

GLOBAL ENERGY TECHNOLOGY INNOVATOR

Part 01

DYNESS COMPANY INTRODUCTION





Dyness is headquartered in Suzhou, China.
We have 3 domestic branch offices located
in Taizhou, Xi An and Shenzhen.

550+ Employees Globally

3 R&D Bases **150+** People in our
R&D team

100+ Patents and mainstream certifications
(TUV, UL, CE, JET, CEC etc.)

100+ Countries & Regions
use our products **6** Global
Branches

3GWh Production Capacity

500 000+ Serviced Households





Business Panorama

DYNES

5 00,000+

Number of families
served

2+2

Domestic branch

6

Overseas branches

100+

global footprint

TOP8

home energy
global supplier

3GWh

production capacity

Top Brands

“2023 China’s Invisible Unicorn”

“Top 5 Batteries of 2023
Manufacturing Solutions Provider”

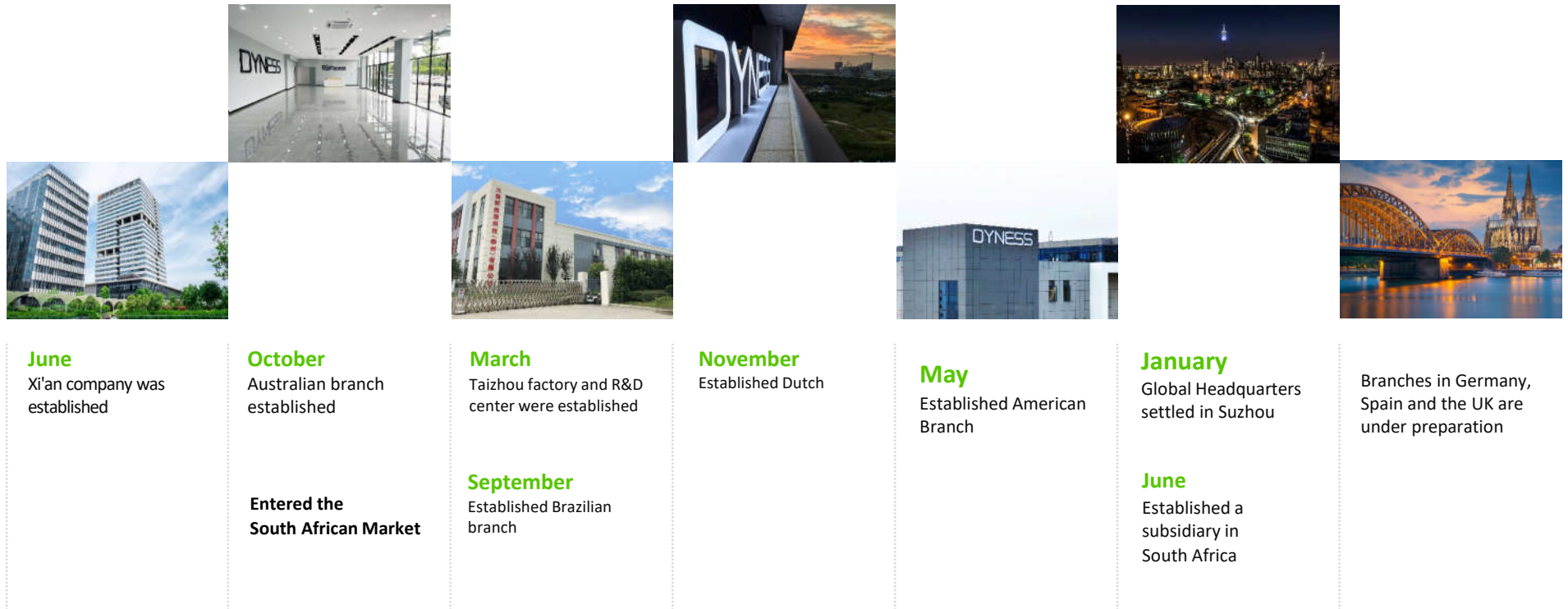
7

Years

0

Safety
incidents

Development Milestones



2017

2019

2020

2021

2022

2023

on the way

Dyness Worldwide Locations

DYNESS



Dyness Taizhou



Dyness Xi'an



Dyness Suzhou



Dyness Brazil



Dyness Netherlands



Dyness America



Dyness South Africa



Dyness Australia

Well Recognized in Overseas Markets

Top Photovoltaic Energy Storage Brand Award
Professional organization certification industry leader



EUPD Research Sustainable Management GmbH
congratulates

Dyness Digital Energy Technology Co., LTD.

on the **Award** of

Top Brand PV South Africa 2023

Category **Storage**

The company Dyness Digital Energy Technology Co., LTD. ranks among the top energy storage brands in South Africa according to the results of a survey carried out by EUPD Research among installers on brand awareness, customers' choice and distribution.




Markus A. W. Hoehner
CEO

**Top Brand PV
South Africa**



EUPD Research Sustainable Management GmbH
congratulates

**Dyness Renewable Energy
Group Co. LTD**

on the **Award** of

Top Brand PV Brazil 2022

Category **Storage**

The company Dyness Renewable Energy Group Co. LTD ranks among the top PV brands in Brazil according to the results of a survey carried out by EUPD Research among installers on brand awareness, customers' choice and distribution.




Markus A. W. Hoehner
CEO

**Top Brand PV
Brazil**



EUPD Research Sustainable Management GmbH
congratulates

Dyness Digital Energy Technology Co., LTD.

on the **Award** of

Top Brand PV Czech Republic 2023

Category **Storage**

The company Dyness Digital Energy Technology Co., LTD. ranks among the top energy storage brands in Czech Republic according to the results of a survey carried out by EUPD Research among installers on brand awareness, customers' choice and distribution.




Markus A. W. Hoehner
CEO

**Top Brand PV
Czech Republic**



**Top Battery Solutions
Provider in China**

Market Certification Aligns with Independent Product Research and Development



100+
Technology
patents

20+
Software
copyrights

**Multifunctional home energy
storage battery system**
Invention patent / utility model
/ Design patent



Part 02

DYNESS PRODUCTS OVERVIEW



DYNESSE PRODUCTS OVERVIEW

DYNESSE

Residential

Module Battery



DL2.5



BX51100



DL5.0C



DL5.0X

Battery Pack



Powerbox G2



LR1.2

Inverter



DYNE 5.0/8.0L-1P-A



Powerbrick

Commercial & Industrial



Tower



HV4



BF100



Powerstone



Stack100



DH100F



DH200F

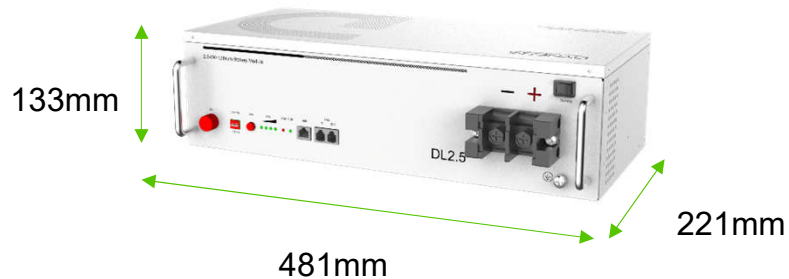
Part 03

RESIDENTIAL PRODUCTS



DL2.5

1.3C
Max.
Discharge



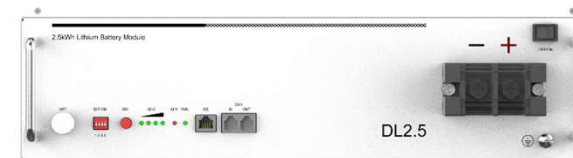
Nominal Energy **2.56kWh**

Recommended Charge/discharge current **50A**

Max. continuous Charge/Discharge Current 75(40min)/130A(30min)

Operating temperature: **Charge: 0~55°C**

Discharge: -20~55°C



22 kg

Flexible Expansion

2.56 kWh per unit
Max. **16** in parallel

Up to 40.96 kWh

Easy Installation

wall-mounted

High Safety LFP

Cell level monitoring and
balancing

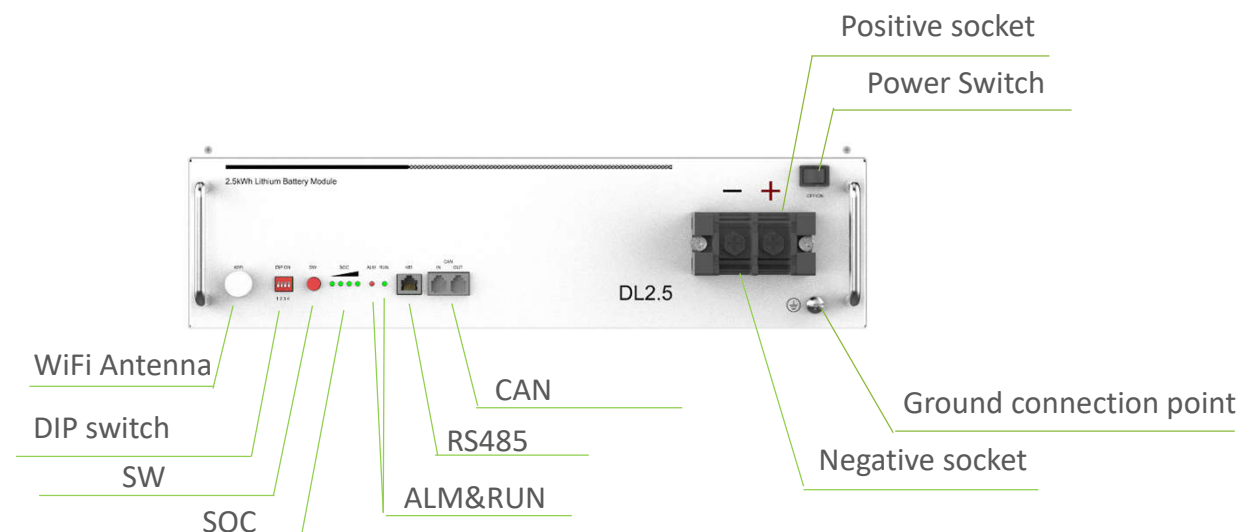
APP Monitoring(Optional)

Real-time monitoring & Remote upgrade
available

RESIDENTIAL PRODUCTS

Battery Interface

DYNES



Product Precautions:

1. Power switch: OFF/ON, remains 'ON' when using.
2. DIP switch : Used to match different inverters.
3. SW: When power switch is in 'ON', long pressing SW for 3s to enable the battery for switch-on or dormant state.
4. Indicated lights, including SOC lights, ALM light, RUN light, which indicate the status of the battery.
5. WiFi function is optional
6. CAN: support CAN communication. (Factory default CAN mode)



RESIDENTIAL PRODUCTS

Mechanical Installation

DYNES

Wall-mounted



a) Positioning & Brackets
Fastening



b) Lock Two Screws



c) Module Mounting

RESIDENTIAL PRODUCTS

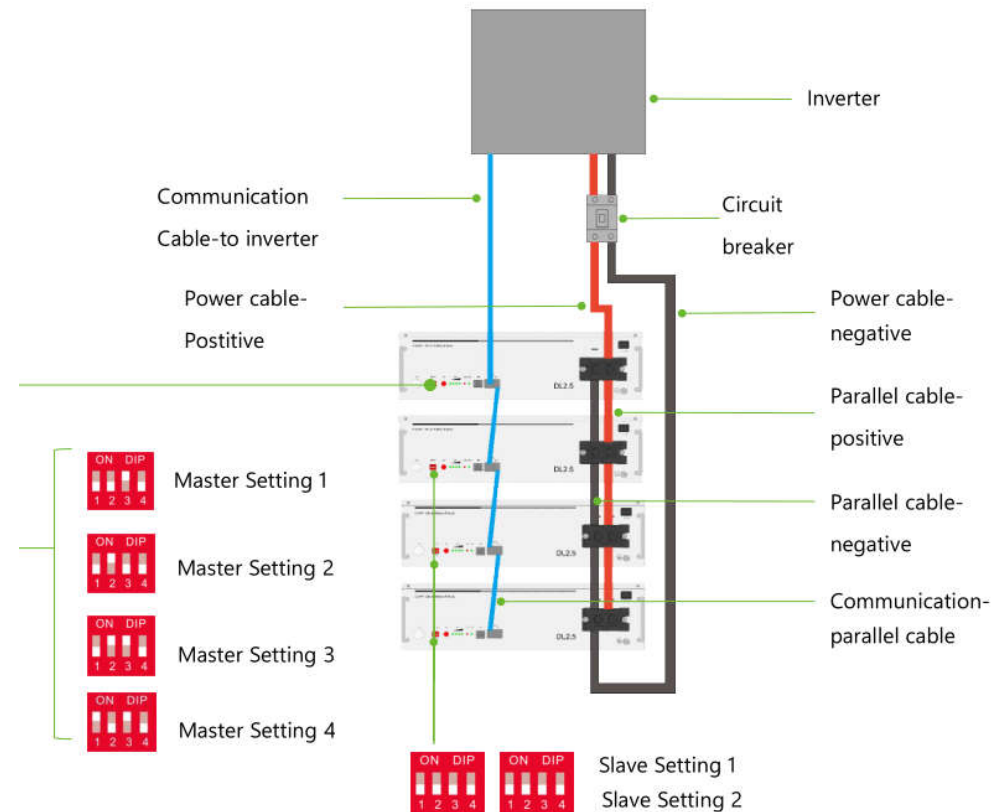
Electrical Installation

Electrical installation

Install grounding cable → Install parallel power & com. Cables → connect power & com. cables to inverter → set DIP switch → turn on the ON/OFF switch → press SW button for 3s → turn on DC breaker → turn on PCS to set up

Attention

It is recommended that **power of inverter : energy of battery $\leq 1:2$**
Recommended **DoD** for LV battery module is **90%**.



Note: Power cables must be connected **diagonally** to make each module get equal current.



