

# Ground Eco HV

## Introduction

Ground HV is a high voltage DC LFP battery system with an operating voltage range between 200V ~ 450V. It is for residential solar & storage applications and works with high voltage single phase or three phase hybrid inverters to achieve solar self-consumption, peak shaving or back-up supply. A battery system consist of controller and battery modules connected in series to achieve a high voltgae.



Battery System



BCU



Ground HV Module



Base

## Ground Eco HV Configuration Table

Name	BCU	Ground HV Module	Base	Energy (kWh)	Voltage Range(V)
Ground HV 10K	1	4	1	9.98	180 ~ 233
Ground HV 12K	1	5	1	12.48	224 ~ 292
Ground HV 15K	1	6	1	14.97	268 ~ 350
Ground HV 17K	1	7	1	17.47	313 ~ 409
Ground HV 20K	1	8	1	19.96	358 ~ 467

BCU is responsible for battery management and control. It consists master BMS and communicates to the three phase hybrid inverter.

- SOC, ALM and RUN indicators.
- CAN / Modbus Communication
- Maximum 50A
- WIFI & APP

## Ground HV module

- 48V 52Ah 2.5kWh per module
- For series connection
- Slim dimensions
- Quick socket & plug design
- Active balance between modules
- Built-in fire suppression gas module
- One engineer quick install



## Ground HV Module Specifications

Module Name	Ground HV
Energy Capacity	2.5kWh
Typical Voltage	48V
Ah Capacity	52Ah
Maximum Current	50A
Battery Type	Prismatic LiFePO4
Connection Method	Series connected for high voltage battery solution
Connector	No cable seat type socket & plug
Weight	28KG per module

## Ground HV Battery System Specifications

System Voltage	192V	288V	384V
Working Voltage Range	177V~216V	265V~324V	354V~432V
Rated Capacity	9.9kWh	14.9kWh	19.9kWh
Ah Capacity		52Ah	
Suggested SOC Range		10% ~ 100%	
Usable Energy	9.4kWh	14.1kWh	18.9kWh
Peak Charge/Discharge Current		50A	
Charge Temperature		0°C ~ 45°C	
Discharge Temperature		-10°C ~ 45°C	
Cycle Life		6000 cycles @ 0.5C/0.5C, 25°C	
Communication		CAN	
Compatible Inverters		Growatt, Sofarsolar, Sunways, Sungrow, GoodWe, Luxpower, Afore, INVT, Hypontech, etc	
Design Life		10 years	
Dimensions	120cm x 57cm x 22cm	150cm x 57cm x 22cm	180cm x 57cm x 22cm
Weight	150KG	210KG	270KG
Display		SOC and Operation Indicators	
Install Method		Ground stacked for one engineer	