

# GH-B16A Battery Energy Storage Solutions GH-Hybrid Inverters



+61 8 929 729 69  
battery@greenhse.com.au  
www.greencharge.com.au

Greenhouse International Pty Ltd  
5/1 Locke Lane, Ellenbrook, WA Australia 6069

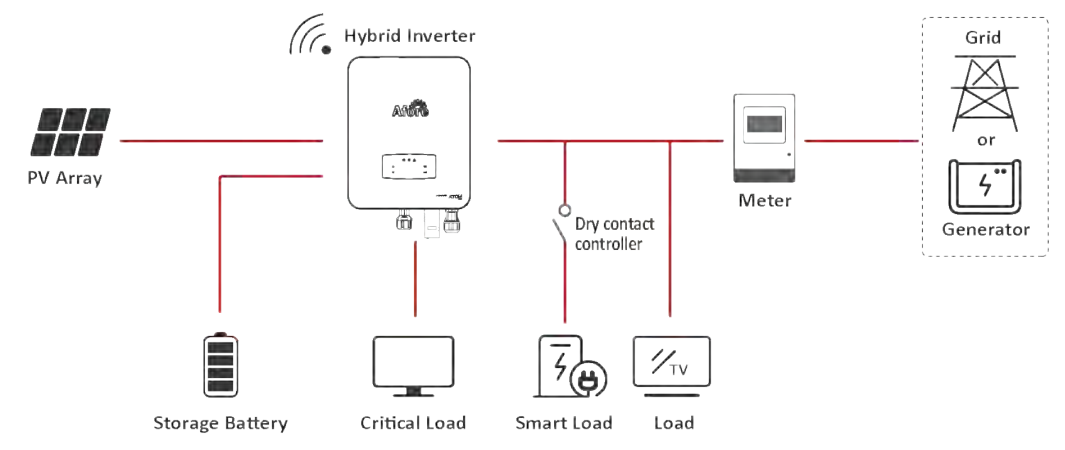




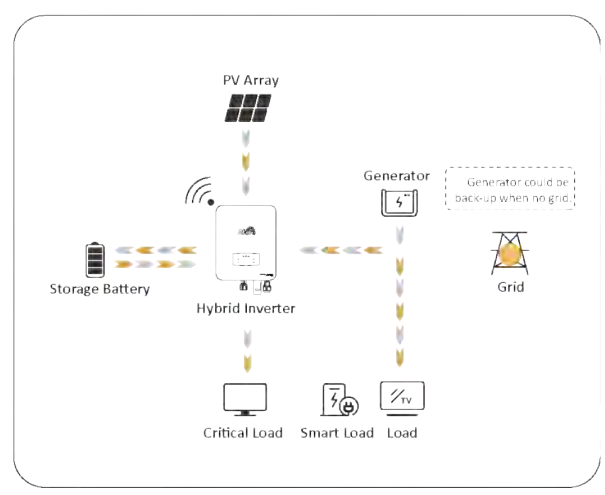
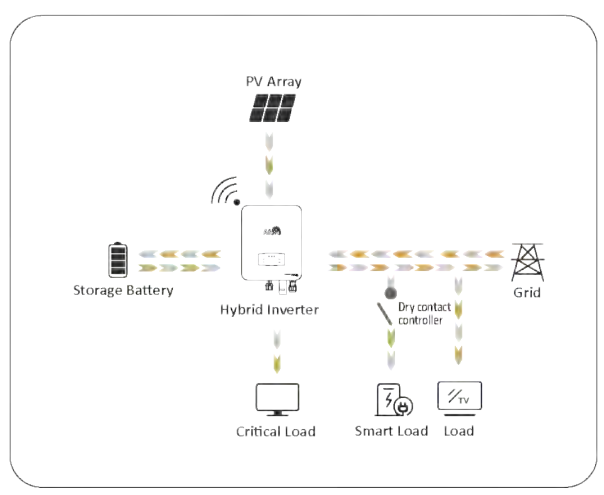
### GH Single Phase Home Energy Storage System