 **Dyness**

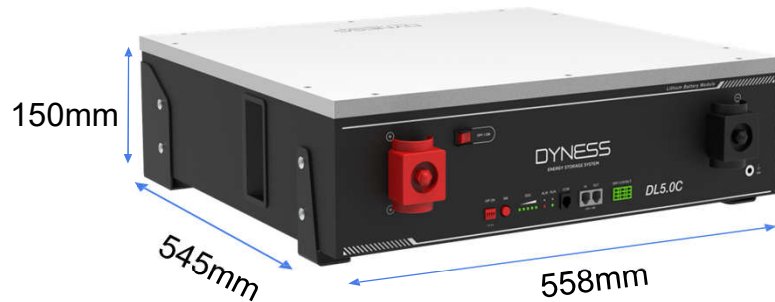
DL5.0C

Battery Installation Video

DL5.0C

DYNESS

1C
discharge



Nominal Energy **5.12kWh**

Recommended Charge/discharge current **50A**

Max. Power Charge Current 75A

Max. Power Discharge Current 100A

Peak Power Charge/Discharge Current 110A (15s)

Operating temperature: **Charge: 0~55°C**

Discharge: -20~55°C

Storage temperature: -10 °C ~ +35 °C

Relative humidity: 5% ~ 85%RH



APP Monitoring (optional)

Real-time monitoring & Remote upgrade available

Flexible Expansion

5.12kWh per unit
Max. **50** in parallel

Up to 256 kWh

Various Mounting Methods

Wall-mounted or floor-standing installation and stack

High Safety LFP

Cell level monitoring and balancing

Wide Compatibility

Matching with leading inverters

RESIDENTIAL PRODUCTS

Battery Interface



Product Precautions:

1. Power switch: OFF/ON, remains 'ON' when using.
2. DIP switch : Used to match different inverters.
3. SW: When power switch is in 'ON', long pressing SW for 3s to enable the battery for switch-on or dormant state.
4. Indicated lights, including SOC lights, ALM light, RUN light, which indicate the status of the battery.
5. COM: Communication cascade port, support **RS232 for remote upgrade**.
6. CAN/485: support CAN/RS485 communication. (Factory default CAN mode)

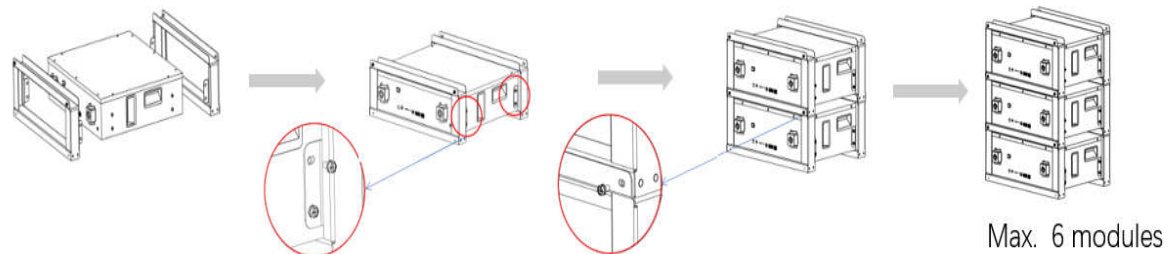


RESIDENTIAL PRODUCTS

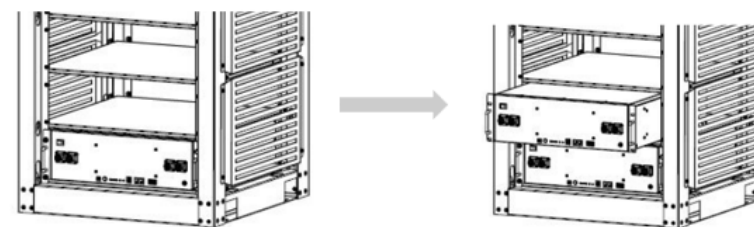
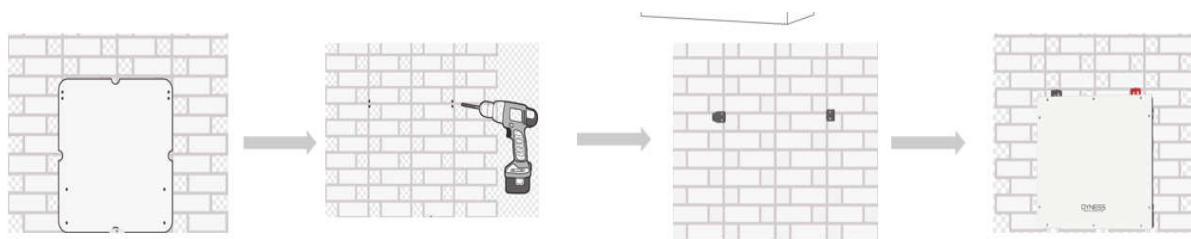
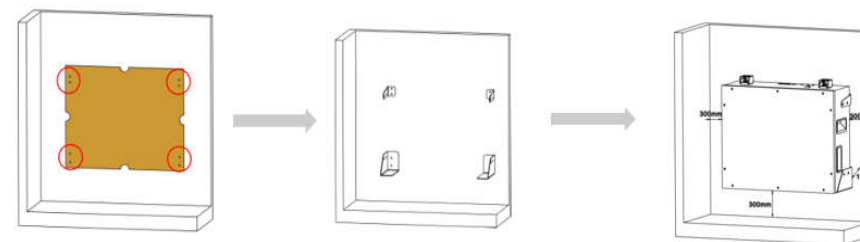
Mechanical Installation

DYNES

Flexible bracket



Wall-mounted



RESIDENTIAL PRODUCTS

Electrical Installation

Electrical installation

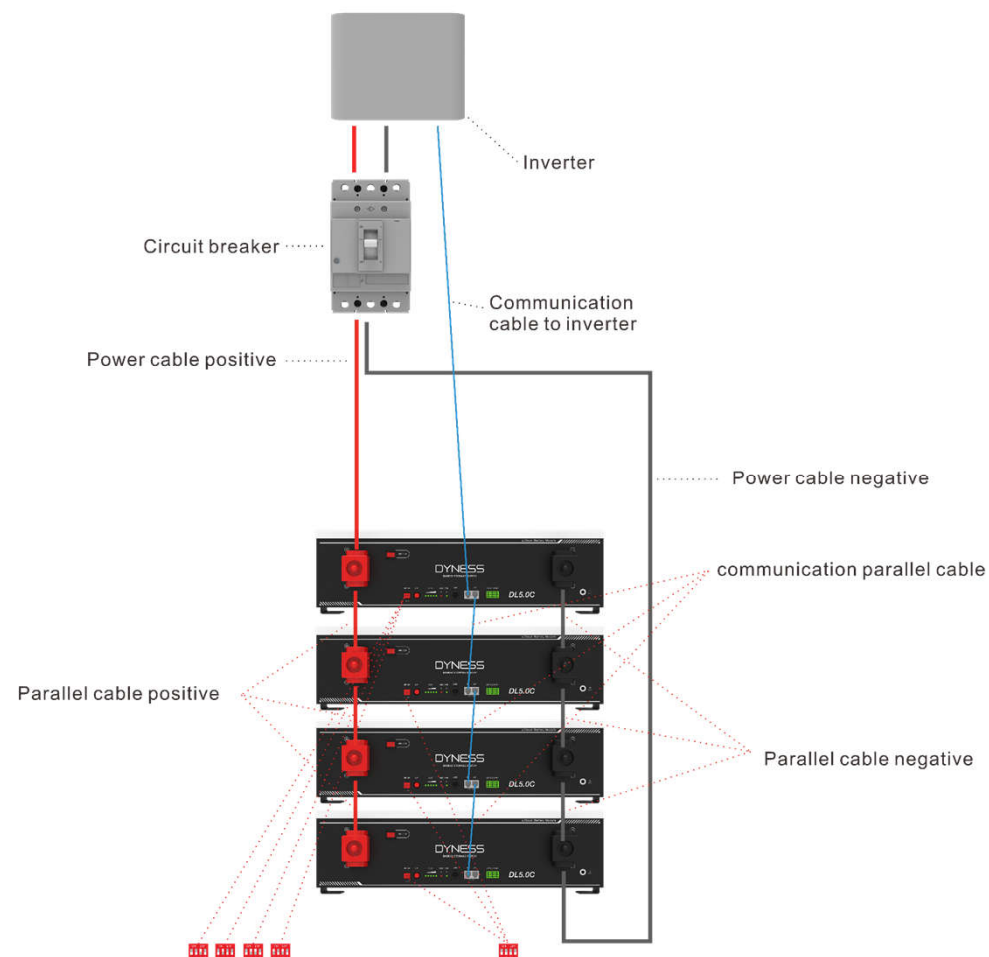
Install grounding cable → Install parallel power & com. Cables → connect power & com. cables to inverter → set DIP switch → turn on the ON/OFF switch → press SW button for 3s → turn on DC breaker → turn on PCS to set up

Attention

It is recommended that **power of inverter : energy of battery $\leq 1:2$**
Recommended **DoD** for LV battery module is **90%**.

No extra communication device needed for paralleling 50 batteries.

DYNES



Note: Power cables must be connected **diagonally** to make each module get equal current.

LR1.2

DYNES



Nominal Energy **1.28kWh**

Max. continuous Charge/Discharge Current **100/100A**

Operating temperature: **Charge: 0~55°C**

Discharge: -20~55°C



12 kg

Light Weight

1/3 weight of the lead-acid battery of the same capacity

Easy Installation

12kg, easy to handle

High Protection level

IP65

Longer service life

3 years, ≥3000 cycles

Deep Cycling

100%DOD

Comparison between Dyness LR1.2 and Lead-acid



	LR1.2	Lead-acid	Advantages of LR1.2
Weight	12kg	30kg	1/3 of lead-acid by weight
Service life	3 years	1year	longer service life
Cycle life	3000 cycles	200-500cycles	much more cycles
Price (Rand)	3500	2000	
Price per day(Rand)	3.2	5.47	LFP is 58% price per day of Lead-acid
Environment Protection	Environment friendly	Heavy metal Pollution	LFP has no heavy-metal pollution
Reliability	BMS integrated	No BMS	1. BMS can protect battery from over charge, discharge, short-circuit, high and lower temperature. 2. LFP can be reactivated even at 0V for multiple times 3. IP65 for outdoors 4. Prevent battery from charging at below 0 °C, that will protect battery better.

Comparison between Dyness LR1.2 and Other Lead-acid Alternative LFP

Feature	LR1.2	Other Lead-acid Alternative LFP	Advantages of LR1.2
Cell	Tier 1	uncertain	Better cell quality
Inverter compatibility	Capacitive load 20mF	Capacitive load 10mF	Can work with almost all inverters below 3kW capacity due to LR1.2 withstanding larger capacitive load
Short circuit protection	Recover when load is disconnected	Component (MOS) damaged	Protect BMS from been damaged and fire accident
Low temperature protection at charge	$0 \pm 5^{\circ}\text{C}$	No protection	Better to ensure battery health
High temperature protection at discharge	$-20 \pm 5^{\circ}\text{C}$	No protection	
Cell balancing	3.35-3.7V	No balance	
Over discharge current protection	$300 \pm 50\text{A}$	$350 \pm 100\text{A}$ or no protection	
Over charge current protection	$130 \pm 20\text{A}$	$150 \pm 60\text{A}$	
Pack structure	Barely no EVA cotton filled	Lots of EVA cotton filled	

Connection

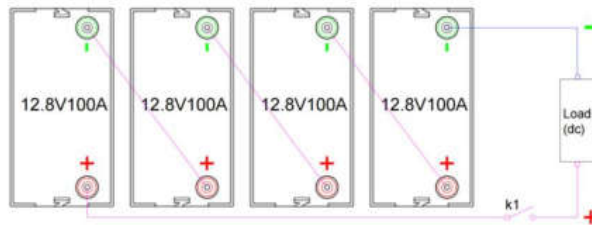


Figure 5-1 Series Application: 4S1P,51.2V100Ah

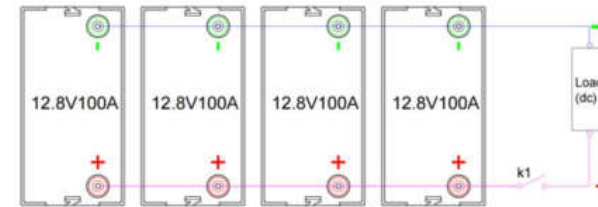


Figure 5-2 Parallel Application: 1S4P,12.8V400Ah

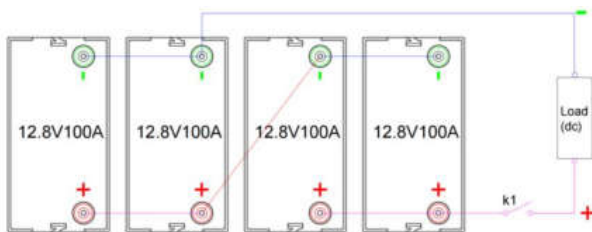


Figure 5-3 Series-parallel Applications: 2S2P,25.6V200Ah



Figure 5-4 Series-parallel Applications: 4S2P,51.2V200Ah

Max 4 units in series and parallel connection

Comparison between Dyness and Eastman



S.N.	Item	EM12.8-100LPH	LR1.2	Remark
1	Energy	1.28	1.28	
2	Capacity	100Ah	100Ah	
3	Max charge & discharge C-rate	1C	1C	
4	Size	330*173*216	330mm*172mm*214mm	
5	DOD	unknown	100%	
6	Cycle	unknown	≥3000 cycles	
7	Capacity expansion	unknown	4 parallel and 4 series	
8	IP	unknown	IP65	
9	Warranty	unknown	3 years	
10	Weight	12.8kg	12kg	

Powerbox Pro

DYNES



Nominal Energy **10.24kWh**

Recommended Charge/discharge current **100A**

Peak Power Charge/Discharge Current 200A (15s)

Operating temperature: **Charge: 0~55°C**

Discharge: -20~55°C

Storage temperature: -10 °C ~ +35 °C

Relative humidity: 5% ~ 85%RH

APP Monitoring (Optional)

Real-time monitoring & Remote upgrade available

IP65

High protection level
Indoor & outdoor options

Various Mounting Methods

Wall-mounted or floor-standing installations

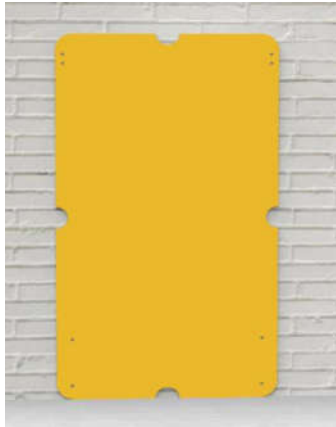
High Safety LFP

Cell level monitoring and balancing

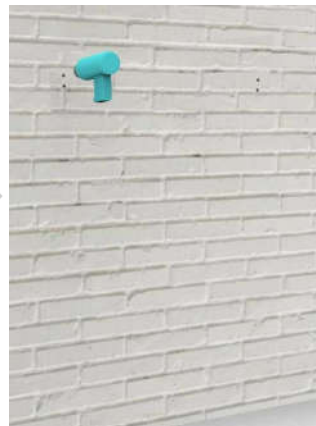
Flexible Expansion

Max. **5** units in parallel

Mechanical Installation



Floor standing

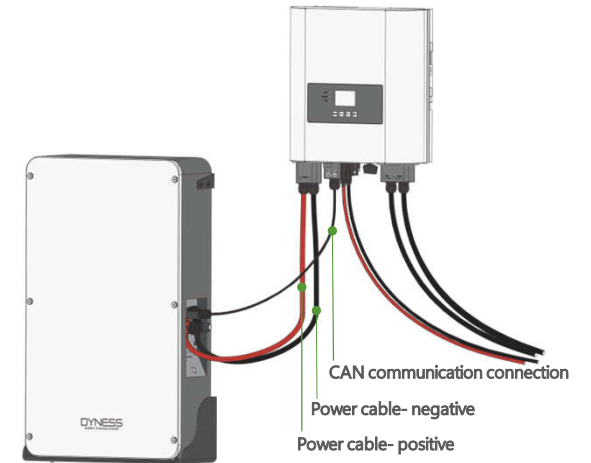
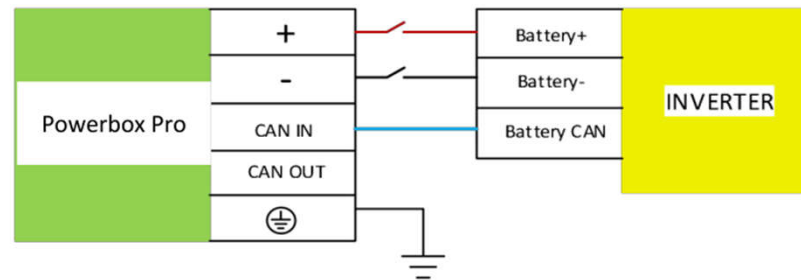


Wiring of **Powerbox Pro** when the system is used **independently**

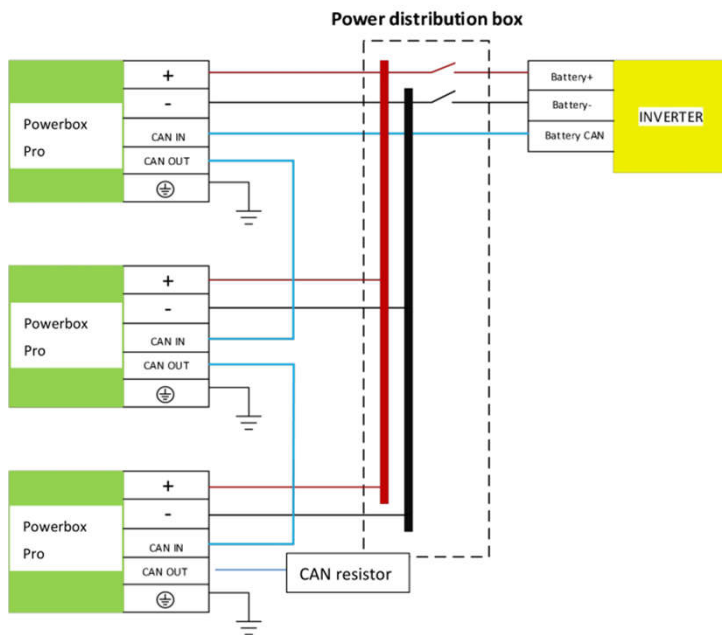


Grounding point

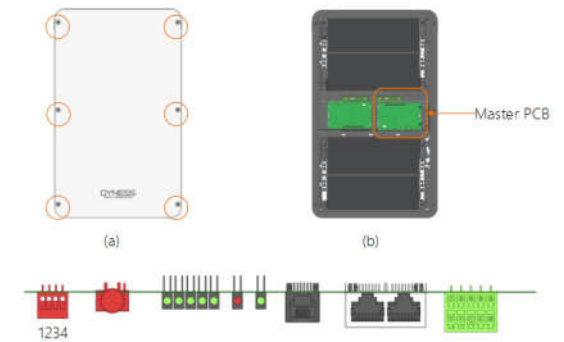
Right Interface of Powerbox Pro



Wiring of Powerbox Pro when the system is used in parallel (MAX. 5)



When the system is used in parallel, all the cover of slave Powerbox Pro systems need to be opened and the DIP switch of the master PCB need to be changed to Slave Setting (i.e. ADD: 0000), while the master PCB of Powerbox Pro follows the Master Settings.

