

DYNNESS



Dyness Digital Energy Technology Co., LTD.

Tel : +86 400 666 0655

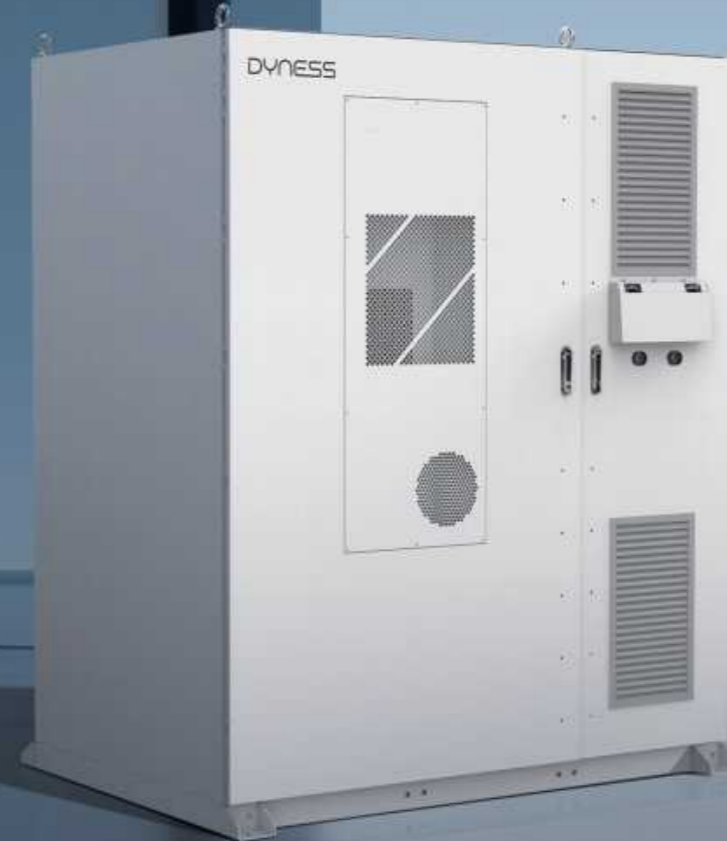
Web : www.dyness.com

E-mail : sales@dyness-tech.com

Address : No. 688 Liupu Road, GuoxiangStreet, Wuzhong Economic Development Zone, Suzhou

File version-20250228-EN Information might be subject to change without notice during product improving

DYNNESS



**Commercial and
Industrial
Energy Solutions**

Discover Your Nature

About Dyness

Dyness, founded in 2017, is a global pioneering energy storage solutions innovator. Relying on advantageous technology and robust product R&D capabilities, Dyness has established a comprehensive product portfolio for full scenarios, including C&I and residential energy storage throughout the entire lifecycle. With its global headquarters in Suzhou, China, Dyness has provided safe, reliable, and high-quality products and services to 500,000+ users in 100+ countries and regions.

At Dyness, customer satisfaction is always Dyness' top priority. Aligned with its mission to reduce the Earth's temperature, Dyness is collaborating with 90+ global brand partners to reduce the cost of renewable energy usage for users. As the pace of global energy transition accelerates, Dyness is committed to promoting sustainable development on a global scale through commercial deepening. It strives to work alongside the industry, market and society to build a low-carbon future worldwide.

• Mission

Driving digital energy development, reducing the cost of energy acquisition, and lowering Earth's temperature.

• Vision

Achieving customer priority, enabling the advancement of global sustainable pursuits, and striving to become a better version of oneself.