### For New Storage System:

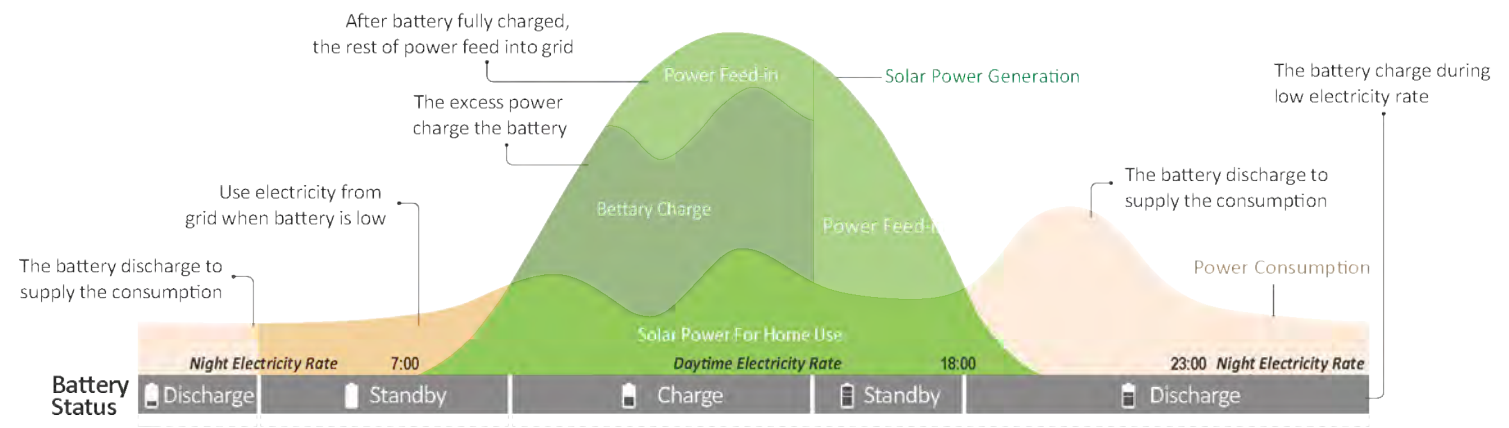


### Optimizing Self-Consumption (on-grid) + Emergency Power Supply(off-grid)



### Optimizing Self-Consumption Mode

With home energy storage installed, home owners may also be able to change from a flat rate electricity tariff to a time-of-use tariff. For the areas and regions, where peak savings can be applied.



# Single Phase Hybrid Storage Inverter

## 6kW



The GH6K-SL Low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 1kW to 3.6kW, compatible with low voltage (40-60V) batteries.

Energy management is based on time-of-use and demand charge rate structures, which significantly reduce the amount of energy purchased from the public grid.

Thanks for the UPS function (switch time < 10ms), that enables the crucial loads power on during outages. Additionally, under the backup operation mode, the inverter provides you up to 150% peak output overloading.

The GH6K-SL storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.