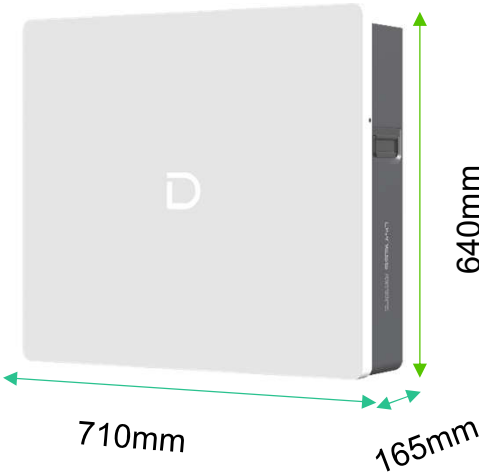






RESIDENTIAL PRODUCTS

Powerbox G2



95kg without Glass front
98kg with Glass front

Features

- Max 50 units in parallel, 10.24~512 kWh expansion
- Active fire suppression: Built-in aerosol fire extinguisher
- Built-in WiFi module, remote App monitoring and upgrade
- 8000 Cycles / 10 Years
- 1C discharge rate, 10.24kW
- LED is programmable to show charging/discharging/alarm, etc.
- One click to upgrade all battery packs
- Master and slave auto recognized
- Breatheable vavle
- Tier 1 battery cell, BYD EVE



	Specifications
Battery Energy	10.24kWh
Nominal Voltage	51.2V
Battery Capacity	200Ah
Maximum continuous discharge current	200A
Mounting	Wall-Mounted & Floor-standing
DOD	95%
IP level	IP65
weight	95kg
Working temperature:	-20~+55°C
Dimension(W*H*D)	710*165*640mm
Certifications	UN38.3/IEC62619/IEC62040/CEC/CE RED

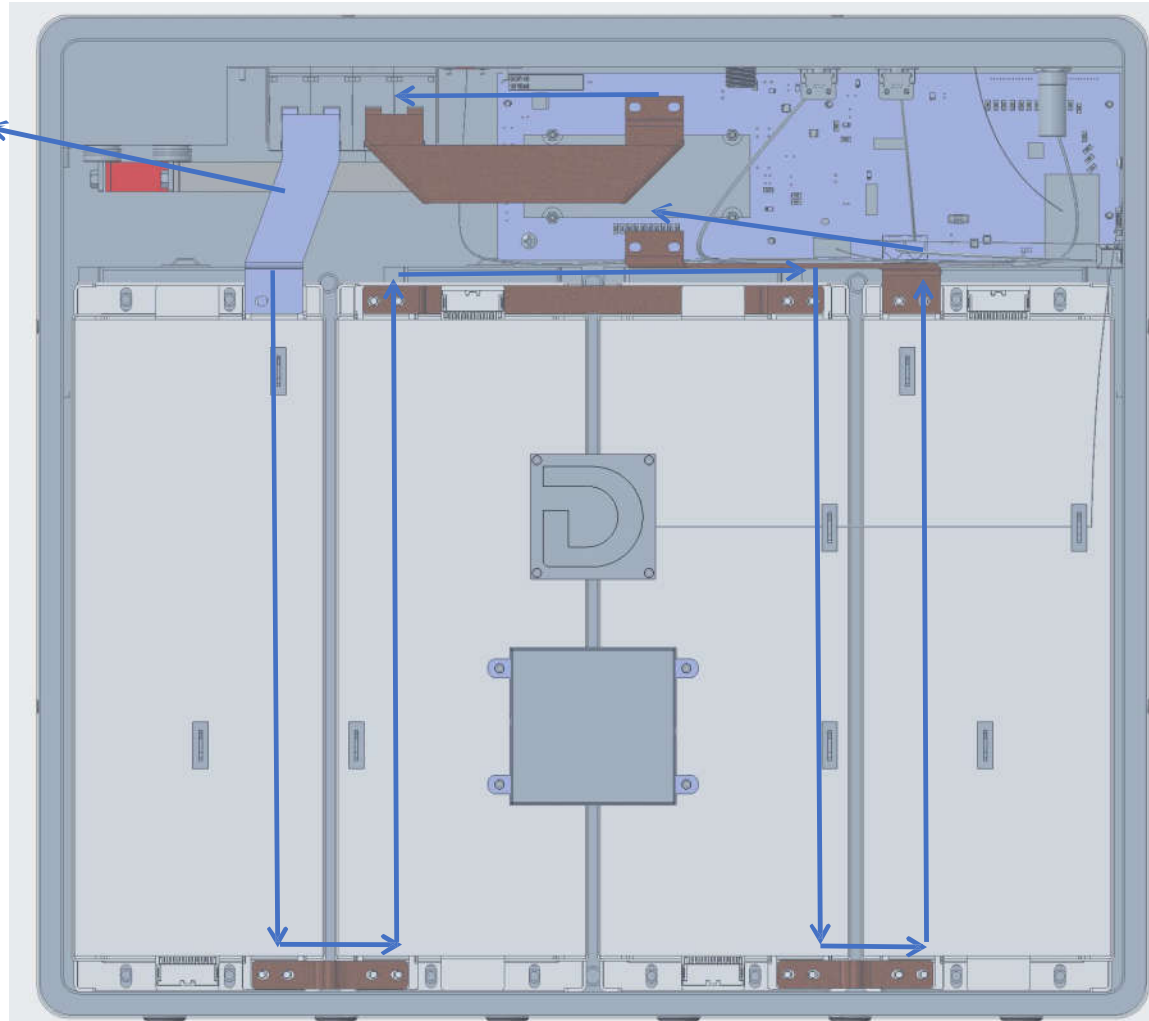
Why is Powerbox G2 designed to be square

- ◆ Bus bar is as shortest as possible to reduce cost, lower internal impedance so as to reduce heat generation;
- ◆ Easier for assembly

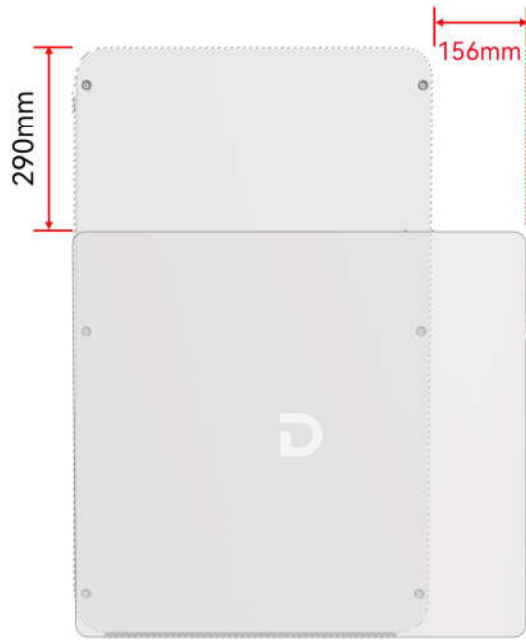
Shortest path to
output port

Positive

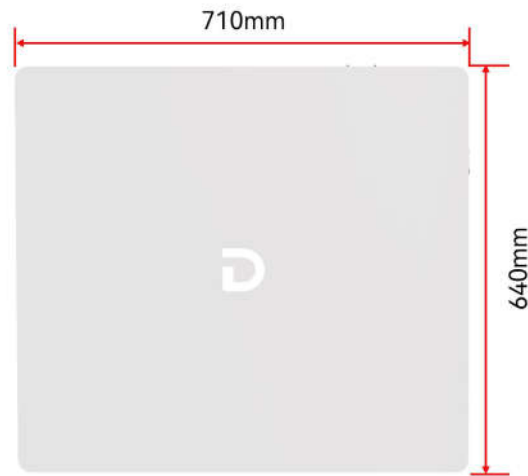
Negative



Lighter, thinner, smaller



PowerBox

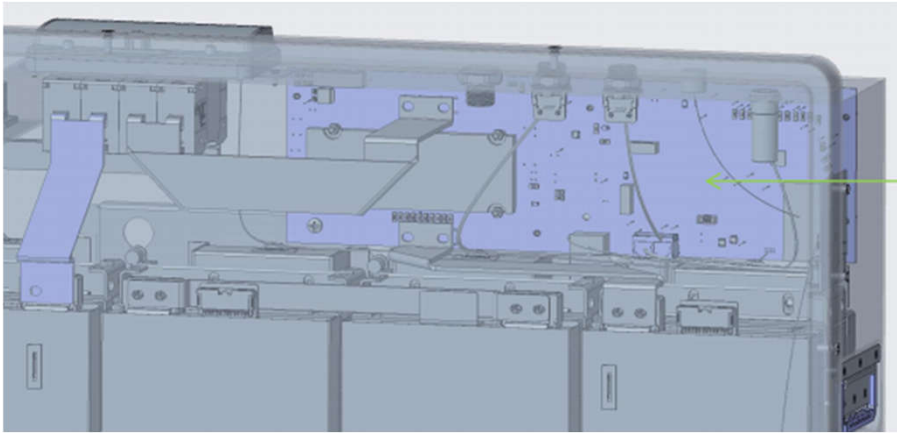


PowerBox G2

PowerBox

New upgrade——Powerful performance

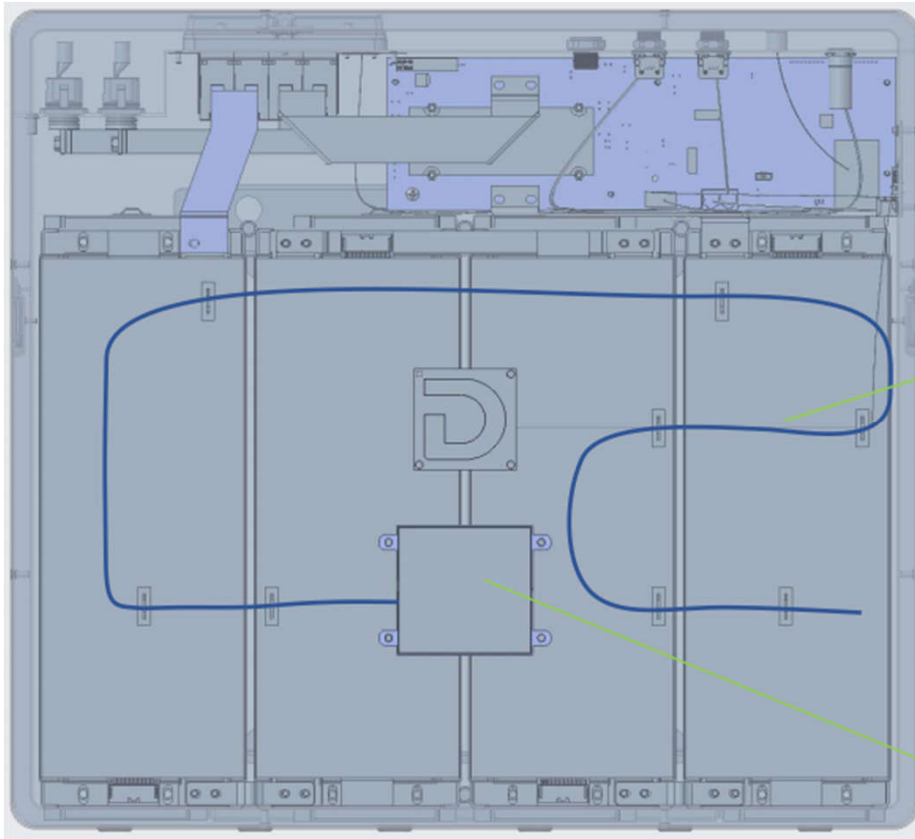
DYNES



- ✓ Brand all-new high-power integrated BMS
- ✓ Built-in Wi-Fi module
- ✓ Supports up to 200A continuous current
- ✓ Design of the shortest power line path

New upgrade——Aerosol fire suppression system

DYNES



Temperature or fire
sensor

Aerosol Fire Extinguisher Unit

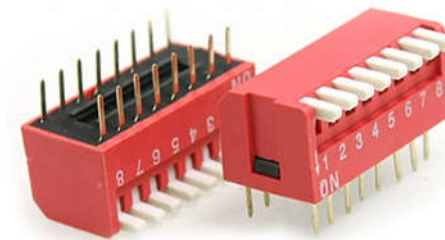
New upgrade—Effortless Communication Settings

One-click OTA upgrade



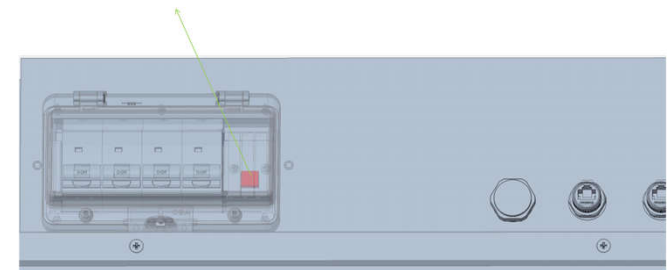
With one-click OTA upgrades, when multiple units are paralleled, there's no need to individually upgrade each unit. Simply upgrade one battery, and the rest will automatically update via parallel communication lines. Easy and convenient operation

Master-slave and automatic recognition



Automatic master-slave recognition in multi-unit parallel connection designates the battery connected to the inverter as the master unit. Simplify your setup—no more dip switches required!

Built-in CAN/485 Communication Switch



The CAN/485 communication switch is now integrated into the waterproof cover of the circuit breaker for easy access. Seamlessly switch between CAN and 485 communication protocols without the hassle of opening the front panel.