• Values

Be True | Be Pragmatic | Be Excellent | Be Altruistic

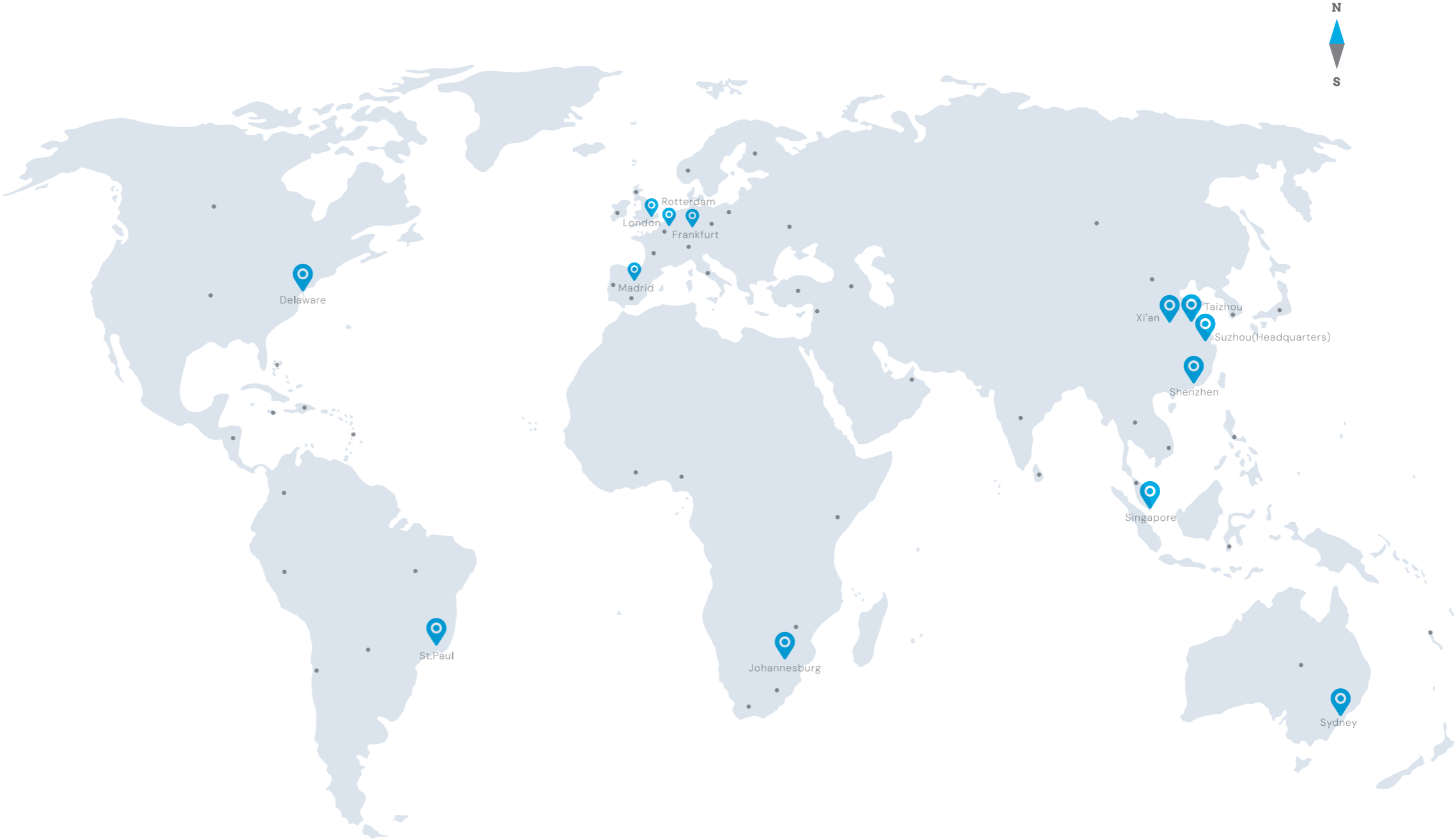


Global Footprint

The Global Pioneering Energy Storage Solutions Innovator

- EUPD Top Brand PV (Storage)
- China TOP 500 Hidden Unicorn
- iF Desigh Award 2024 Winner

.....