**AI EMS**  
Electricity Pricing & Automation



**PV OVERSIZE**  
1.5 Times PV Oversize



**MPPT CHANNELS**  
Up to 2 MPPT Channels



**UPS FUNCTION**  
Switch Time < 10ms



**PARALLEL**  
Max.6 Parallel Stacking



**INPUT**  
Support Generator

Support for Time-of-use Optimization



Configurable Operation Modes



AFCI (Optional) & Rapid Shutdown Ready



Build in Anti-feed-in Function



Compact Size and Easy Installation



Smart Monitoring & Remote Firmware Upgrade

## GH6K-SL

### TECHNICAL SPECIFICATIONS

PV Input	
Ppv Max (W)	9000
Vmax PV (V) (Absolute max)	550
Min. Operating Voltage (V)	100
Start-up Voltage (V)	100
MPPT Voltage Range (V)	80-500
Vdc range @ full power (V)	170-500
Isc PV (Absolute Max.) (A)	26 x 2
Max. PV input current (A)	18.5 x 2
Number MPP Trackers	2
Number Input Strings	1/1
Battery Charge	
Battery Type	Li-ion/Lead -acid
Battery Normal Voltage Range (Vdc)	51.2V (40-60V)
Max charge / Discharge Current (A)	80
Max charge / Discharge Power (W))	4800
AC Grid (Input and Output) & (Stand Alone)	
Normal AC Voltage	L/N/PE, 230Vac
Frequency (Hz)	50
Nominal AC Current (A)	26.1
Max. cont. input/output Current (A)	28
Rated Power (W)	6000
Max. cont. Power (W)	6000
Power Factor	1.0 (-0.8~+0.8 adjustable)
Max. Efficiency (%)	97.6
Others	
Ingress Protection (IP)	IP65 Class 1
Temperature	-25°C to +60°C (Derating 45°C)
Protective Class	Class I
Inverter Isolation	Non-isolated (PV-AC-BAT)
Over-Voltage Category	OVC III (AC Main), OVC II (PV)
Maximum Altitude	2000
Weight (kg)	17
Dimensions (WxHxD)mm	370 x 513 x1 92mm
Firmware	V06

# Single Phase Hybrid Storage Inverter

## 10kW

















The GH10K-SL Low voltage series storage Inverters are designed to increase energy independence for homeowners. The power range is from 7kW to 12kW, compatible with low voltage (40-60V) batteries.

Energy management is based on time-of-use and demand charge rate structures, which significantly reduce the amount of energy purchased from the public grid.

The UPS function (switch time < 10ms), enables the crucial loads power ON during outages. Additionally, under the backup operation mode, the inverter provides you with up to 150% peak output overloading.

The GH10K-SL energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts the device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.

						
<b>AI EMS</b> Electricity Pricing & Automation	<b>MAX. 370A</b> Max. Charge/Discharge Current 370A	<b>Max. 1.5</b> 1.5 Times PV Oversize	<b>2 MPPT</b> Up to 2 MPPT Channels	<b>&lt;10 ms</b> Switch Time < 10ms	<b>PARALLEL</b> Max.6 Parallel Stacking	<b>INPUT</b> Support Generator

Higher Yields 	 Build in Anti-feed-in Function
Support for Time-of-use Optimization 	 Compact Size and Easy Installation
Configurable Operation Modes 	 Smart Monitoring & Remote Firmware Upgrade
AFCI (Optional) & Rapid Shutdown Ready 	

## GH10K-SL

### TECHNICAL SPECIFICATIONS

#### PV Input

Max. Input Power (kW)	15
Max. PV Voltage (V)	950
MPPT Range (V)	80-900
Normal Voltage (V)	650
Start up Voltage (V)	100
Max. Input current (A)	26 + 18.5
Max Short Current (A)	32 - 25
No. of MPP Tracker / No. of PV String	2/2

#### Battery Port

Battery Type	Li-ion/Lead -acid
Battery Normal Voltage Range (V)	51.2V (40-60V)
Max charge / Discharge Current (A)	310
Normal charge / Discharge Current (A)	250

#### AC Grid

Max. Cont. input/output Current (A)	46
Max. Cont. Power (kVA)	10
Nominal Grid Current (A)	46/44
Max. Peak Current (A) 60s	68/66
Nominal Grid Voltage (V)	220/230
Nominal Grid Frequency (Hz)	50/60
Power Factor	1

#### Protection

PV Reverse Polarity Protection	Yes
Bat. Reverse Polairty Protection	Yes
Over-Current/ Voltage Protection	Yes
Anti-Islanding Protection	Yes
AC Short Circuit Protection	Yes
Residual Current Detection	Yes
Ground Fault monitoring	Yes
PV Arc Detection	Yes
Enclosure Protect Level	IP66
AC/DC Surge Protect	Type II

