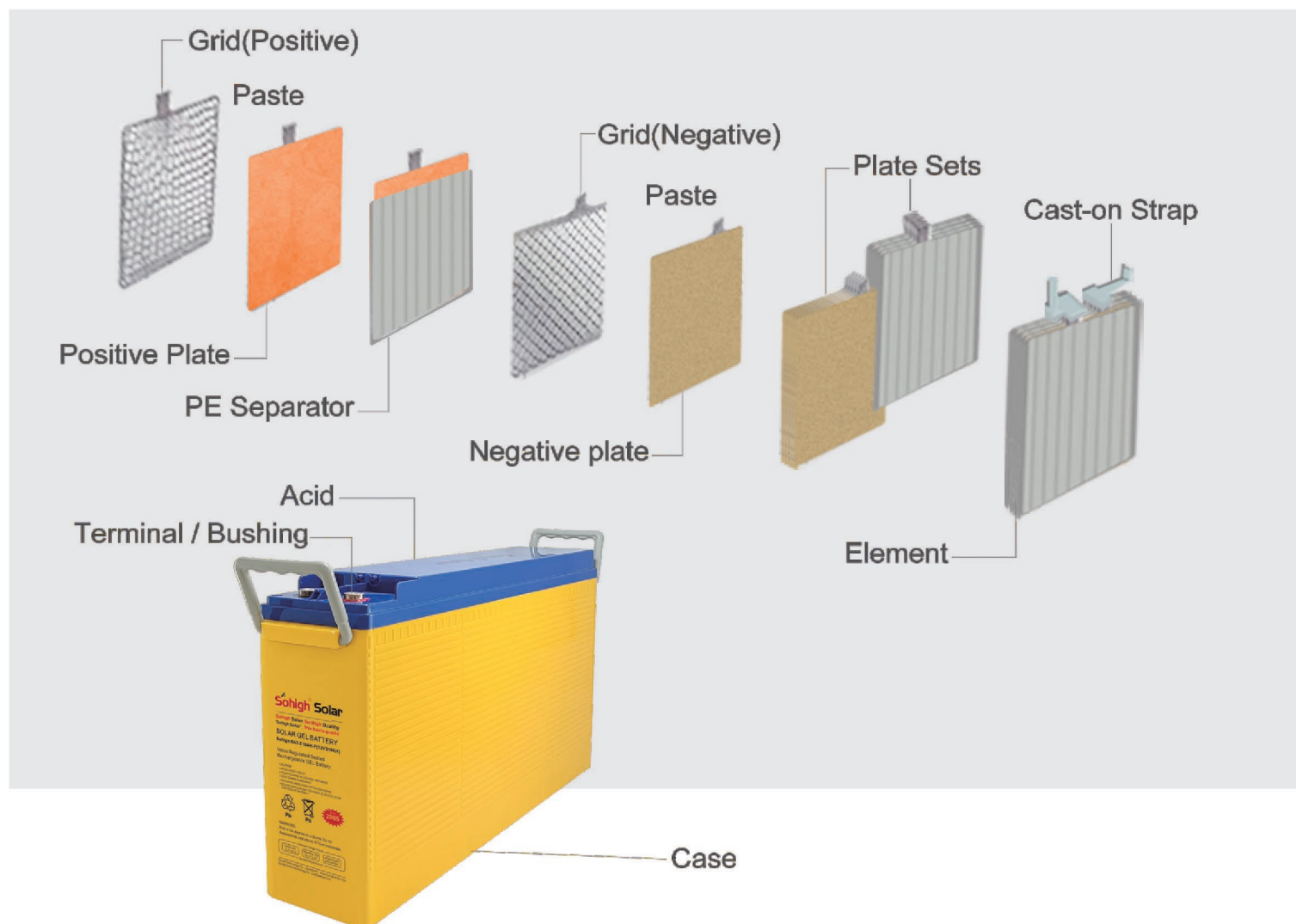
## Lead-calcium Multi-element Alloy Plate



## Product Features

- Solve electrolyte stratification, sulfuric acid evenly distributed.
- The silica gel electrolyte lead-acid batteries can be so deep discharge, thus greatly extending the cycle life of the battery.
- The battery float current is small (about 1/3 AGM battery), the floating charge lower energy consumption, less warming, reduce battery thermal runaway risk.
- Low self-discharge rate of the battery.
- By high partition, adsorption and strong.
- Comply with environmental requirements, ease of use.
- Longer Service Life.
- Low Internal Resistance.
- Longest Available Standby Life.
- High Energy Density.
- Lower Self Discharge.
- Good deep discharge cycle capability .
- Excellent Recovery from Deep.

## Lead-Acid Battery Structure



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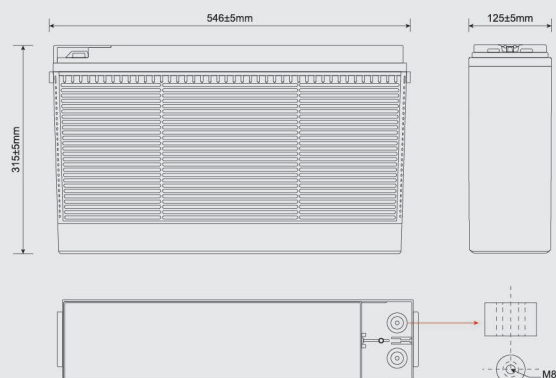
# Sohigh BAT-210AH-F