● Main Shipping Areas

📍 Branches

13

Global Branches

2

Production Centres

2

R&D Centres

3GWh

Annual Production Capacity

100+

Global Markets

500,000+

Users

Commercial and Industrial Energy Storage Products



All-in-one



Safe & Reliable



High Energy Density



All Scenario



Intelligent O&M

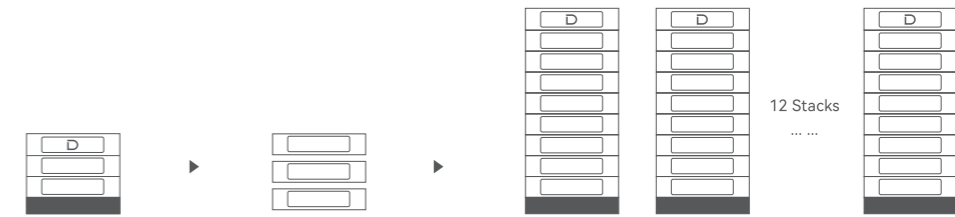


STACK100

Stack100 is suitable for residential and small commercial and industrial scenarios. Rackless and stackable design is easy to plug and play. It supports 12 clusters in parallel with a maximum capacity of 921kWh and supports 1C charge/discharge.



Specification



| Model | STACK100 |
|--------------------------------------|---|
| Battery Type | LiFePO ₄ |
| Module Voltage/Capacity | 51.2V/100Ah |
| Single Module Weight | 47kg |
| System Modules Serial Number | 3~15 |
| System Energy Range | 15.36~76.8kWh |
| Operating Voltage | 134~864V |
| Recommended Charge/Discharge Current | 50A (0.5C) |
| Max.Charge/Discharge Current | 100A (1C) |
| Peak Discharge Current(2min 25°C) | 125A(1.25C) |
| Depth of Discharge | 95% |
| Communication | CAN/RS485 |
| Cycle Life | ≥8000 cycles / 10 Years |
| Single Cluster Dimension[W*D*H] | 590*390*(233+133*n),"n" stands for the number of battery modules |
| Charging Temp. Range | 0~55°C/-20~55°C (Optional) |
| Discharging Temp. Range | -20~55°C |
| 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 | Ingeteam/Solis/GoodWe/Growatt/Solplanet/SAJ/DEYE/Hoymiles/SOLINTEG ect. |

* Test conditions: 0.2C Charging& Discharging, @25°C, 95% DOD

Features and Advantages

Flexible Expansion

Up to 12 clusters in parallel,
15KWh--921KWh capacity

1C Rate

Suitable for grid frequency regulation, charging stations and other scenarios, cost saving

Automatic Self-heating

-20°C to 55°C operating temperature (optional)

Ultra Safe

Intelligent fire extinguishing system, react within 5 seconds

Easy Installation

0 wiring, rackless free stacking, plug-and-play, one cluster installation in 30min

Module Mixing

Free mixing of modules within three years

PowerRack HV4

PowerRack HV4 series features a rack-mount structure design that is ideal for medium-sized industrial and commercial applications. It supports up to 12 clusters of parallel machines with a maximum expansion capacity of 921 kWh. This effectively enhances PV consumption, provides backup power or peak shifting to ensure the safe and stable operation of the system.



Features and Advantages

Flexible Expansion

Modular design, up to 12 clusters in parallel, 20.48 kWh--921 kWh capacity

Economical

Rack structure, lower cost, higher space utilization

Long-term Reliability

LFP cells, 10 years long warranty, intelligent BMS monitors battery status in real time

Intelligent O&M

Optional Wi-Fi module, real-time data monitoring and troubleshooting, one-key intelligent upgrade