#### General Data

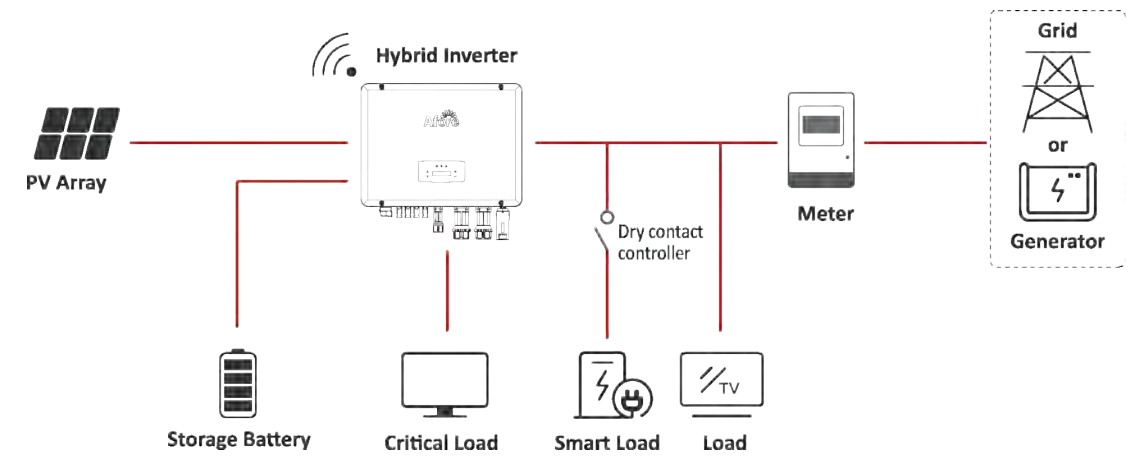
Dimensions (WxHxD)mm	600 x 400 x 250
Weight (kg)	30kg
Topology	Transformerless
Cooling	Intelligent Fan
Relative Humidity	0-100%
Operating Temperature Range	-25-60°C
Operating Altitude (m)	<3000
Mounting	Wall Bracket
Communication with RSD	SUNSPEC
Display & Communication Interfaces	LCD, LED, RS485, CAN, WI-FI, GPRS, 4G, SUNSPEC



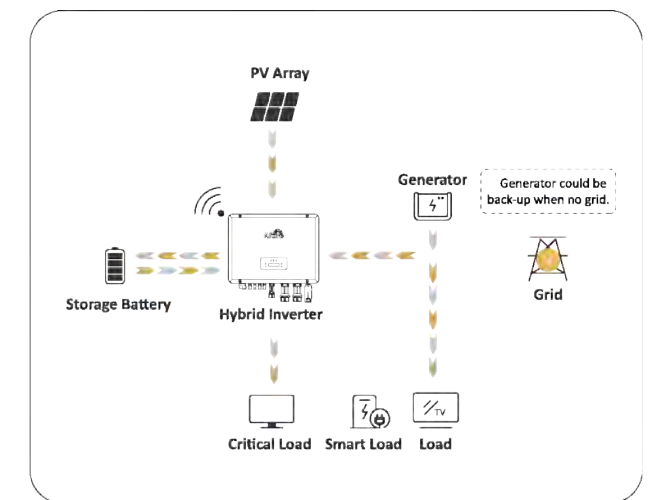
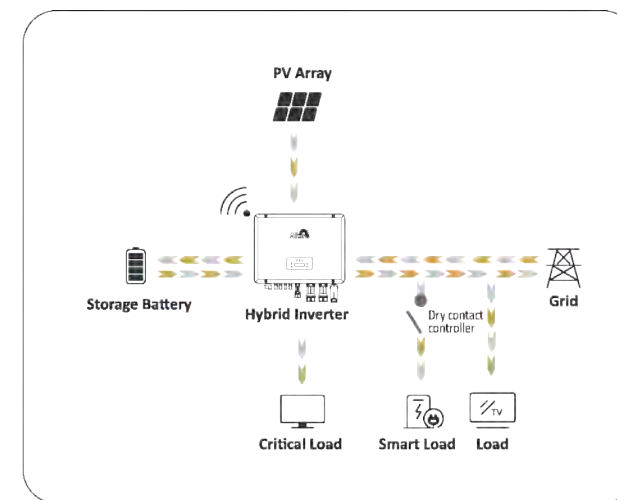
## GH Three Phase Home Energy Storage System