⚡ Battery Interface Introduction

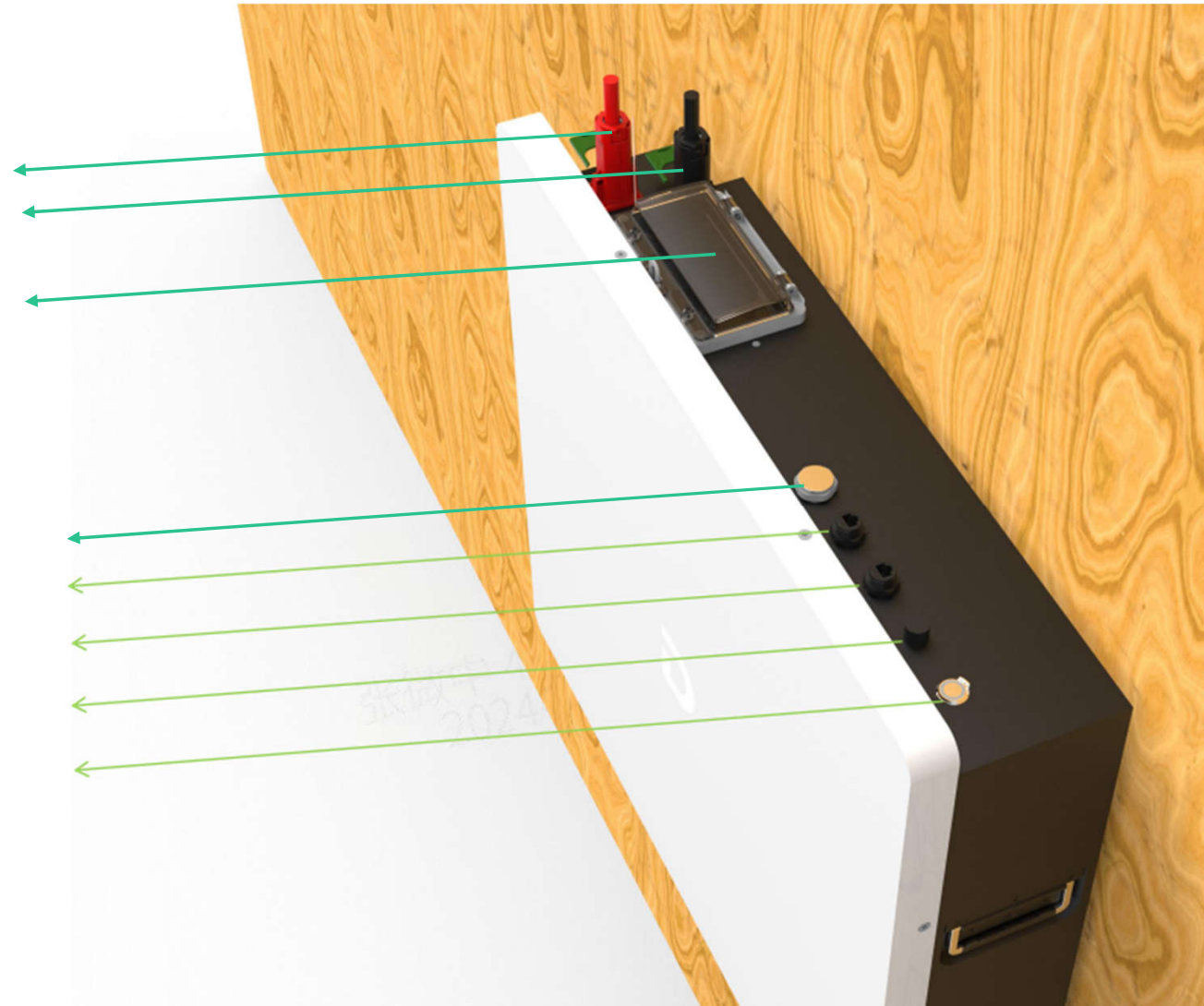
DYNES

Battery output positive socket
Battery output negative socket

Circuit breaker waterproof cover
Built-in DIP switch

Waterproof breathable valve
CAN IN
CAN OUT

WIFI concealed antenna
Power on button



Hidden wall mounting bracket

Friendly installation in 3 steps

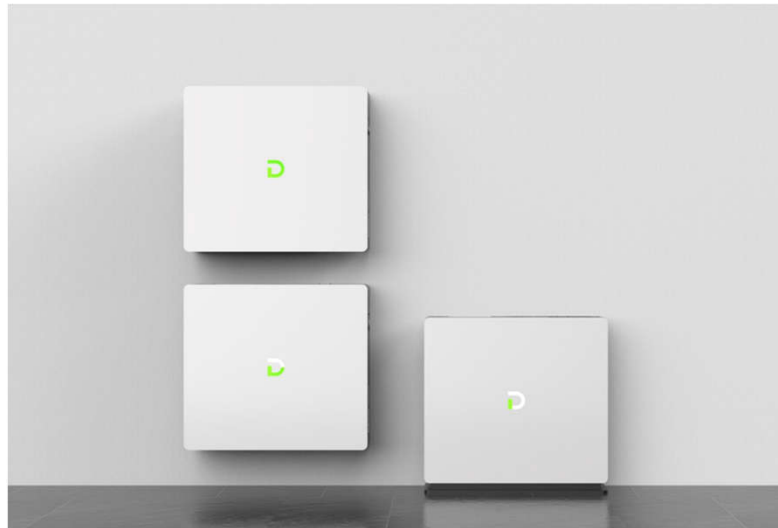
- 1 6 screws are fixed into the back of the cabinet
- 2 The wall bracket is fixed to the wall with expansion screws
- 3 When wall-mounted, the screws are inserted into the round hole slot of the wall-mounting bracket to fix it.



Explore More Custom Design

DYNES

LED lighting display with programmable customized display effects



Optional Tesla Powerwall 3 same white glass panel





RESIDENTIAL PRODUCTS

PowerBrick

DYNES

Features

- Max 50 units in parallel, 14.3~715 kWh expansion
- 10 years warranty , 8000 cycles
- LED is programmable to show charging/discharging/alarm,etc.
- Built-in WiFi module, Smart monitoring optimizes the battery system.
- With a maximum discharge power of 0.7C ,10.24KW
- Optional built-in aerosol fire extinguisher



Floor standing with wheel
(optional) for easy transport

Specifications

	Specifications
Battery Energy	14.3kWh
Nominal Voltage	51.2V
Battery Capacity	280Ah
Maximum continuous current	200A
Mounting	Wall-Mounted & Floor-standing with wheel(optional)
DOD	95%
IP level	IP20
weight	115kg
Working temperature:	-20~+55°C
Dimension(W*H*D)	429*228*822mm
Certifications	UN38.3/CE

Smaller and lighter

Weight: 115KG;



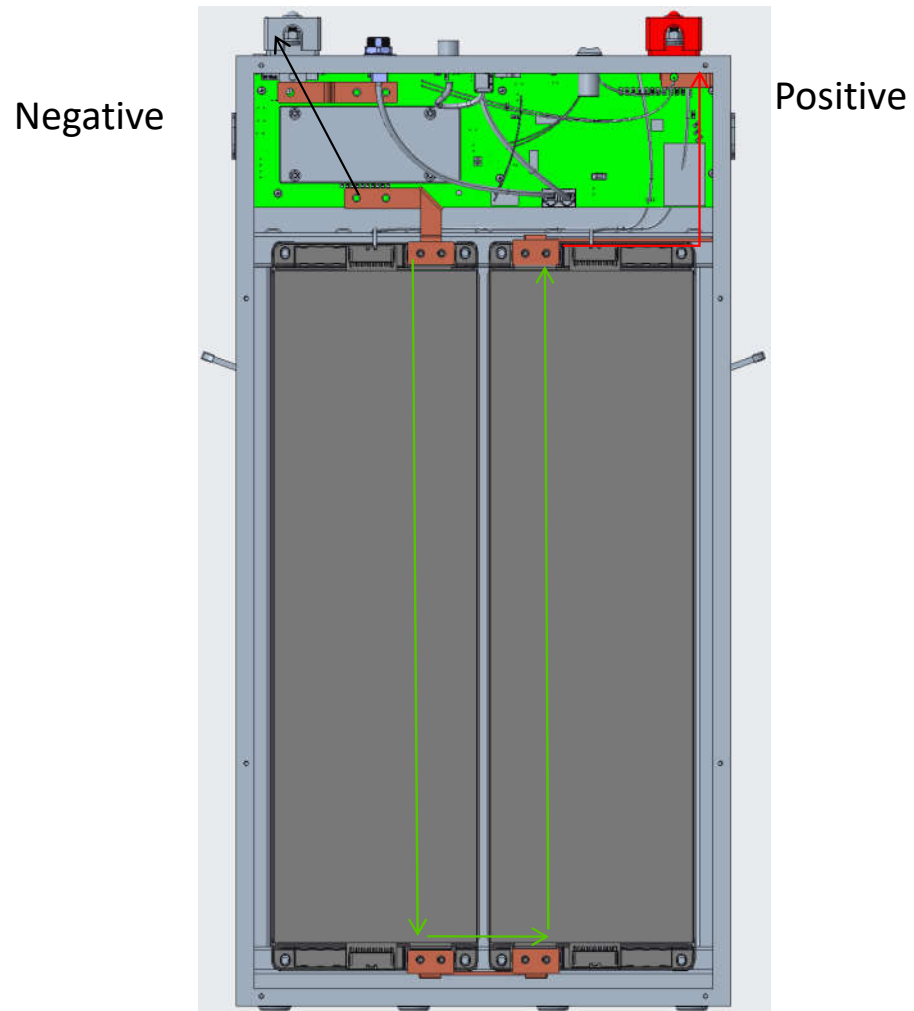
Size is 40%
Weight is lighter by 39%

Weight: 154KG

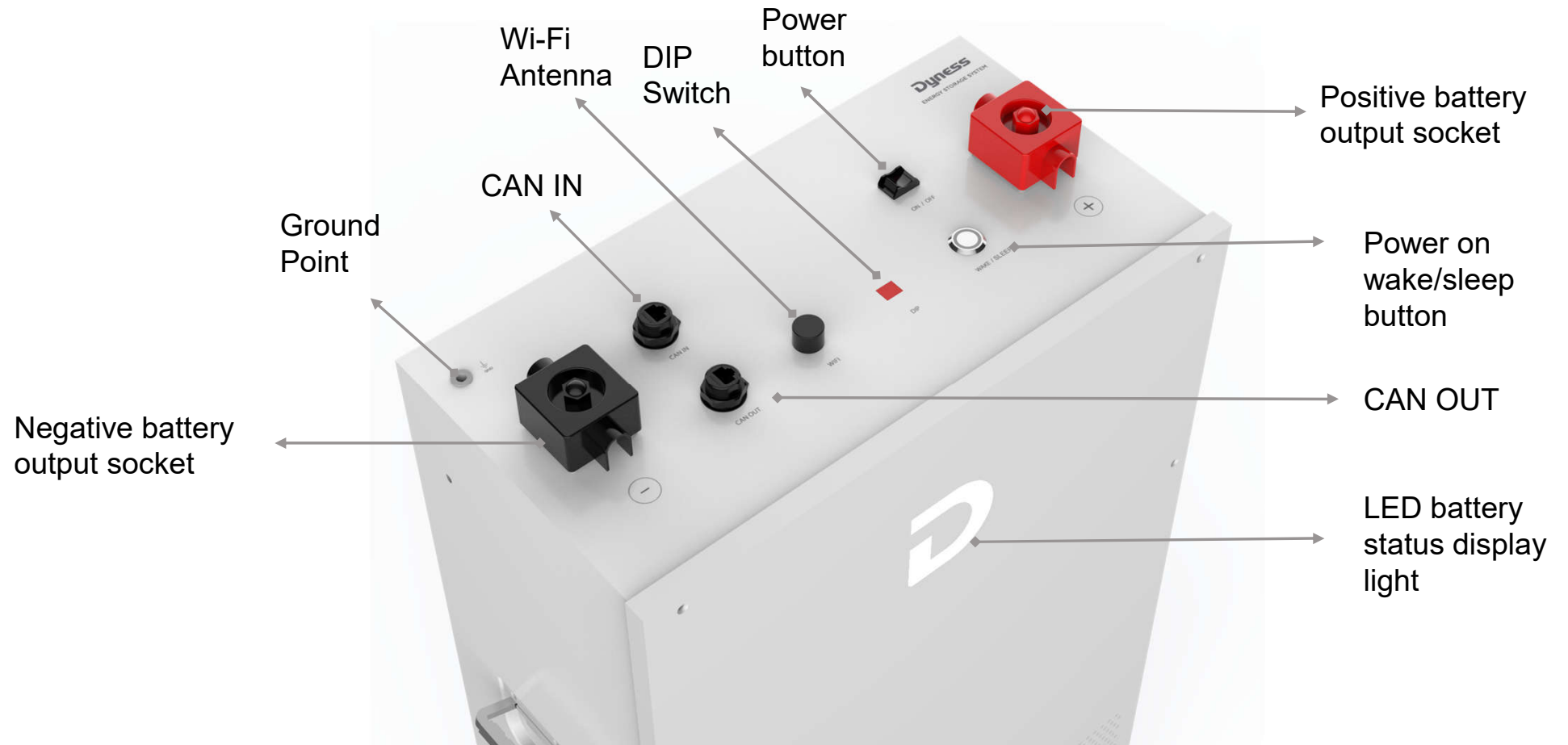


Shortest Copper Bus Bar Length

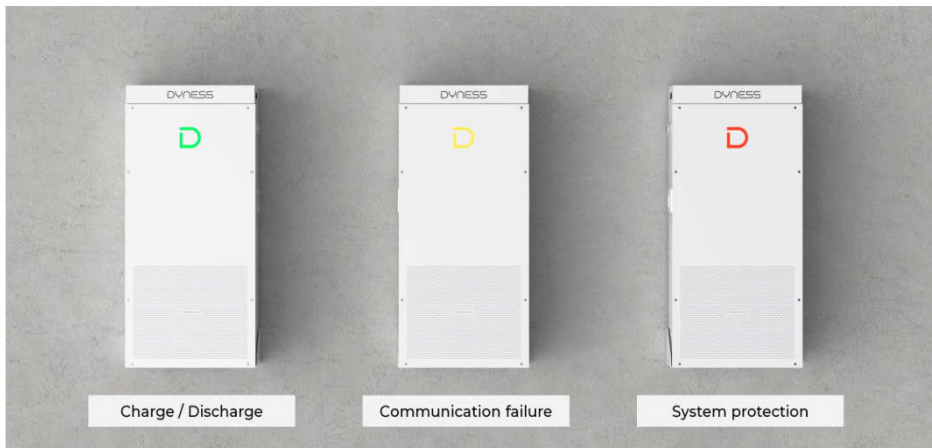
- ◆ Bus bar is as shortest as possible to reduce cost, lower internal impedance so as to reduce heat generation;
- ◆ Easier for assembly



Battery interface introduction

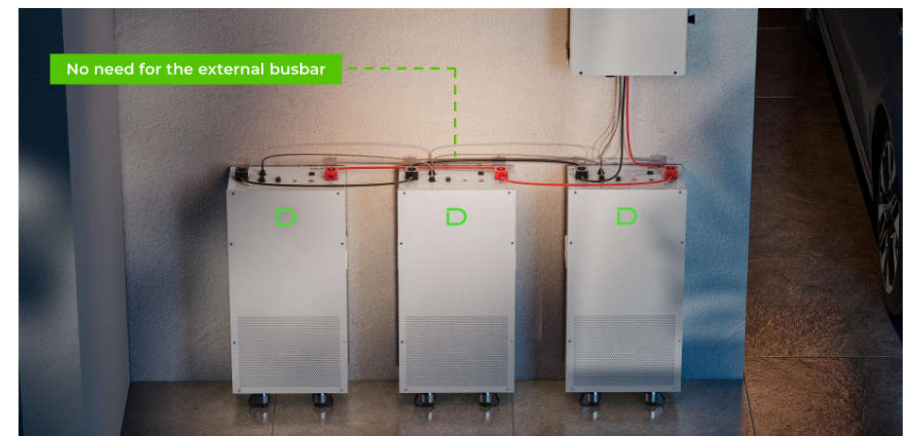


Discover different battery status through lights



LED color is programmable to show charging/discharging/alarm, etc.