Specification

| | |
|---------------------------------|---|
| Model | HV51100 |
| Battery Type | LiFePO ₄ |
| Nominal Battery Energy | 5.12kWh |
| Nominal Capacity | 100Ah |
| Nominal Voltage | 51.2V |
| Net Weight | 43.5kg |
| Dimension(W/D/H) | 481/535/140mm |
| Charging Temp. Range | 0-55°C |
| Discharging Temp. Range | -20-55°C |
| Communication | CAN |
| Cycle Life * | >6000 Cycles |
| Protection Level | IP20 |
| Expansion | Up to 15 units in series |
| Compatible Inverters | GoodWe/Solis/SAJ/Sinexcel/Hoymiles/Growatt/Ecatus/Sermatec/ATESS/Sunways etc. |
| Certification & Safety Standard | UN38.3/CE-EMC |

* Test conditions: 0.2C Charging/Discharging, @25°C, 95% DOD

| Rack Type | PowerRack HV4 | | |
|-----------------------------------|-----------------------|------------------------|--------------------------------|
| Rack System Control unit Type | BDU100 | | |
| Battery Module Type | HV51100 | | |
| Battery Module Quantity | 4~7 units | 8~11 units | 12~15 units |
| Nominal Battery Energy | 5.12kWh×n(n=4~7) | 5.12kWh×n(n=8~11) | 5.12kWh×n(n=12~15) |
| Nominal Capacity | 100Ah | 100Ah | 100Ah |
| Nominal Voltage | 51.2V×n(n=4~7) | 51.2V×n(n=8~11) | 51.2V×n(n=12~15) |
| Nominal Power Output | 3.07kW×n(n=4~7) | 3.07kW×n(n=8~11) | 3.07kW×n(n=12~15) |
| Max.Power Output | 5.12kW×n(n=4~7) | 5.12kW×n(n=8~11) | 5.12kW×n(n=12~15) |
| Recommend Charging Current | 50A | 50A | 50A |
| Recommend Discharging Current | 50A | 50A | 50A |
| Net Weight | 62+12+43.5kg×n(n=4~7) | 86+12+43.5kg×n(n=8~11) | 62×2+12+43.5kg×n(n=12~15) |
| Dimension(W/D/H) | 601/610/1392mm | 601/610/2012mm | 601/610/1392mm*2(Two clusters) |
| Module Quantity and Configuration | 4~7 Units in series | 8~11 Units in series | 12~15 Units in series |

BF100

BF100 is an outdoor-mountable DC battery cabinet featuring an intelligent air-cooled cooling design. It offers flexible single cabinet capacity of 71/86/100kWh, reserved DC side expansion interface. Additionally, it is equipped with a wall-mounted hybrid inverter to facilitate AC output. This cabinet is ideal for office parks, commercial buildings, charging stations, and other small industrial and commercial applications.



Features and Advantages

Flexible Expansion

Single cabinet capacity of 71/86/100kWh optional, reserve DC side expansion interface

Simple O&M

Modular design, side outlet mode, easy to install, and easy to maintain.

IP55+C3/C5

Resistance up to C3/C5 corrosion level, handles harsh environments such as high humidity and salt spray corrosion with ease.

Safe & Reliable

Three-stage detection + active exhaust + passive explosion-proof design to eliminate hidden hazards and ensure safe operation.

Specification

| Model | BF100-C70 | BF100-C80 | BF100-C100 |
|-----------------------|--------------------------------------|----------------|----------------|
| Battery | | | |
| Battery Type | LiFePO ₄ | | |
| Battery Capacity | 280Ah | | |
| Rated Current | 140A | | |
| Max. Current | 160A | | |
| PACK Configuration | 1P16S | | |
| PACK Quantity | 5 PACK/Cluster | 6 PACK/Cluster | 7 PACK/Cluster |
| Voltage Range | 232~288Vdc | 278.4~345.6Vdc | 324.8~403.2Vdc |
| Nominal Capacity | 71kWh | 86kWh | 100kWh |
| System | | | |
| Weight | 1100±100kg | 1200±100kg | 1300±100kg |
| Dimension (W/D/H) | 725/1224/2258mm | | |
| Max. Efficiency | ≥94% (TBD) | | |
| Air Conditioner Power | 2kW (Cooling), 1kW (Heating) | | |
| Temperature | -20~50°C (Derating above 45°C) | | |
| Humidity | 0~95%RH (Non-condensing) | | |
| Ingress Protection | IP55 | | |
| Anti-corrosion Grade | C3/C5 | | |
| Cooling Method | Air-cooling | | |
| Noise | ≤65dB (TBD) | | |
| Display | Touch screen | | |
| Elevation | 3000m (Derating above 2000m) | | |
| Fire Protection | Aerosol (Optional Perfluorohexanone) | | |
| Communication | Ethernet/4G/RS485 | | |
| Certification | CE | | |