### For New Storage System:

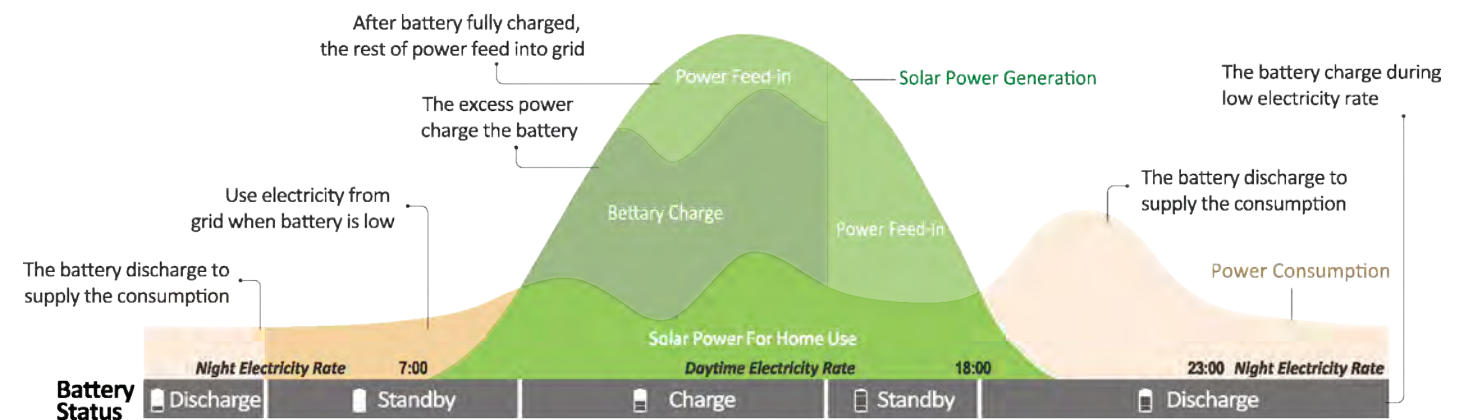


### Optimizing Self-Consumption (on-grid) + Emergency Power Supply (off-grid)



### Optimizing Self-Consumption Mode

With home energy storage installed, home owners may also be able to change from a flat rate electricity tariff to a time-of-use tariff. For the areas and regions, where peak savings can be applied.



# Three Phase Hybrid Storage Inverter

## 7-12kW (LV Battery Supported)











The GH7-12 Series three phase storage inverters are designed to increase energy independence for homeowners and commercial users. The power range is from 7kW to 12kW, compatible with low voltage (40-60V) batteries.

Energy management, based on time-of-use and demand charge rate structures, significantly reduces the amount of energy purchased from the public grid.

The UPS function (switch time < 10ms), enables the crucial loads power ON during outages. Additionally, under the backup operation mode, the inverter provides you with up to 150% peak output overloading.

The GH7-12kw Series energy storage inverter features Smart Electricity Pricing & Automation, an energy management tool based on real-time electricity pricing strategies. It continuously monitors electricity price fluctuations and dynamically adjusts device operation accordingly. Operating 24/7 fully automatically without the need for manual intervention, it helps users optimize their electricity usage and reduce energy costs.

						
<b>AI EMS</b> Electricity Pricing & Automation	<b>MAX. 370A</b> Max. Charge/Discharge Current 370A	<b>100% UNBALANCE</b> Support Unbalance Load	<b>2 MPPT</b> Up to 2 MPPT Channels	<b>10 ms</b> Switch Time < 10ms	<b>PARALLEL</b> Max.6 Parallel Stacking	<b>INPUT</b> Support Generator

Higher Yields 	 48V low voltage battery, transformer isolation design
Support for Time-of-use Optimization 	 Build in Anti-feed-in Function
Configurable Operation Modes 	 Compact Size and Easy Installation
AFCl (Optional) & Rapid Shutdown Ready 	 Smart Monitoring & Remote Firmware Upgrade