Up to 50 units in parallel, 14.3KWh--716.8KWh Capacity

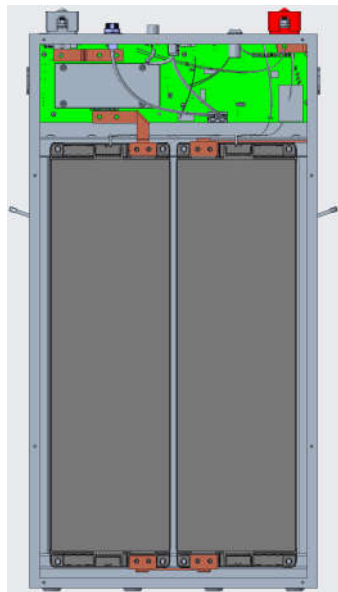


Up to 50 units in parallel

Less

DYNES

Less copper bar length



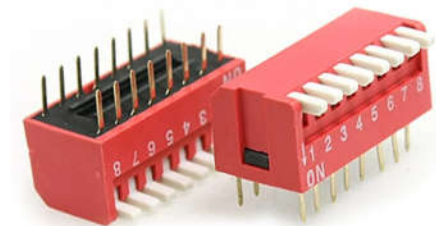
Reduced system impedance, increased system efficiency, and decreased heat generation

Less manual updates



With one-click OTA upgrades, when multiple units are paralleled, there's no need to individually upgrade each unit. Simply upgrade one battery, and the rest will automatically update via parallel communication lines. Easy and convenient operation

Less hassle, no dip switches needed!

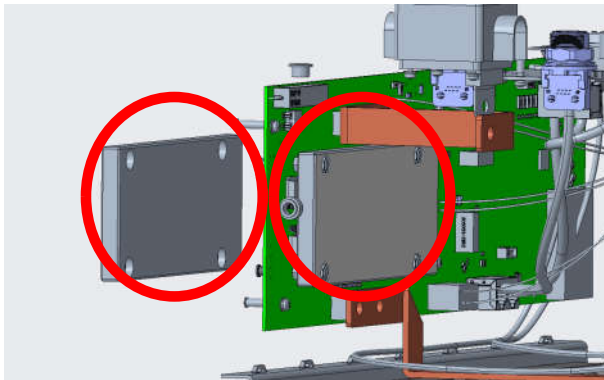


Automatic master-slave recognition in multi-unit parallel connection designates the battery connected to the inverter as the master unit. Simplify your setup—no more dip switches required!

More

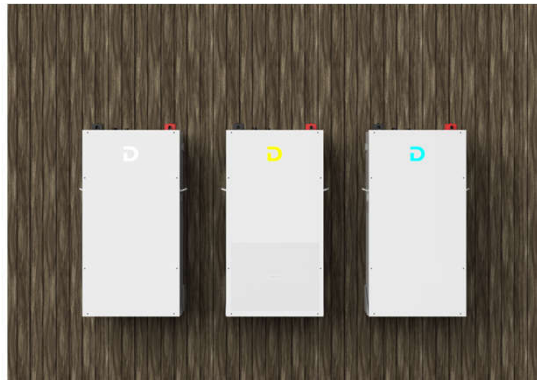
DYNES

More Durable



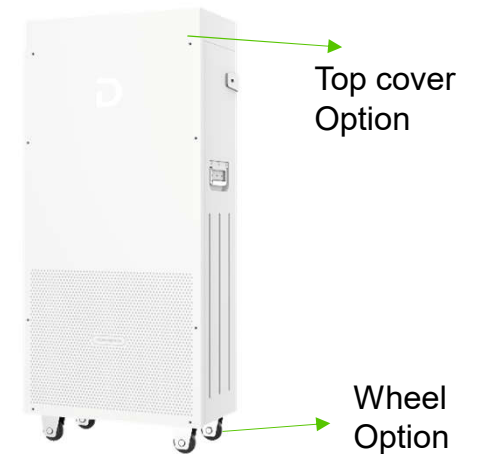
Dual-sided aluminum plate ensures stable and durable operation

More Interaction



LED display with customizable effects for personalized viewing.

More customized Design



Optional top cover and wheels

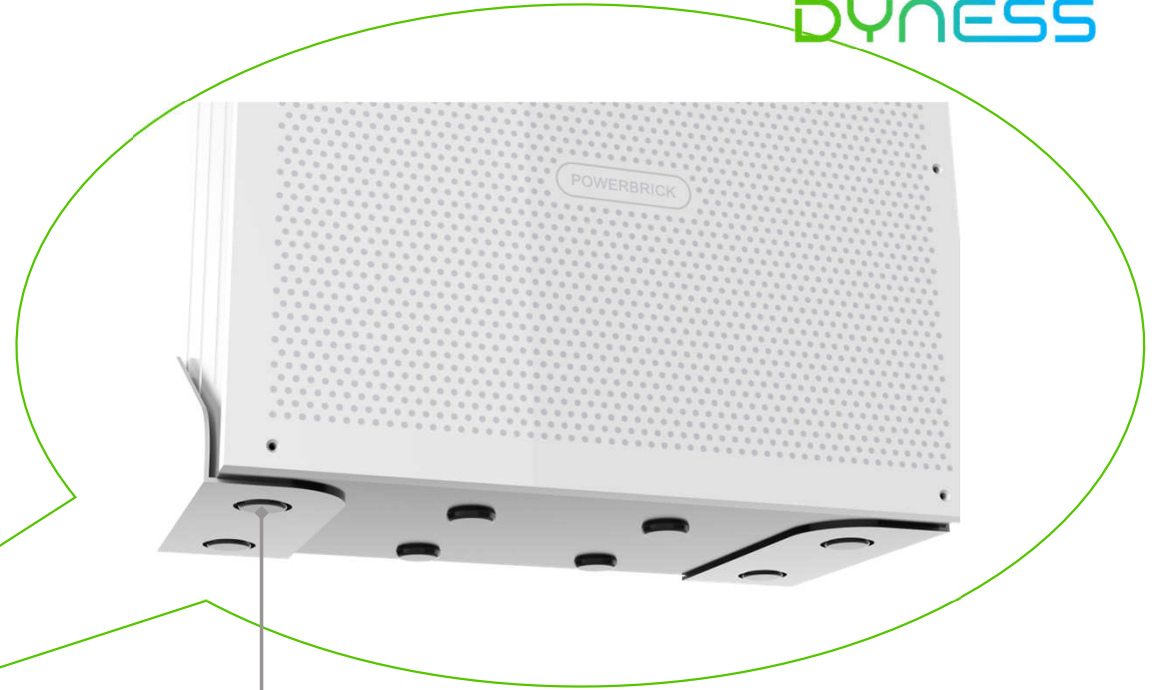
Friendly to Installers

DYNES

The bracket and wall are fixed with expansion screws



The battery is lifted onto the bracket, the upper mounting lugs are fixed with screws, and the bottom is limited by the convex bump.

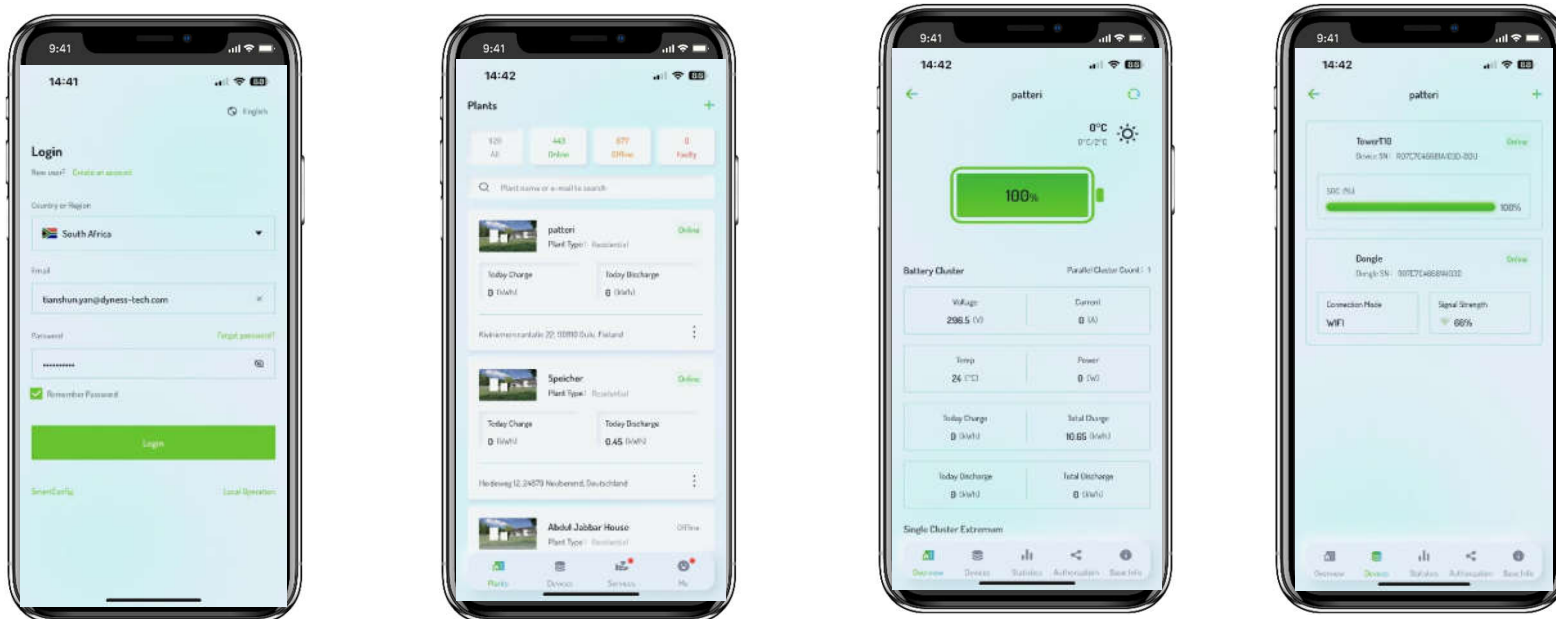


The convex bump at the bottom of the battery shell snaps into the round groove of the bracket

RESIDENTIAL PRODUCTS

WiFi Monitoring

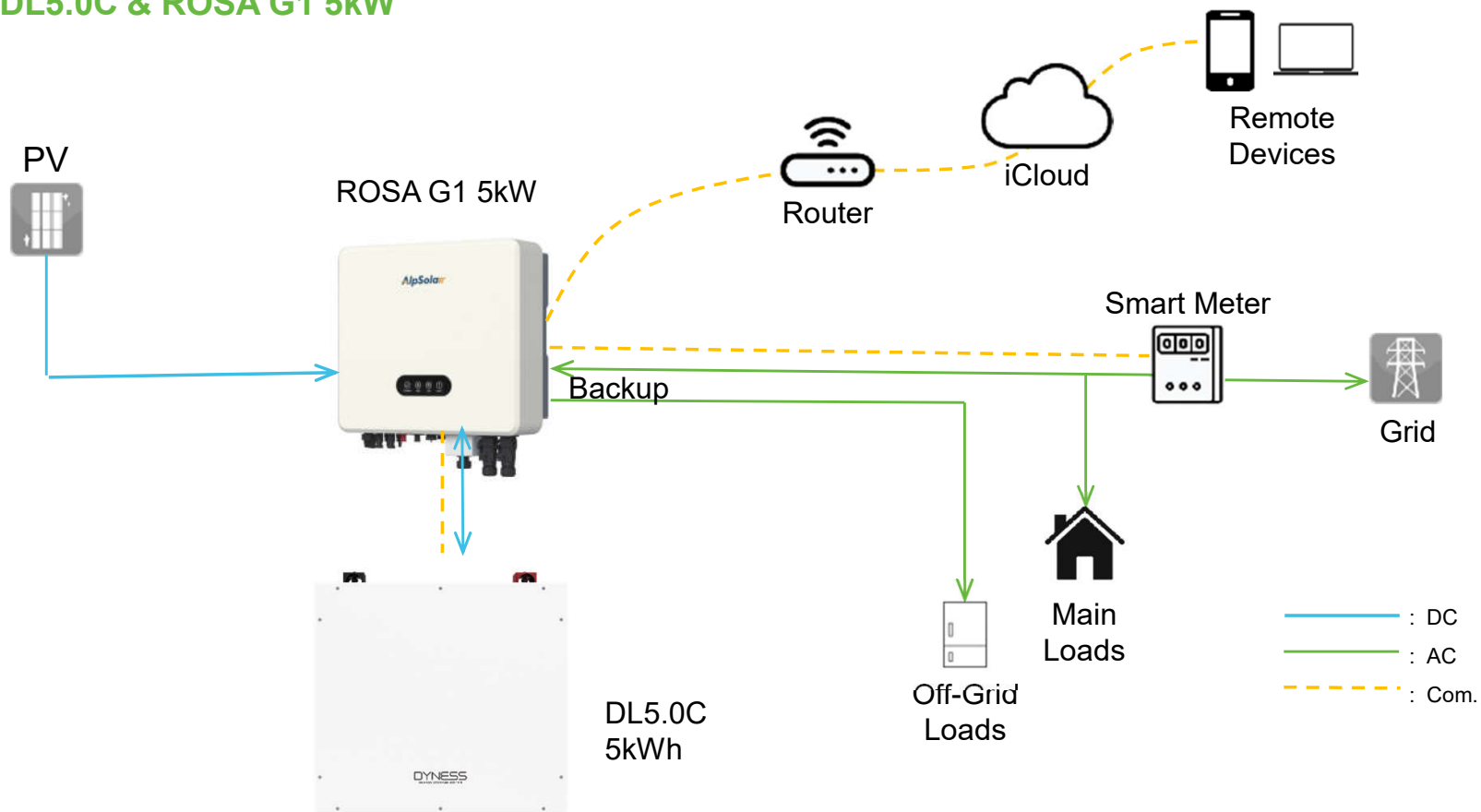
DYNES



Customer can view Dyness battery status such as voltage, current, temperature, etc. via Dyness App.

DYNESS DL5.0C & ROSA G1 5kW

DYNESS



Part 04

C&I PRODUCTS





STACK100



DYNESS

Model	STACK100
Battery Type	LiFePO4
Module Voltage/Capacity	51.2V/100Ah
System Modules Serial Number	3~15
System Energy Range	15.36~76.8kWh
Operating Voltage	134~876V
Recommended Charge/Discharge Current	50A (0.5C)
Max. Charge/Discharge Current	100A (1C)
Peak Discharge Current (2min 25℃)	125A (1.25C)
Depth of Discharge	95%
Communication	CAN/RS485
Cycle Life	6000 cycles / 10 Years
Signal Module Weight	47Kg
Max. Single Cluster Dimension [W*D*H]	591*390*1700mm – 11 module
Charging Temp. Range	0 ~ 55℃
Discharging Temp. Range	-20 ~ 55℃
Protection Level	IP20
Fire Protection System	Aerosol fire extinguisher
Installation method	Stack type
Cooling method	Forced wind cooling
WIFI Module	Built-in WIFI module; APP OTA Function
Certification & Safety Standard	CE-EMC/CE-RED/62619/63056/62477/62040 /UN38.3
Compatible Inverters	Deye/Goodwe/Solis/SAJ/Sinexcel/Hoymiles/Growatt/EcatuS/Sermatec/ATESS/Sunways etc.