12V Front Terminal Battery

**Sohigh Solar**  
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## Dimensions ( mm )



T18

## Key Features

- Safety seal, Deflating system, Simple maintenance, Long lasting, Stable quality and High reliability
- Gelled electrolyte made by mixing sulfuric acid with silica fume
- The electrolyte is gel like, immobile and does not leak, enabling uniform reaction of each part of the plate
- High rate discharge performance due to tight assembly technology
- Strong heat dissipation and wide operating temperature range
- Avoid acid mist being separated out, environment friendliness
- Efficient venting system release excessive gas automatically

## Application

- Standby power supply
- UPS/Power supply
- Telecommunication system
- Solar system
- Wind system
- Power station

## Technical Parameter

Model	Sohigh BAT-210AH-F
Cells Per Unit	6
Voltage(V)	12V
Terminal Type	T18
Capacity	210Ah@10hr-rate to 1.80V per cell @25°C
Max. Discharge Current	2000A(5 sec)
Internal Resistance	Approx. 3.8mΩ
Recommended Maximum Charging	60A
Operating Temperature range	Discharge:-20°C~60°C, Charge:0°C~50°C, Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8V DC/unit Average at 25°C
Equalization and Cycle service	14.4 to 14.6V DC/unit Average at 25°C
Designed floating life(20°C)	12 years
Self Discharge	Gel batteries can be stored for more than 6 months at 25°C Self-discharge ratio less than 3% per month at 25°C Pls charge batteries before using

\*Product specifications are subject to change without further notice

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# Sohigh BAT-150AH-F

12V Front Terminal Battery

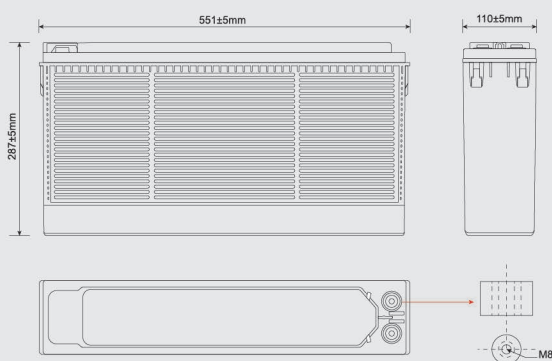
**Sohigh Solar**  
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## Key Features

- Safety seal, Deflating system, Simple maintenance, Long lasting, Stable quality and High reliability
- Gelled electrolyte made by mixing sulfuric acid with silica fume
- The electrolyte is gel like, immobile and does not leak, enabling uniform reaction of each part of the plate
- High rate discharge performance due to tight assembly technology
- Strong heat dissipation and wide operating temperature range
- Avoid acid mist being separated out, environment friendliness
- Efficient venting system release excessive gas automatically

## Dimensions ( mm )



## Application

- Standby power supply
- UPS/Power supply
- Telecommunication system
- Solar system
- Wind system
- Power station

## Technical Parameter

Model	Sohigh BAT-150AH-F
Cells Per Unit	6
Voltage(V)	12V
Terminal Type	T18
Capacity	150Ah@10hr-rate to 1.80V per cell @25°C
Max. Discharge Current	1500A(5 sec)
Internal Resistance	Approx. 5mΩ
Recommended Maximum Charging	45A
Operating Temperature range	Discharge:-20°C~60°C , Charge:0°C~50°C, Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8V DC/unit Average at 25°C
Equalization and Cycle service	14.4 to 14.6V DC/unit Average at 25°C
Designed floating life(20°C)	12 years
Self Discharge	Gel batteries can be stored for more than 6 months at 25°C Self-discharge ratio less than 3% per month at 25°C Pls charge batteries before using

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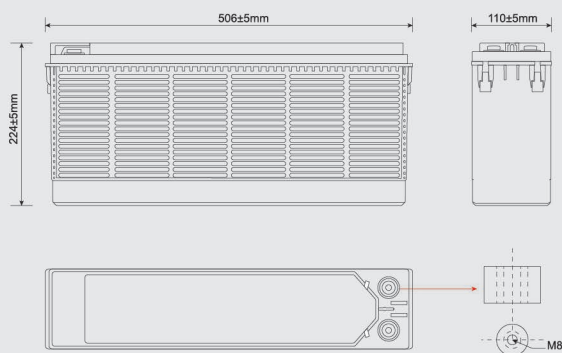
# Sohigh BAT-105AH-F

12V Front Terminal Battery

**Sohigh Solar**  
High Technology, High Quality



## Dimensions ( mm )



T18

## Key Features

- Safety seal, Deflating system, Simple maintenance, Long lasting, Stable quality and High reliability
- Gelled electrolyte made by mixing sulfuric acid with silica fume
- The electrolyte is gel like, immobile and does not leak, enabling uniform reaction of each part of the plate
- High rate discharge performance due to tight assembly technology
- Strong heat dissipation and wide operating temperature range
- Avoid acid mist being separated out, environment friendliness
- Efficient venting system release excessive gas automatically

## Application

- Standby power supply
- UPS/Power supply
- Telecommunication system
- Solar system
- Wind system
- Power station

## Technical Parameter

Model	Sohigh BAT-105AH-F
Cells Per Unit	6
Voltage(V)	12V
Terminal Type	T18
Capacity	105Ah@10hr-rate to 1.80V per cell @25°C
Max. Discharge Current	1000A(5 sec)
Internal Resistance	Approx. 5.5mΩ
Recommended Maximum Charging	30A
Operating Temperature range	Discharge:-20°C~60°C, Charge:0°C~50°C, Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8V DC/unit Average at 25°C
Equalization and Cycle service	14.4 to 14.6V DC/unit Average at 25°C
Designed floating life(20°C)	12 years
Self Discharge	Gel batteries can be stored for more than 6 months at 25°C Self-discharge ratio less than 3% per month at 25°C Pls charge batteries before using

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