### GH7-12kW

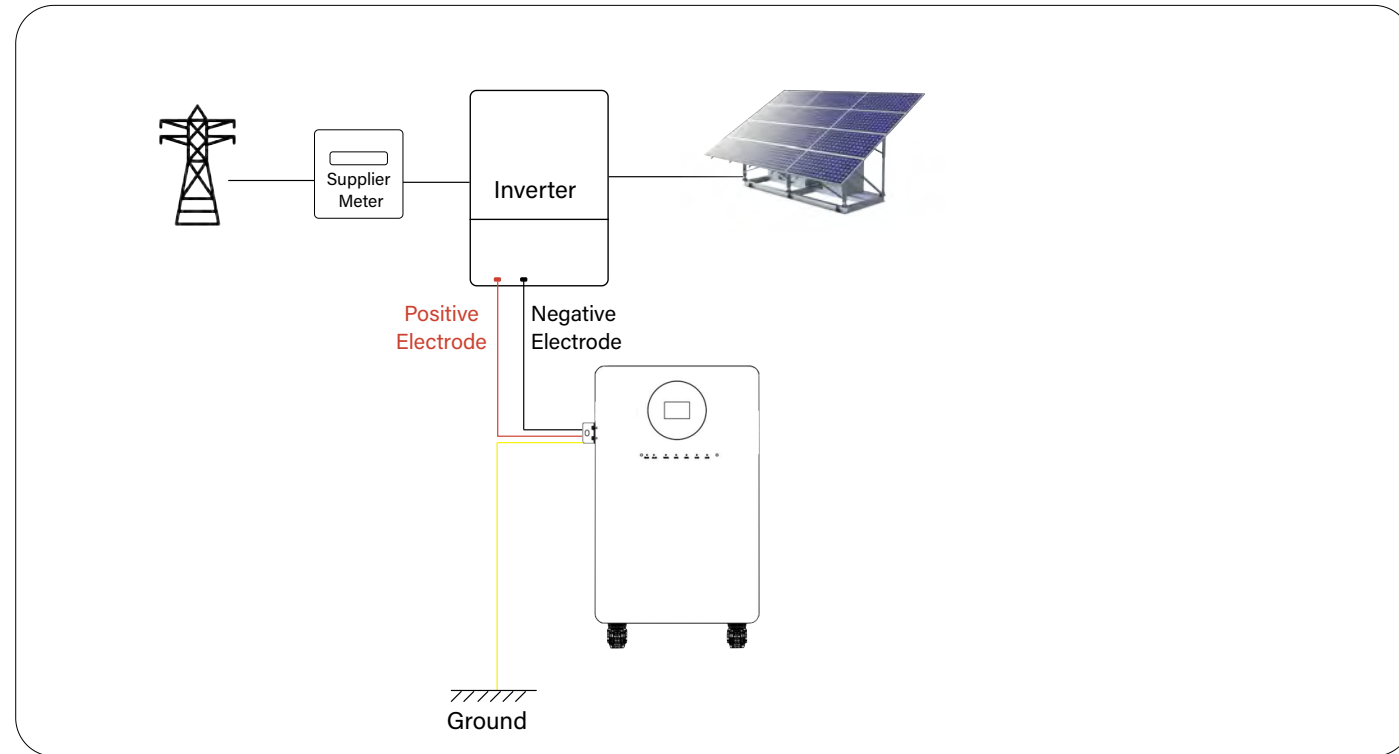
### TECHNICAL SPECIFICATIONS

	GH7K-TL	GH12K-TL
<b>PV Input</b>		
Max DC Input Power (kW)	14	24
Max PC Voltage (V)	950	950
MPPT Voltage Range (V)	80-900	80-900
Normal Voltage (V)	650	650
Start-up Voltage (V)	100	100
Start-Up Voltage (V)	160	160
Max. Input Current (A)	26 + 18.5	26 + 18.5
Max. Short Current (A)	32 + 25	32 + 25
Number MPP Trackers / No. of PV Strings	2/2	2/2
<b>Battery Port</b>		
Compatible Battery Type	Li-ion / Lead-acid etc.	
Battery Nominal Voltage (V)	250	400
Battery Voltage Range (V)	40-60	40-60
Max charge / Discharge Current (A)	220	370
Max charge / Discharge Power (kW)	10.5	18
Normal Charge / Discharge Current (A)	180	300
<b>AC Grid</b>		
Nominal AC Output Power (kW)	6	10
Max. Continuous Power (kVA)	7	12
Max. Continuous Current (A)	11	18
Nominal Grid Voltage (V)	380/400	380/400
Nominal Grid Frequency (Hz)	50/60	50/60
Power Factor	1.0 (-0.8~+0.8 adjustable)	1.0 (-0.8~+0.8 adjustable)
<b>AC Load Output</b>		
Max. Continuous Current (A)	11	18
Max. Continuous Power (kVA)	7	12
Max. Peak Current (A) 60s	22/21	36/35
Nominal AC Voltage L-N (V)	380/400	380/400
Nominal AC Frequency (Hz)	50/60	50/60
Voltage (THD) (%)	<3	<3
<b>Protection</b>		
PV Reverse Polarity Protection	Yes	Yes
Over-current / Voltage Protection	Yes	Yes
Bat. Reverse Polarity Protection	Yes	Yes
Anti-Islanding Protection	Yes	Yes
AC Short Circuit Protection	Yes	Yes
Residual Current Detection	Yes	Yes
Ground Fault Monitoring	Yes	Yes
Enclosure Protect Level	IP66	IP66
AC/DC Surge Protect	Type II	Type II
Ground Fault Monitoring	Yes	Yes
<b>General Data</b>		
Dimensions (WxHxD)mm	600x400x250mm	600x400x250mm
Weight kg	30	30
CEC Efficiency / Max Efficiency (%)	96.8% / 98.1%	96.8% / 98.1%
Cooling	Intelligent Fan	Intelligent Fan
Relative Humidity	0-100%	0-100%
Operating Temperature Range (°C)	-25 to 60°C	-25 to 60°C
Operating Altitude	<3000	<3000
Standby Consumption (W)	<10	
Display & Communication Interfaces	LCD, LED, RS485, CAN, WI-FI, GPRS 4G, SUNSPEC	
Communication with RSD	SUNSPEC	