DH100F

DH100F features an integrated multifunctional design that supports PV access and on-grid to off-grid switching. It encompasses the whole scenario of photovoltaic, storage and diesel generator. The single cabinet capacity of 71/86/100kWh optional, allowing for customization based on electricity consumption needs. This system is ideal for office parks, commercial buildings, charging stations, and other small industrial and commercial applications.



Features and Advantages

Flexible Expansion

Single cabinet capacity of 71/86/100kWh optional, supports both on-grid and off-grid AC parallel operation

IP55 Protection

Fearless of outdoor installation, strong environmental adaptability

Full-scenario

Supporting PV access, on-grid to off-grid switching, covering the whole scenario of photovoltaic, storage and diesel generator

Safe & Reliable

Three-stage detection + active exhaust + passive explosion-proof design to eliminate hidden hazards and ensure safe operation

Simple O&M

Modular design, rear outlet and lower outlet mode, easy to install, easy to layout, easy to maintain, and support for online monitoring and O&M

Specification

| Model | DH100F-C70 | DH100F-C80 | DH100F-C100 |
|-----------------------|--------------------------------------|----------------|----------------|
| Battery | | | |
| Battery Type | LiFePO ₄ | | |
| Battery Capacity | 280Ah | | |
| Rated Current | 140A | | |
| Max. Current | 160A | | |
| PACK Configuration | 1P16S | | |
| PACK Quantity | 5 PACK/Cluster | 6 PACK/Cluster | 7 PACK/Cluster |
| Voltage Range | 232~288Vdc | 278.4~345.6Vdc | 324.8~403.2Vdc |
| Nominal Capacity | 71kWh | 86kWh | 100kWh |
| AC (On-grid) | | | |
| Rated Power | 35kW | 40kW | 50kW |
| AC Maximum Current | 60A | 74A | 86A |
| AC Rated Voltage | 400Vac | | |
| Wiring Method | 3P4L+PE | | |
| Frequency | 50Hz/60Hz | | |
| Power Factor | 0.8 (Leading)~0.8 (Lagging) | | |
| THDi | < 5% (Rated power) | | |
| AC (Off-grid) | | | |
| Rated Power | 35kVA | 40kVA | 50kVA |
| AC Maximum Current | 60A | 74A | 86A |
| AC Rated Voltage | 400Vac | | |
| Wiring Method | 3P4L+PE | | |
| Frequency | 50Hz/60Hz | | |
| Unbalanced Load | 100% | | |
| THDv | < 3% (Liner load) | | |
| Photovoltaic | | | |
| Max. Input Power | 25kW*2 | 30kW*2 | 35kW*2 |
| Max. Input Current | 80A*2 | | |
| Short-circuit Current | 100A*2 | | |
| Max. Voltage | 1000Vdc | | |
| Input Voltage | 300~1000Vdc | 350~1000Vdc | 400~1000Vdc |
| Start-up Voltage | 375Vdc | 440Vdc | 500Vdc |
| MPPT Path | 2 | | |
| System | | | |
| Weight | 1500±100kg | 1600±100kg | 1700±100kg |
| Dimension (W/D/H) | 1200/1224/2258mm | | |
| Max. Efficiency | ≥84% (TBD) | | |
| Air Conditioner Power | 2kW (Cooling), 1kW (Heating) | | |
| Temperature | -20~50 °C (Derating above 45 °C) | | |
| Humidity | 0~95%RH (Non-condensing) | | |
| Ingress protection | IP55 | | |
| Anti-corrosion Grade | C3 | | |
| Cooling Method | Air cooling | | |
| Noise | ≤70dB (TBD) | | |
| Elevation | 3000m (Derating above 2000m) | | |
| Display | Touch screen | | |
| Fire Protection | Aerosol (Optional Perfluorohexanone) | | |
| Communication | Ethernet/4G/RS485 | | |
| Certification | CE, TUV | | |