STACK100



Easy installation and maintenance

Plug and play in connector,
IP20 Indoor installation. Easy to replace BMS



Flexible space layout

Each cluster from 3 units to 15 units,
adding new modules within 3 years



Flexible Expansion

Expandable to a maximum of 957.6kWh
in parallel, no need 2nd-level BMS control



High Performance

1C charging & discharging
Tier 1 battery cell, built-in air-cooling system

Storage temperature: 5 °C ~ +45 °C

Relative humidity: 0-85%RH



Safety

Each PACK has an independent Aerosol fire extinguishing device



STACK100

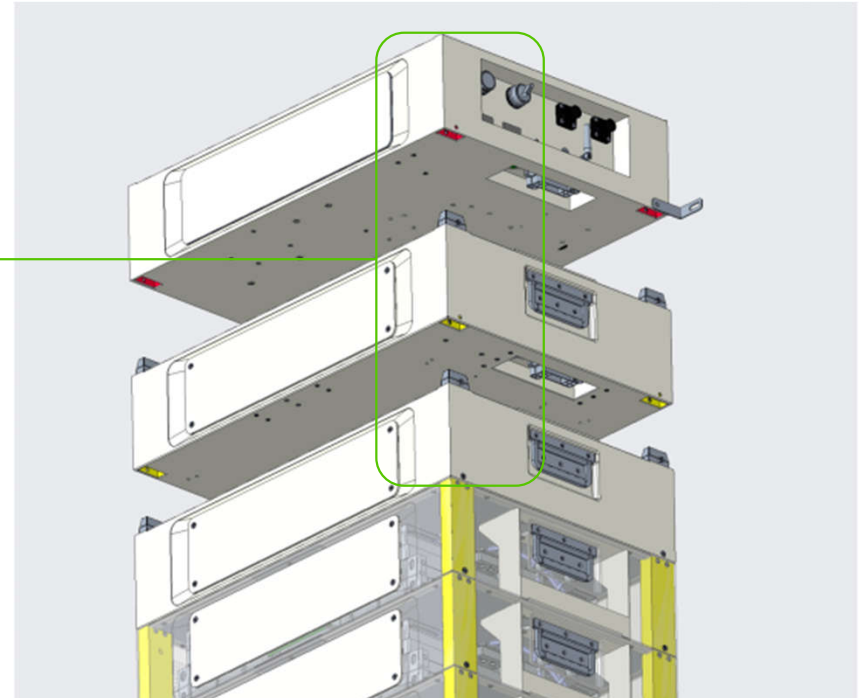
DYNES

Rackless stackable design with integrated support by steel frame



The integrated steel skeleton inside the module housing improves the load-bearing capacity;

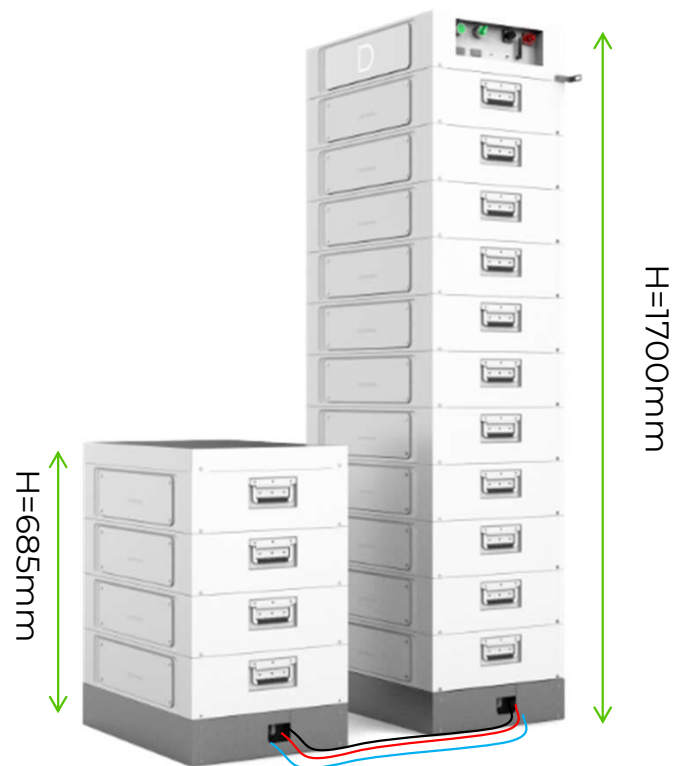
Modular design for easy transportation/Installation ←



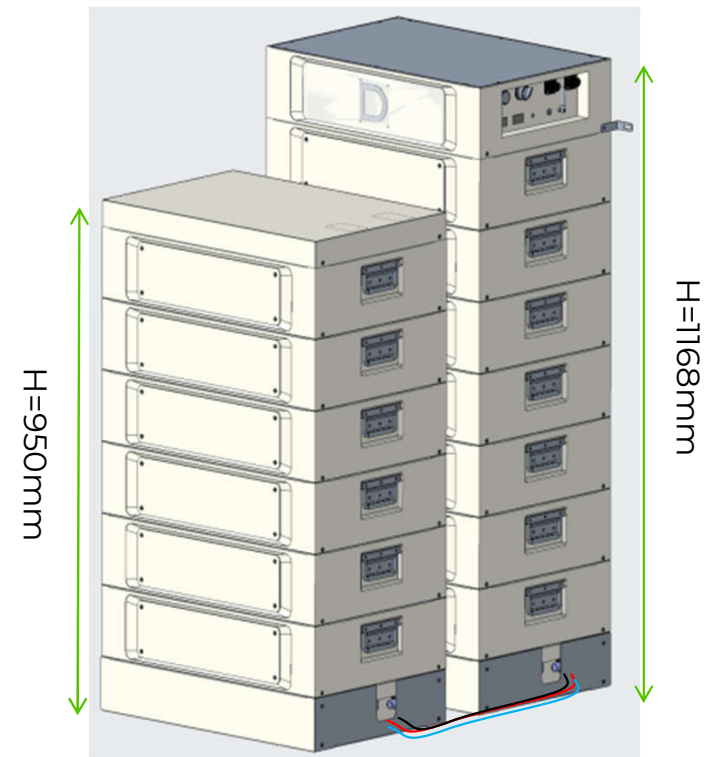
STACK100

Flexible space layout ability

DYNES



Option1: 15 modules in series(4+11), 76.8KWh

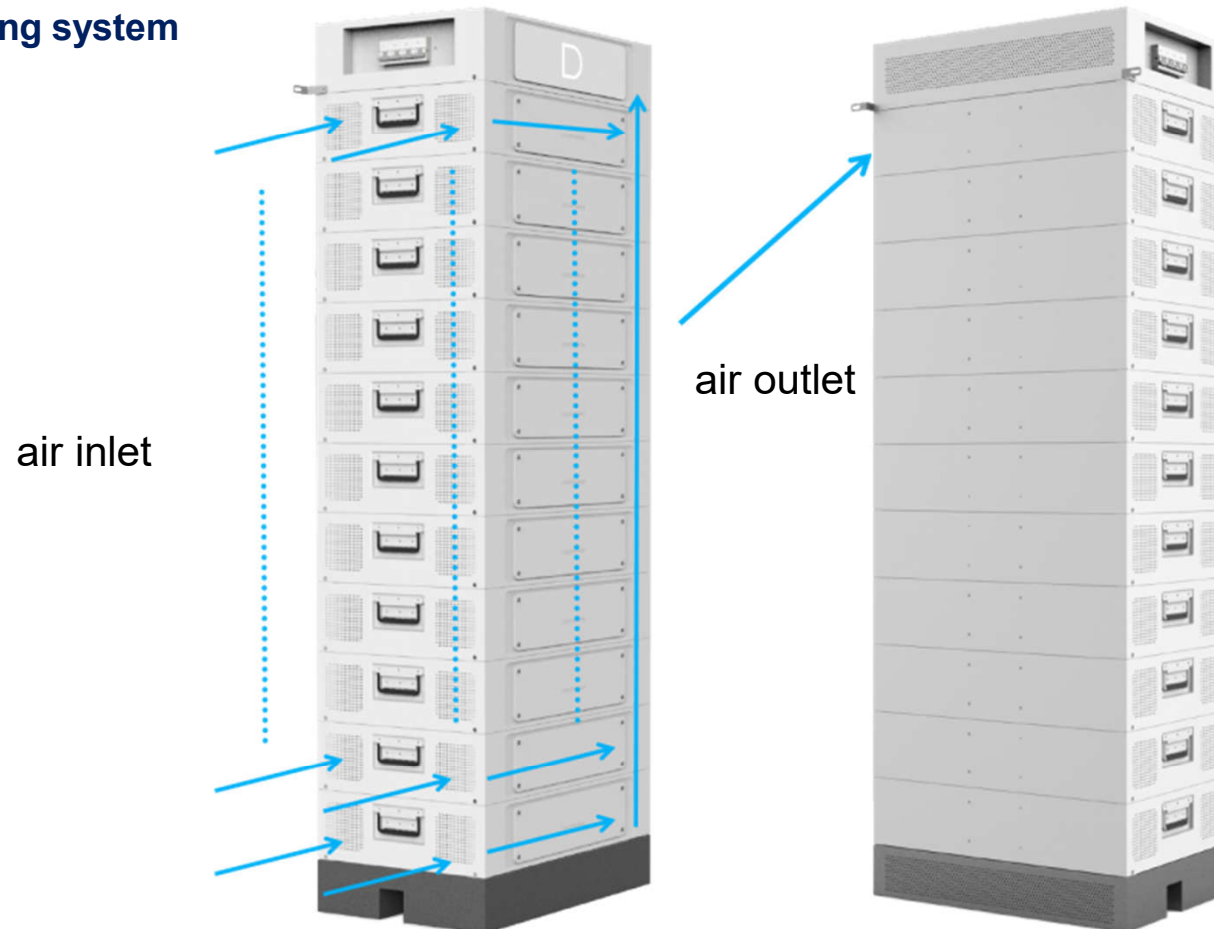


Option2: 13 modules in series(6+7), 66.56KWh

STACK100

Built-in air-cooling system

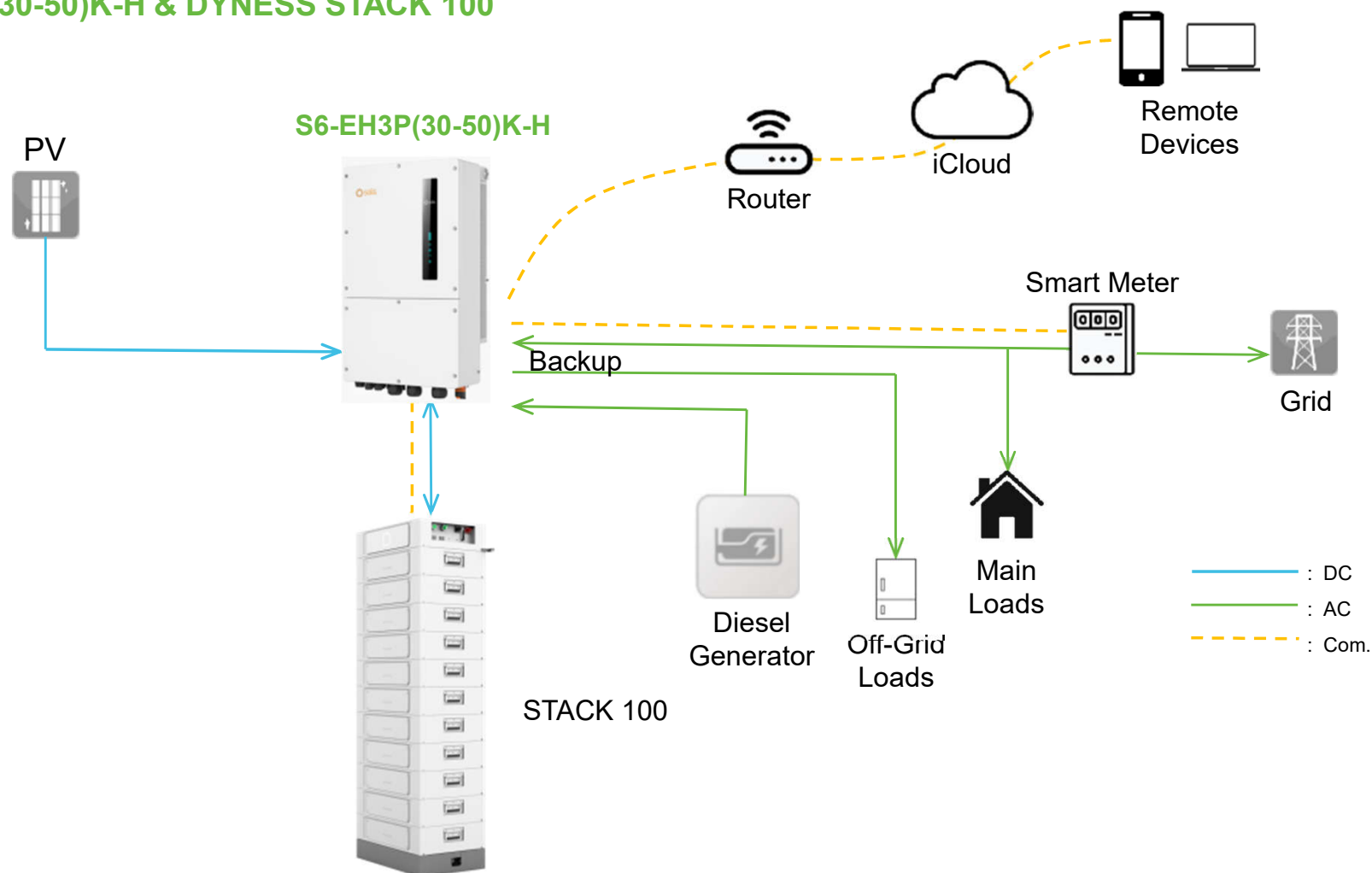
DYNES



Energy Storage Solution

S6-EH3P(30-50)K-H & DYNESS STACK 100

DYNESS



PowerRack -HV4 (High-Voltage)