# GH-B16A Battery

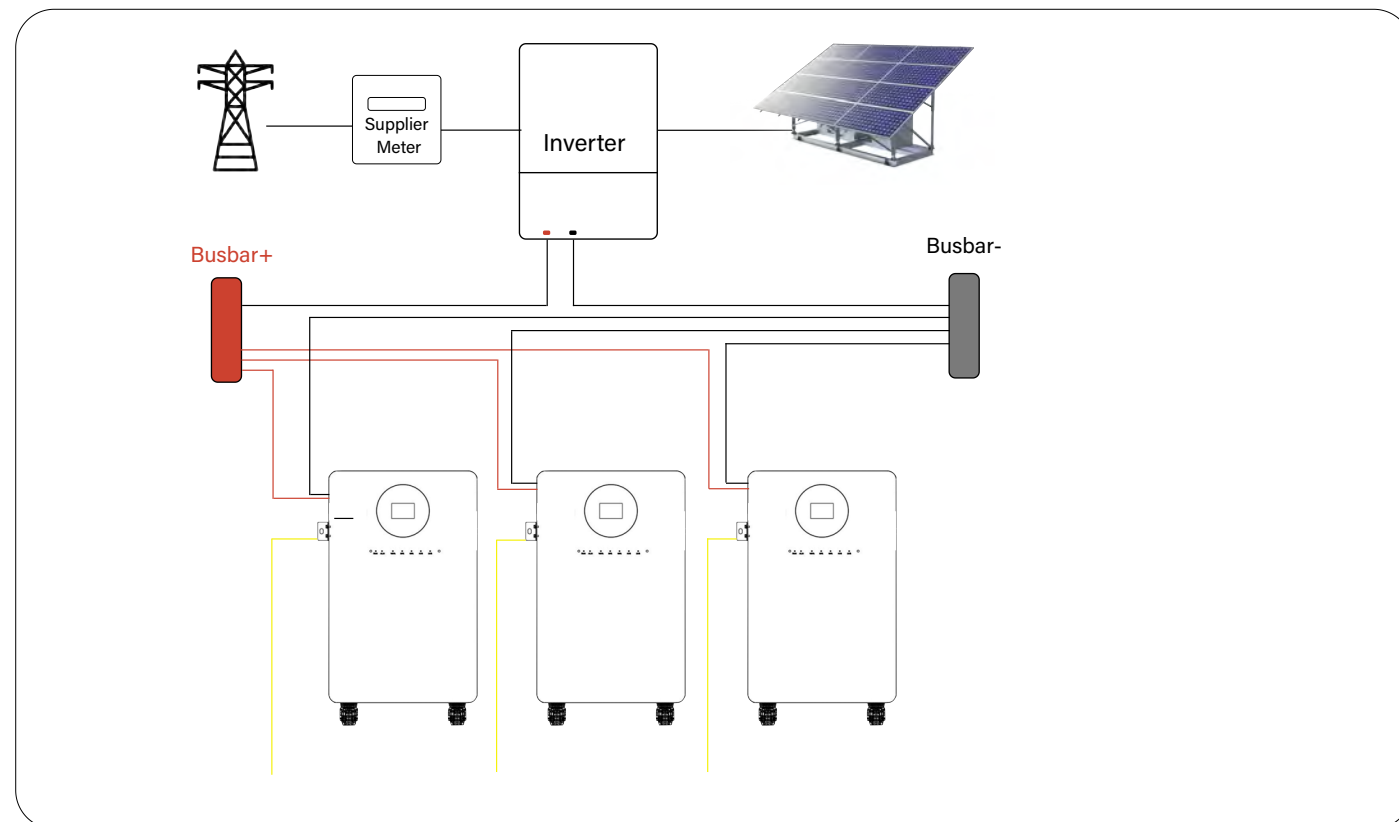
## Battery/Inverter System Connection

Single-Battery Connected in Parallel



Multiple Batteries Connected in Parallel

Use a parallel bus bar when installing two or more batteries.



## Power Your Home with Government-Backed Savings

- ✓ Up to 100% Battery cost covered\* with government rebates.
- ✓ 16 kWh storage capacity – scalable for larger homes.
- ✓ Remote monitoring via PACEEX App (Wi-Fi/Bluetooth).
- ✓ 10+ year lifespan with industry-leading safety
- ✓ (CE, RoHS, SGS, IEC 62619, IEC 62368, IEC 61000 certified).

\*As of July 2025 Terms apply. Rebates vary by region and electricity rates

# GH-B16A Battery Energy Storage System

## Save Big on Smarter Power

### 1. Battery System Specifications

RESIDENTIAL SERIES MODEL NO:	GH-B16A
Battery Chemistry:	Lithium Ion Phosphate (LiFePO <sub>4</sub> )
Rated Voltage	51.2V
Nominal Capacity	314 Ah
Maximum Charge Voltage	58.4V
Maximum Charging Current	157A
Energy	16.076 kWh
Discharge Cut-off Voltage	40V
Warranty	10 Years
Certification	CE, RoHS, SGS, IEC 62619, IEC 62368 IEC 610000
Country of Manufacture	China

### Environmental Specifications

Operating Temperature	Range
Charging	0°C to 60°C
Discharging	-20°C to 60°C
Storage	0°C to 35°C
Maximum Elevation	Floor-mounted
IP Rated	IP20 Indoors