DH200F

The DH200F features an integrated multi-functional design that supports PV access, on-grid to off-grid switching, covering the whole scenario of photovoltaic, storage and diesel generator. It supports a maximum of 12 machines in AC parallel and can be expanded to 2.58MWh. Support equipped with intelligent and efficient STS, the switching time between on-grid and off-grid is less than 20 ms, ensuring a stable power supply.



Features and Advantages

Flexible Expansion

Maximum support for 12 machines in AC parallel, expandable to 2.58MWh; reserved DC expansion interface.

No Black Out

Equipped with intelligent and efficient STS, the off-grid switching time is less than 20 ms (optional).

Safe & Reliable

A prevention-oriented fire protection strategy featuring three levels of detection, multiple extinguishing agents, and EMS intelligent judgment.

Structural Innovation

The unique air duct design features a shoulder-to-shoulder flexible layout, resulting in high space utilization.

IP55 Protection

Resistant to outdoor installation with strong environmental adaptability.

Full-scenario

Supporting PV access, transitioning from on-grid to off-grid, and encompassing the entire spectrum of photovoltaic systems, energy storage, and diesel generators.

Specification

| Model | DH200F |
|------------------------------------|--------------------------------------|
| Battery | |
| Battery Type | LiFePO ₄ |
| Battery Capacity | 280Ah |
| PACK Configuration | 1P16S |
| PACK Quantity | 15 PACK/Cluster |
| Rated Current | 140A |
| Max. Current | 160A |
| Voltage Range | 672~864Vdc |
| Nominal Capacity | 215kWh |
| AC (On-grid) | |
| Rated Power | 100kW |
| AC Maximum Current | 167A |
| AC Rated Voltage | 400Vac |
| Wiring Method | 3P4L+PE |
| Frequency | 50Hz/60Hz |
| Power Factor | 1(Leading)~1(Lagging) |
| THDi | ≤3% (Rated power) |
| Max. Number Of Parallel Expansions | 12 |
| AC(Off-grid) | |
| Rated Power | 100kW |
| AC Rated Voltage | 400Vac |
| AC Maximum Current | 167A |
| Wiring method | 3P4L+PE |
| Frequency | 50Hz/60Hz |
| Unbalanced Load | 100% |
| THDv | < 3% (Liner load) |
| Max. Number Of Parallel Expansions | 5 |
| Photovoltaic | |
| Max. Input Power | 50kW (Power 1.1 times overload) |
| Max. Input Current | 100A |
| Short-circuit Current | 150A |
| Max. Voltage | 670Vdc |
| Input Voltage | 200-670Vdc |
| Start-up Voltage | 250Vdc |
| MPPT Path | 0~3 |
| System | |
| Weight | 2800±100kg |
| Dimension (W/D/H) | 1850/1265/2250mm |
| Max. Efficiency | ≥87% (TBD) |
| Air Conditioner Power | 3kW (Cooling), 1kW (Heating) |
| Temperature | -20~50°C(Derating above 40°C) |
| Humidity | 0~95%RH (Non-condensing) |
| Ingress protection | IP55 |
| Anti-corrosion Grade | C3 |
| Cooling method | Air cooling |
| Noise | ≤75dB |
| Elevation | 3000m (Derating above 2000m) |
| Display | Touch screen |
| Fire Protection | Aerosol (Optional Perfluorohexanone) |
| Communication | Ethernet/4G/RS485 |
| Certification | CQC, CE, TUV |

DH200Y

DH200Y is the first high-security, high-energy density, DC1000V liquid-cooled all-in-one energy storage system designed for grid-connected projects, including office parks, commercial buildings, and charging stations. Single cabinet capacity of 232kWh, maximum support for 10 machines in parallel, expandable to 2.3MWh. With a 9% increase in energy density and a 10% reduction in floor space. The higher energy density provides superior options for energy storage solutions.