548*568*1412/2012 mm



4-11 Modules in series

Two Rack options: **7s** or **11s**

Max. **12** Clusters in parallel



High Safety
LFP & smart BMS



Voltage Range
179~876V



High Voltage
High system Efficiency



Expandable
Max 76.8kWh per cluster

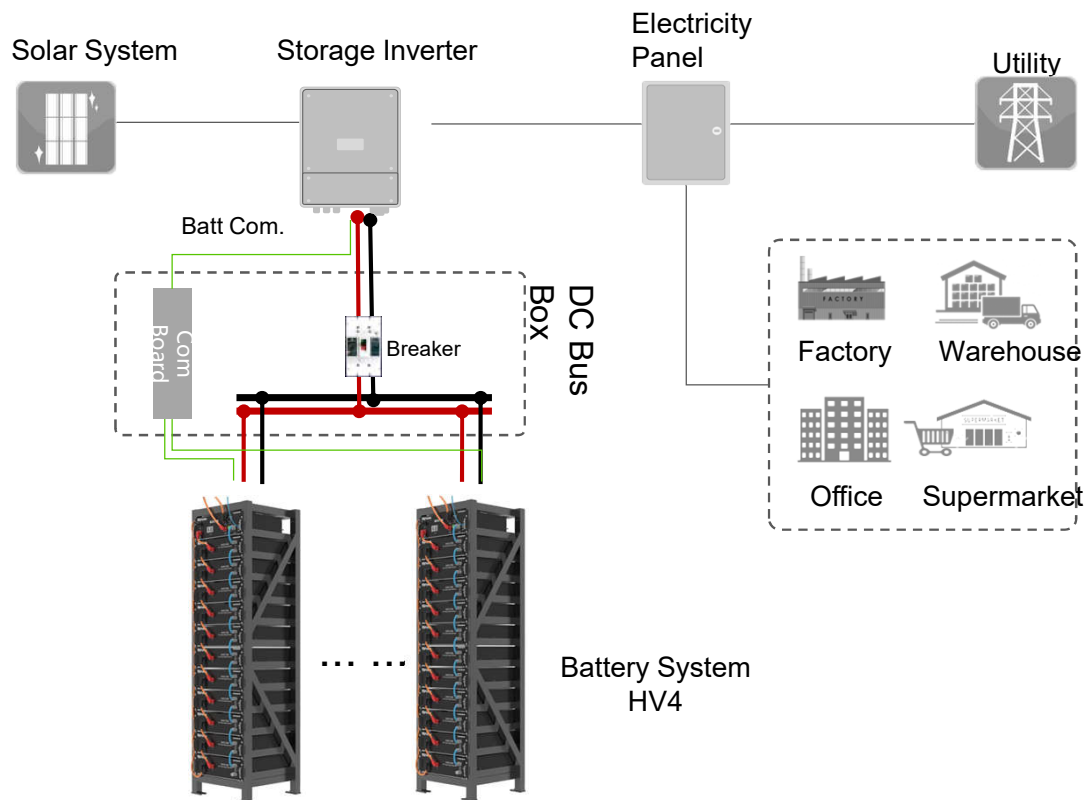


Model	Rack System HV4	
Rack Type	PowerRackHV4-7s	PowerRackHV4-11s
Battery Module Type	HV51100	HV51100
Battery Module Quantity	7units	11units
Nominal Battery Energy	35.84kWh	56.32kWh
Nominal Capacity	100Ah	100Ah
Nominal Voltage	358.4V	563.2V
Operating Vol. Range	313.6-403.2V	492.8-633.6V
Nominal Power Output	21.5kW	33.79kW
Max. Power Output	35.84kW	56.32kW
Recommend Charging Current	50A	50A
Recommend Discharging Current	50A	50A
Net Weight	397.5kg	646.5kg
Dimension(WDH)	548*568*1412mm	548*568*2012mm
Rack System Control unit Type	BDU100	BDU100
Module Quantity and Configuration	7 Units in series	11 Units in series

Storage temperature: 5 °C ~ +45 °C

Relative humidity: 5%-85% RH

PowerRack -HV4 (High-Voltage)



Rack Name	PowerRack HV4
Applicable Module	HV51100
Combiner Box & Related Cables	Customized
Secondary Host	Integrated in Combiner Box
Rack Bracket	Customized
Max. number of batteries per rack	11
Max. number of clusters in parallel	12
Max. System Capacity / kWh	676

Project Cases

DYNES



HV4, Netherlands, Europe
Back-up power



HV4, Philippines, Southeast Asia
Back-up power



HV4, South Africa, Johannesburg
Self-use & Back-up power



DL5.0C, Manila, the Philippines
Backup power



HV4, Philippines, Southeast Asia
Back-up power



Tower, Nuremberg, Germany
Self-use



DL5.0C, Manila, the Philippines
Backup power



DL5.0C, Manila, the Philippines
Backup power



DH100F

DYNES

C&I Storage System

All-in-one integrated system design inside the Cabinet to fulfill C&I scenarios.



All-in-one PV+ESS

Operation temperature: -20 °C ~ +60 °C

Storage temperature: -20 °C ~ +45 °C

Relative humidity: 0-95%RH

Product features

Full-scenario

All-in-one multifunctional integration, supporting PV and generator access, grid-to-off-grid switching.

Ultimate security

Aerosol fire suppression with three-level detections

Flexible expansion

71~100kwh capacity available for single unit; Reserved DC expansion interface; Support AC expansion;

Highly efficient and low-cost

280Ah LFP battery with high energy density. EMS Intelligent control; Modular design, backwards output method, reduce infrastructure cost.

DH100F

IP55



100kWh + 50kW PCS per cabinet

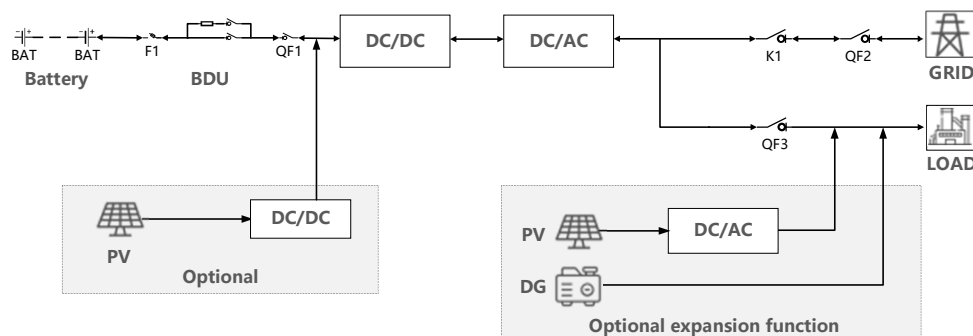
Supports Expanded Capacity

Air Conditioning cooling

Communication: Ethernet/RS485/CAN/USB

IP55 Protection Degree

High Safety, Smart Control



Product Parameters

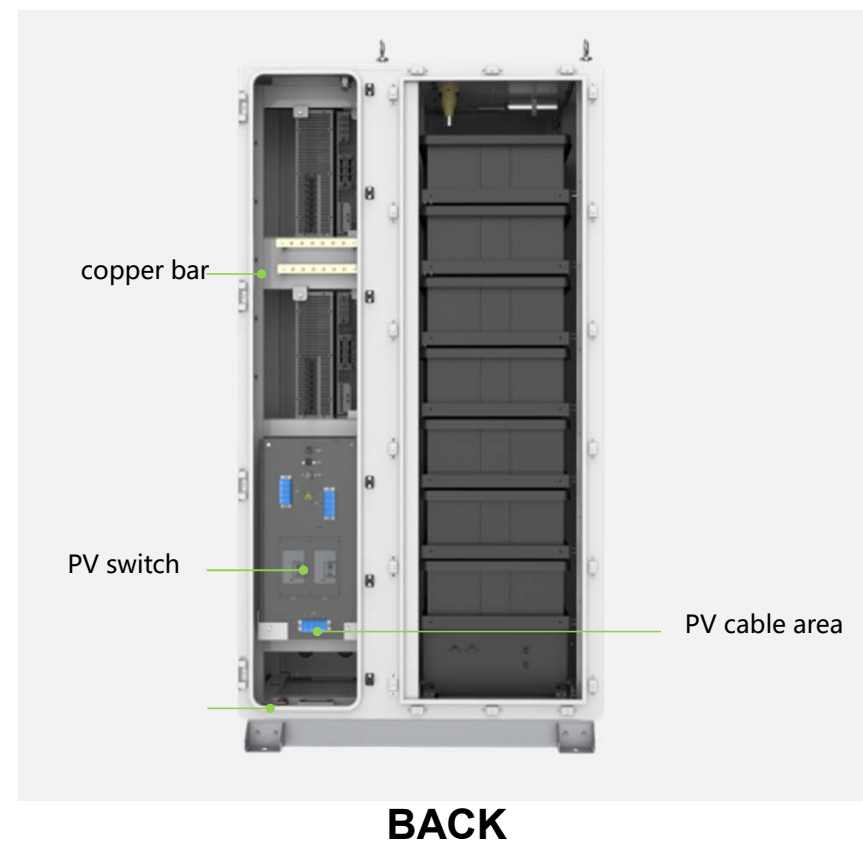
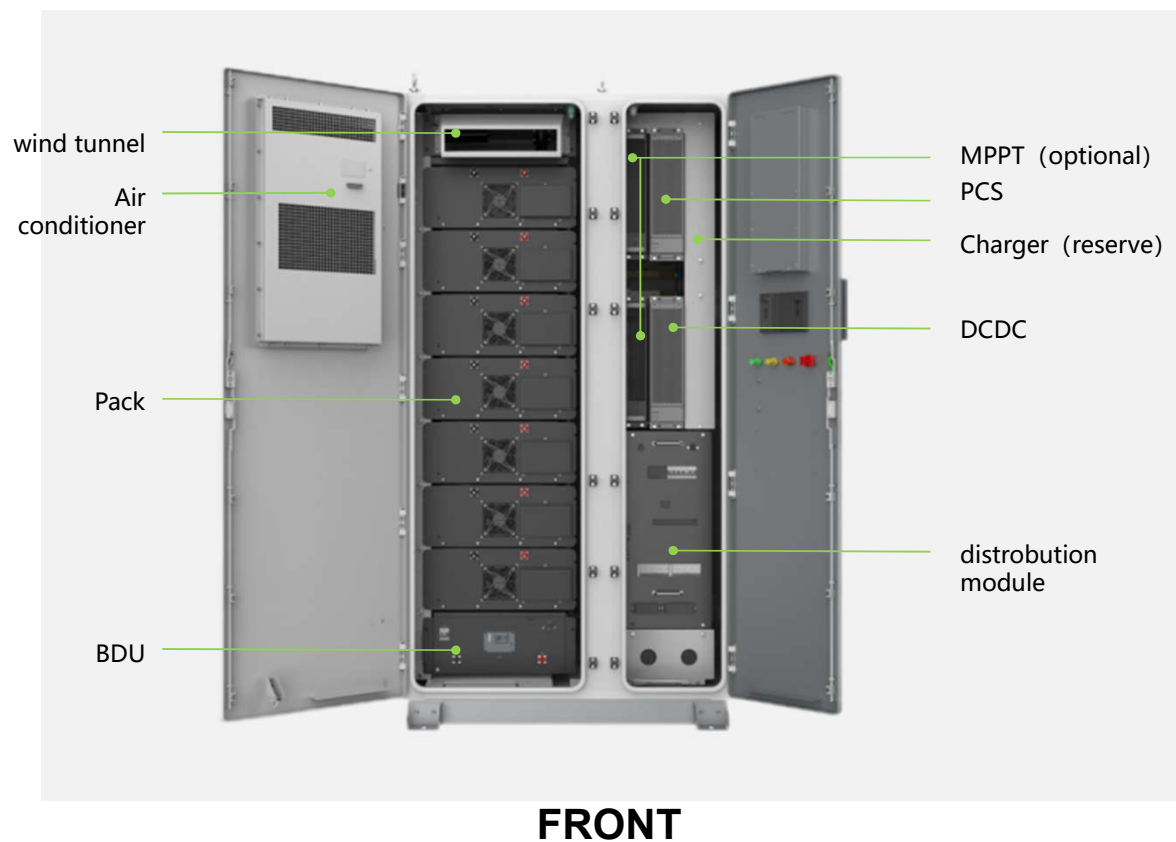
Model	DH100F-71kWh		DH100F-86kWh		DH100F-100kWh	
Battery system specification parameters:						
Battery type	LFP (280Ah)					
Pack configuration	1P16S					
Rated current	140A (0.5C)					
Max. current	160A					
PACKquantities	5Pack		6Pack		7Pack	
System capacity	71kwh		86kwh		100kwh	
AC specification parameters (on-grid):						
Rated power	35kW		43kW		50kW	
AC rated current	51A		62A		72A	
AC rated voltage	230/400V					
Wiring method	3P4L+PE					
Frequency	50Hz/60Hz					
AC specification parameters (off-grid):						
Rated power	35kVA		43kVA		50kVA	
Max. AC current	51A		62A		72A	
AC rated voltage	230/400V					
Wiring method	3P4L+PE					
Frequency	50Hz/60Hz					
Unbalanced load carrying	100%					
PV access						
Max. input power	25kW *2		30kW *2		35kW *2	
Max. current	80A					
Max. short-circuit current	150A					
Start-up voltage	310V		370V		430V	
Input voltage	300~1000V					
MPPT paths	2					
System specification:						
Dimension (W*D*H)	1200*1180*2258 mm (TBD, lifting ring not included)					
Weight	Approx. 1500kg(TBD)					
Temperature	-20~50℃ (derating above 45℃)					
Humidity	0~95% (no condensing)					
Ingress protection	IP55					
Anti-corrosion grade	C3					
Noise	≤70dB (TBD)					
Elevation	3000m (Derating above 2000m)					
Cooling method	Air cooling					
EMScommunications	Ethernet/RS485/CAN/USB					

DH100F

Product Structure

DYNES

1. front-back wind tunnel, less noise
2. cable outlet: bottom/backward, reduce infrastructure cost with no need to install concrete base
3. backward cable output module, backward maintenance solution





DYNESS

DH200F

C&I Storage System

All-in-one integrated system design inside the Cabinet to fulfill C&I scenarios.



Overall solar+storage solution



All-in-one design concept



High-level safety design



Convenient outdoor setup



Allow flexible system design



Capacity expandable to megawatts

COMMERCIAL & INDUSTRIAL PRODUCTS

DH200F

The cabinet supports outdoor use, integrated inside with battery modules, storage PCS, air conditioner and fire extinguisher.