Operating Noise	<30 db (A)

### Battery Dimensions

Dimensions	850*650*245mm (+/-5mm)
Weight	131.5kg
Mounting	Floor-mounted or Wall Bracket

### 2. Communication and Control

Communication Mode	CAN/RS485/RS232/Bluetooth/Wifi
RS485/CAN	Inverter Comms
RS232	Firmware updates / Monitoring of battery information
WiFi/Bluetooth	Remote monitoring
Dry Contact	Alarm outputs

### 3. Battery Management System (BMS)

	Parameter
Single Cell Over-Charge Cut-off Voltage	3.65V
Single Cell Under-Discharge Cut-off Voltage	2.5V
Over-Current Discharge Protection	250A/500mS
Recommended Charge Current	157A
Maximum Discharge Current	157A
Recommended Discharge Current	157A
Rated DC Power	8.38kW
Peak Discharge Current/Time	250A/500+/-20mS
Backup Run-time	24+ Hours for essential load
Available Battery Capacity	16.076kWh
DOD	100%
Charge/Discharge DOD Cycle	16.076kWh
System Connection	Up to 15 Batteries connected in parallel (1 Battery-16kWh, 2 Batteries-32kWh, 3 Batteries-48kWh)

### 4. Compliance and Safety

Certifications	CE, RoHS, CE, RoHS, SGS, IEC 62619, IEC 62368
Recycling	WEEE Compliant

### 5. VPP Ready:

Virtual Power Plant compatible system required.

### 6. Installation:

The GH-B16 Residential Home Battery requires professional installation to qualify for government rebates. Our certified technicians cover all Australian regions.