Features and Advantages

Flexible Expansion

Maximum support for 10 machines in AC parallel, expandable to 2.3MWh; reserved DC expansion interface.

Ultra Safe

Triple-level fire suppression + active exhaust + passive explosion-proof design to eliminate hidden hazards and ensure safe operation.

Ultra-high Level Protection

PACK+PCS IP65, C3/C5 Anti-corrosion grade optional, handles harsh environments such as high humidity and salt spray corrosion with ease.

Economical

Occupies an area of 1.58m², energy density up to 147kWh/m², low installation costs

Smart Temperature Control

PACK smart liquid cooling+PCS smart Air cooling, cluster-level temperature difference $\leq 3^{\circ}\text{C}$

Simple O&M

Modular design, pre-maintenance solution for easy access and O&M, and support for online monitoring and O&M

Specification

| Model | DH200Y |
|------------------------------------|---------------------------------------|
| Battery | |
| Battery Type | LiFePO ₄ |
| Battery Capacity | 280Ah |
| PACK Configuration | 1P52S |
| PACK Quantity | 5 PACK/Cluster |
| Rated Current | 140A |
| Max. Current | 160A |
| Voltage Range | 754~936Vdc |
| Nominal Capacity | 232kWh |
| AC (On-grid) | |
| Rated Power | 100kW |
| AC Maximum Current | 145A |
| AC Rated Voltage | 400Vac |
| Wiring Method | 3P4L+PE |
| Frequency | 50Hz |
| Power Factor | 1(Leading)~1(Lagging) |
| THDi | $\leq 3\%$ (Rated power) |
| Max. Number Of Parallel Expansions | 10 |
| System | |
| Weight | 2600±100kg |
| Dimension (W/D/H) | 1055/1500/2398mm |
| Max. Efficiency | $\geq 90\%$ (TBD) |
| Liquid-cooling Power | 2.5kW (Cooling), 2kW (Heating) |
| Temperature | -20~50°C (Derating above 45°C) |
| Humidity | 0~95%RH (Non-condensing) |
| Ingress Protection | IP55 |
| Anti-corrosion Grade | C3/C5 |
| Cooling Method | PACK Liquid-cooling + PCS Air-cooling |
| Noise | $\leq 75\text{dB}$ |
| Elevation | 3000m (Derating above 2000m) |
| Display | Touch screen |
| Fire Protection | Aerosol (Optional Perfluorohexanone) |
| Communication | Ethernet/4G/RS485 |
| Certification | CQC, CE, TUV |

BY5000

BY5000 is the first 20-foot, 5 MWh liquid-cooled energy storage system. It features a 375Ah large battery cell, a double-layer liquid-cooled PACK structural design, and a single cluster with a management string design. This system is easy to transport and install, offering customers a more efficient, safer, and smarter all-encompassing energy storage solution.



Features and Advantages

Flexible Expansion

Support DC side expansion, meet the capacity requirements of various scenarios.

Long Lifetime

Double-layer liquid-cooled battery cell PACK structure design, intelligent temperature control.

Minimal O&M

Modular&non-walk-in design, battery pre-assembly, easy to install, easy to deploy, easy to maintain.

Ultra Safe

Three-stage fire protection +active pressure release+explosion proof; three-stage fuse, real-time insulation check.

IP55+C5

Ultra-high level protection, handles harsh environments such as high humidity and salt spray corrosion with ease.