DYNES

Technical parameters of DH200F

1.85*1.2*2.25 m 215kWh

IP55

2.25m

1.85m

215kWh + 100kW PCS per cabinet

Expendable to 2.5MWh + 1200kW PCS

Air Conditioning cooling

Communication:Ethernet/RS485/CAN/USB

IP55 Protection Degree

High Safety, Smart Control

15 Modules in one cabinet
Independent packaging

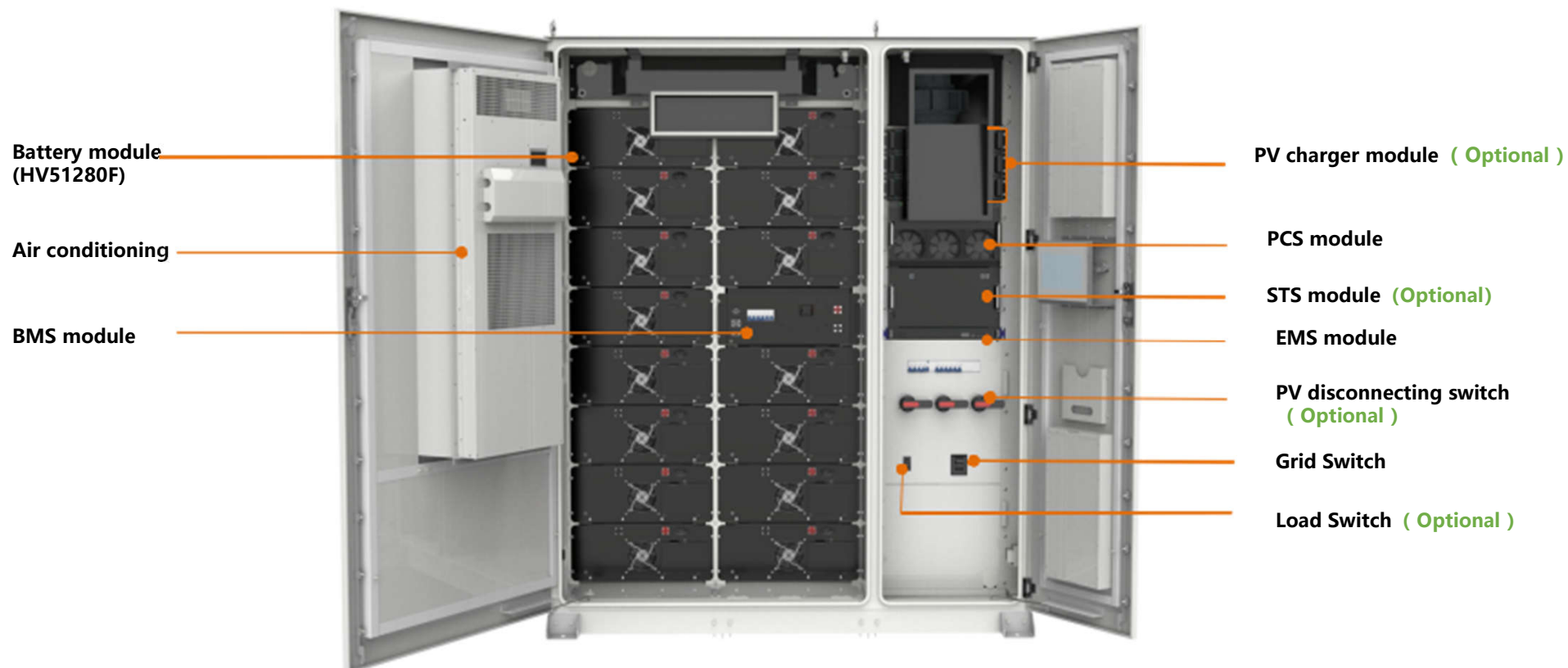
Operation temperature: -20 °C ~ +50 °C
Storage temperature: -20 °C ~ +45 °C
Relative humidity: 0-95%RH

Battery Specifications	
Battery Module Type	HV51280F
Cell Capacity	280Ah
Battery Voltage Range	672~864V
Nominal Current	140A (0.5C)
System Storage Power	215kWh
AC Specifications (on-grid)	
Nominal Power	100kW
AC Nominal Voltage	400V
Wiring	3P4L+PE
Nominal Frequency	50Hz
AC Maximum Current	158A
AC Specifications (off-grid)	
Nominal Power	100kW
AC Nominal Voltage	400V
Wiring	3P4L+PE
Nominal Frequency	50Hz
AC Maximum Current	158A
Unbalanced Load Capacity	100%
Photovoltaic Input	
MPPT Voltage Range	200-670V
MPPT channels	Up to three
Input Power	Single channel 50kW
System Specifications	
Dimensions (W*D*H)	1850*1200*2250mm
Weight	≈3300kg
System Round-trip Efficiency	91% (TBD)
Operation Temperature	-20~55°C
Operation Humidity	0~95%
Protection Level	IP55
Anti-corrosion Level	C3
Noise Level	≤75dB
Altitude	≤3000m
Cooling System	Fan Cooling
Communication	Ethernet /RS485/CAN/USB
Certification	CE/CQC

COMMERCIAL & INDUSTRIAL PRODUCTS

DH200F

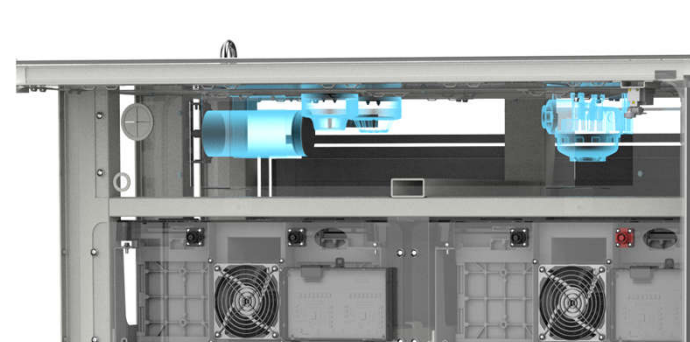
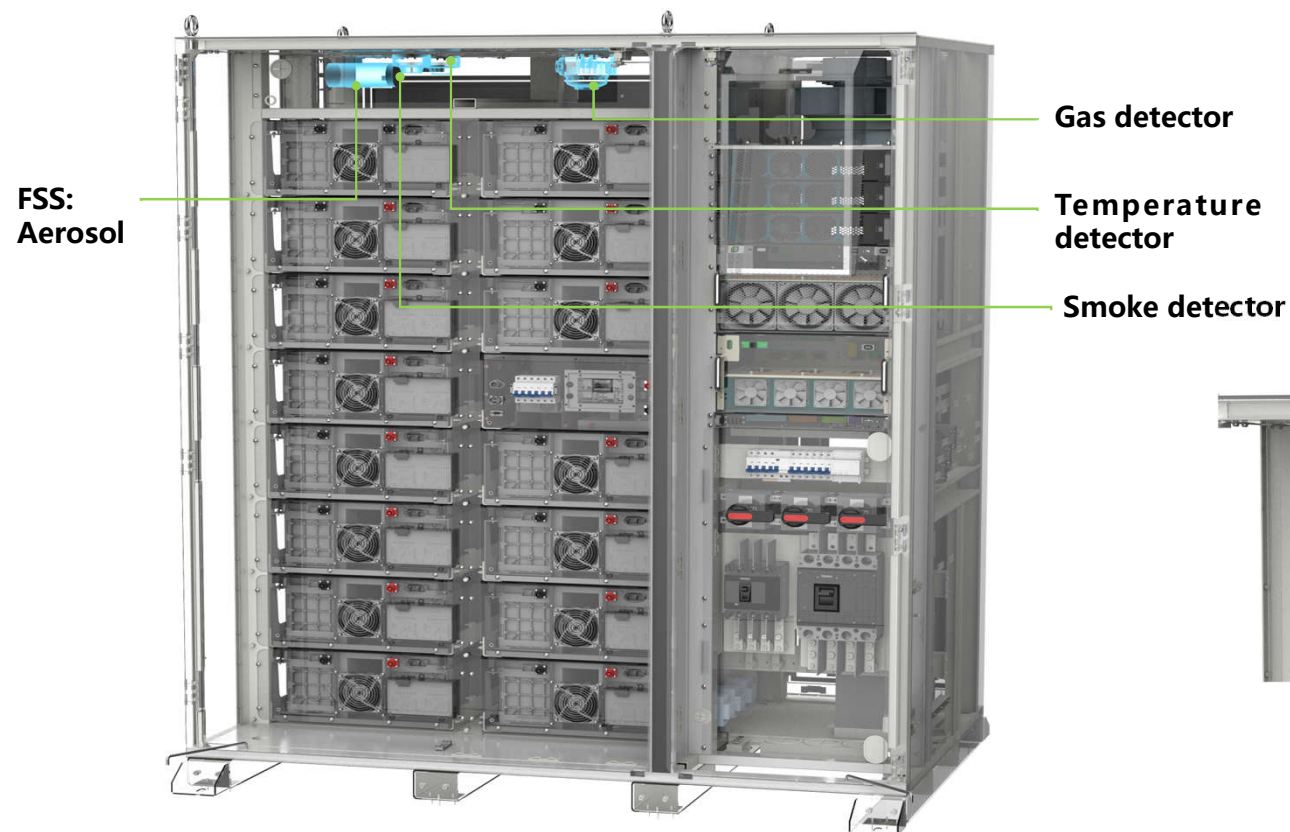
DYNES



COMMERCIAL & INDUSTRIAL PRODUCT

DH200F : ALL-IN-ONE SYSTEM

DYNES



COMMERCIAL & INDUSTRIAL PRODUCTS

DH200F: ALL-IN-ONE SYSTEM



15 * HV51280F
100kW / 215kWh

Off-Grid Scheme



Expandable up to **1MWh**

Max. **5** cabinets connected in parallel

or

On-Grid Scheme



Expandable up to **2.5MWh**

Max. **12** cabinets connected in parallel

Supports outdoor use, integrated with battery modules, 100kW PCS, air conditioner, FSS (fire suppression system), MPPT modules (optional), supports multi-communication: Ethernet/RS485/CAN/USB

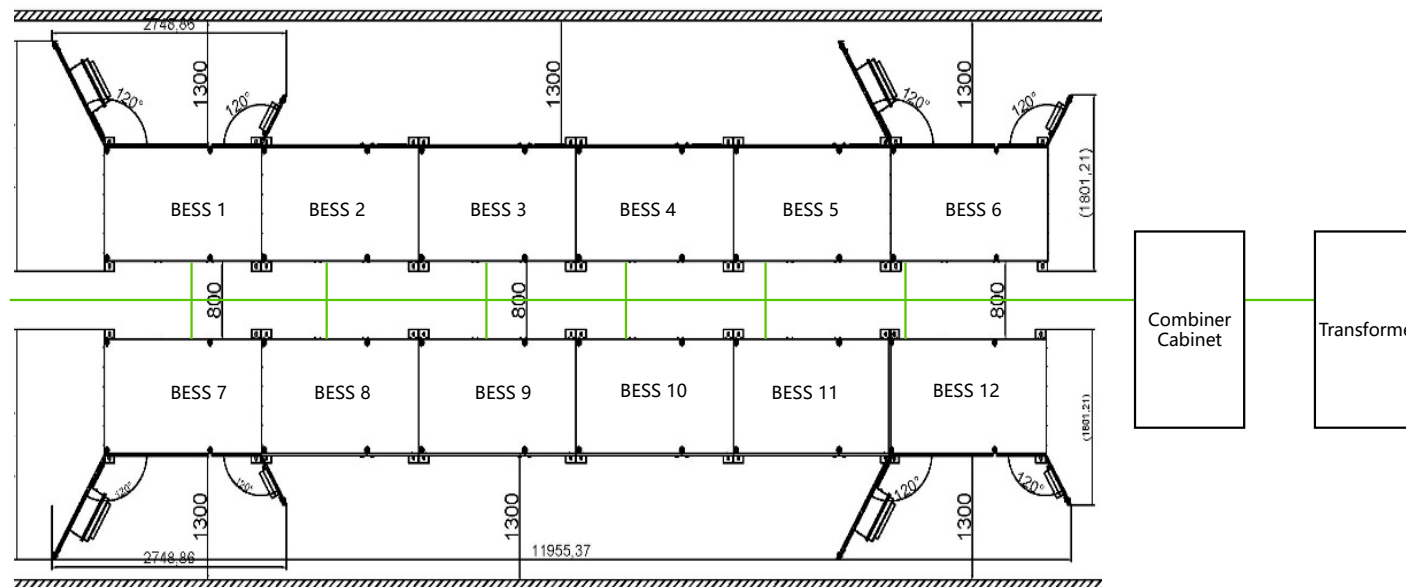
COMMERCIAL & INDUSTRIAL PRODUCTS



DH200F: ALL-IN-ONE SYSTEM

Easy Installation: Standard cabinet-type All-in-one design, easier wiring, less installation costs

Flexible Expansion: Supports expansion from KWh level to MWh level



Dyness Battery Cases Globally



Centurion, south Africa
Self-use & Back-up power



Henan, China
Peak-valley arbitrage



Shenzhen, China
Peak-valley arbitrage,
capacity expansion



Rotterdam, Netherlands
Capacity expansion

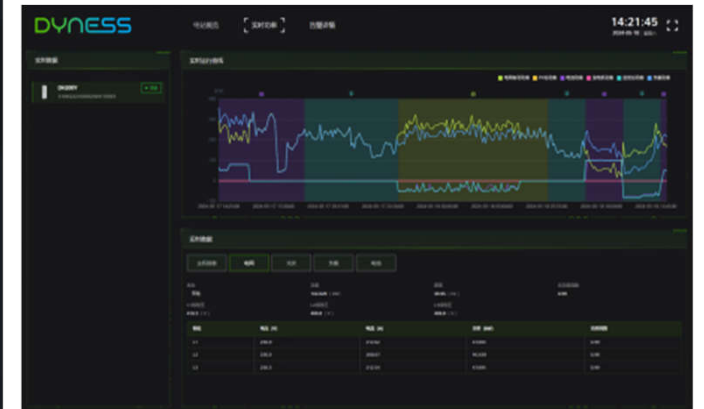


Hungary, Europe
Self-use & peak-shaving



Spain, Europe
Self-use

Dyness Self-developed Cloud Platform



Part 05

COMPETITOR COMPARISION





Comparison between Dyness and Felicity LV Batteries

DYNES

LPBF48250-P

MODEL	LPBF48250	LPBF48300
Usable Capacity	12.5KWh	15KWh
Nominal Voltage	51.2V	
Voltage Range	48-57.6V	
Recommend Charge & Discharge Current	≤120A	
MAX. Charge & Discharge Current	200A@15S	
Recommend Output Power	≤ 6000W	
MAX. Output Power	10000W@120S	
DOD	>95%	
Scalability	Up to 6 units in parallel	
Communication	CAN&RS485	
Ingress Protection	IP21	
Cycle Life	≥6000@25°C , 80%DOD	
Working Temperature Range	Discharge: -20°C to + 65°C, Charge: + 0°C to + 55°C	
Net Weight(KG)	154KG	
Gross Weight(KG)	177KG	
Product Dimension(MM)	615*350*955MM	
Package Dimension(MM)	715*450*1115MM	

PowerBrick

14.3KWh

- Recommend 140A
- Continuous 200A, **10.24KW**
- Recommend 7.1kW
- Continuous **10.24KW**
- **Max 50 units** in parallel
- **8000** cycles, tie 1 cell CALB
- 115kg; lighter **by 39kg**
- 429*228*822; **40% size**
- **10 years** warranty vs 3-5 years warranty

Comparison between Dyness and Deye LV Batteries

DYN^{ESS}



Powerbrick



RW-F10.2

Advantages of Dyness Powerbrick

1. Built-in WiFi module to support remote monitoring and upgrade function
2. It only needs to connect and upgrade one battery and others will follow for OTA upgrade
3. Master and slave will automatically configure without settings
4. Max 50 units in parallel VS Deye 32 units
5. Optional built-in aerosol fire extinguisher
6. Tier 1 battery cells CALB
7. 8000 cycles , 95%DoD VS Deye 6000 cycles, 90%DOD
8. 14.3kWh and cost-effective
9. working with leading inverters

Comparison between Dyness and Deye HV Batteries

DYNESS



Stack100



BOS-G

Advantages of Dyness Stack100

1. Stackable rack will **save transport and material cost**
2. Stackable rack has **no external wiring**, just plug and play, saving installation time and cost
3. Stackable is more **flexible** in battery configuration
4. Internal **fan cooling duct** will make sure even heat dissipation, better battery performance, and 10 years warranty
5. Built-in **aerosol** fire extinguisher
6. Maintenance plate is in front of battery module, **easy for maintain or replace BMS**
7. **Built-in WiFi module** will let customer monitor battery status at cell level via Dyness app and easier for after-sales maintenance
8. **LED color** on BDU can be **programmable** to show battery working status

Part 06

COMPATIBILITY



Compatibility List

DYNES



Ingeteam



SUNGROW
Clean power for all




LV Compatibility list.pdf

LUXPOWER^{TEK}

GOODWE




HV compatibility.pdf



GROWATT

Deye



...

Solar
System



Solis 30kW



Solis 30kW



Electricity
Panel



DYNES

Utility



DC breaker
 $\geq 125\text{A}$



stack100-6s

DC breaker
 $\geq 125\text{A}$



stack100-6s

System Capacity: 61.44kWh
Nominal voltage: 307.2V
Working voltage range: 268.8-345.6V

DYNESS

THANKS!

Dyness

www.dyness.cn