Specification

| | |
|------------------------|---|
| Model | BY5000 |
| Battery | |
| Battery Type | LiFePO4 |
| Battery Capacity | 375Ah |
| Rated Current | 1880A |
| Max. Current | 2120A |
| PACK Configuration | 1P6OS |
| PACK Quantity | 7 PACK*10 Cluster |
| Voltage Range | 1176-1500Vdc |
| Nominal Capacity | 5.04MWh |
| System | |
| Weight | 43t (TBD) |
| Dimension (W/D/H) | 6058/2438/3400mm (TBD) |
| Max. Efficiency | ≥93% (TBD) |
| Liquid-cooling Power | 60kW (Cooling) (TBD) |
| Temperature | -20~50°C (Derating above 45°C) |
| Humidity | 0~95%RH (Non-condensing) |
| Ingress Protection | IP55 |
| Anti-Corrosion Grade | C5 |
| Cooling Method | Liquid-cooling |
| Elevation | 3000m (Derating above 2000m) |
| Display | Touch screen |
| Fire Protection | PACK/System/Water fire protection/Ventilation & Explosion protection system |
| Communication Protocol | 4G, Modbus RTU, Modbus TCP/IP |
| Standards-compliant | GB/T36276, GB/T34131, IEC62619, IEC63056, IEC60730, EN61000-6-2/4, IEC 62933, UL9540A |

C&I Application Cases



- **Belgium**
DH200F
100kW/215kWh
Dynamic scaling (peak-shaving) + PV consumption (self-shaving)



- **Brazil**
PowerRack HV4
100kW/307kWh
Dynamic Capacity Expansion (peak-shaving) + PV Consumption



- **The Netherlands**
DH200F
100kW/215kWh
Photovoltaic consumption (self-use)



- **Bulgaria**
PowerRack HV4F
112.64 kWh
Peak-to-valley Arbitrage+Self-generation and Self-use



- **Spain** 100kW/215kWh
DH200F Emergency Power Supply + PV Consumption



- **Netherlands** 300kW/645kWh
DH200F Dynamic Capacity Expansion + PV Consumption+Charging Pile

- **Hungary** 500kW/1160kWh
DH200Y Self-generation and Self-use+PV Consumption



- **China** 5MW/18MWh
DH200F Peak-shaving+PV Consumption



- **China** 100kW/215kWh
DH200F Peak-to-valley Arbitrage + Dynamic Capacity Increase

After-sales Service

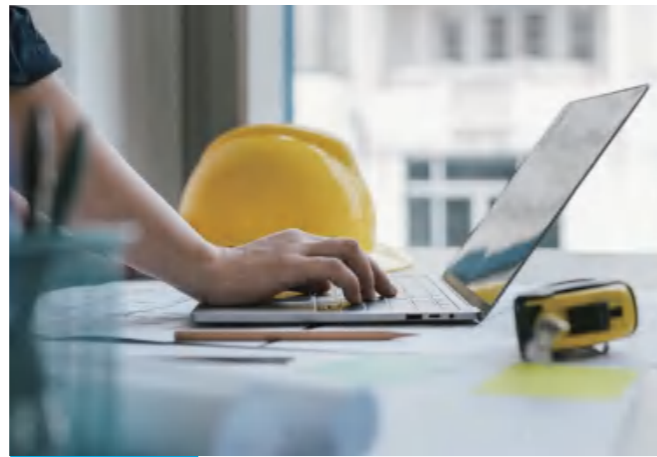
Online + offline comprehensive operation and maintenance service system

+86 400 666 0655



Offline

8 Supporting Languages
13 Service Center
Worldwide Service Locations



Online

Sophisticated Online Service Platform
200+ Online Service Engineer
<https://support.dyness.com>



Professional

Localized technical support and customized service solutions.



Efficient

After-sales service response time is less than 1 hour.



Responsible

Customer centricity and 98% customer satisfaction

