









Dyness Digital Energy Technology Co., LTD.

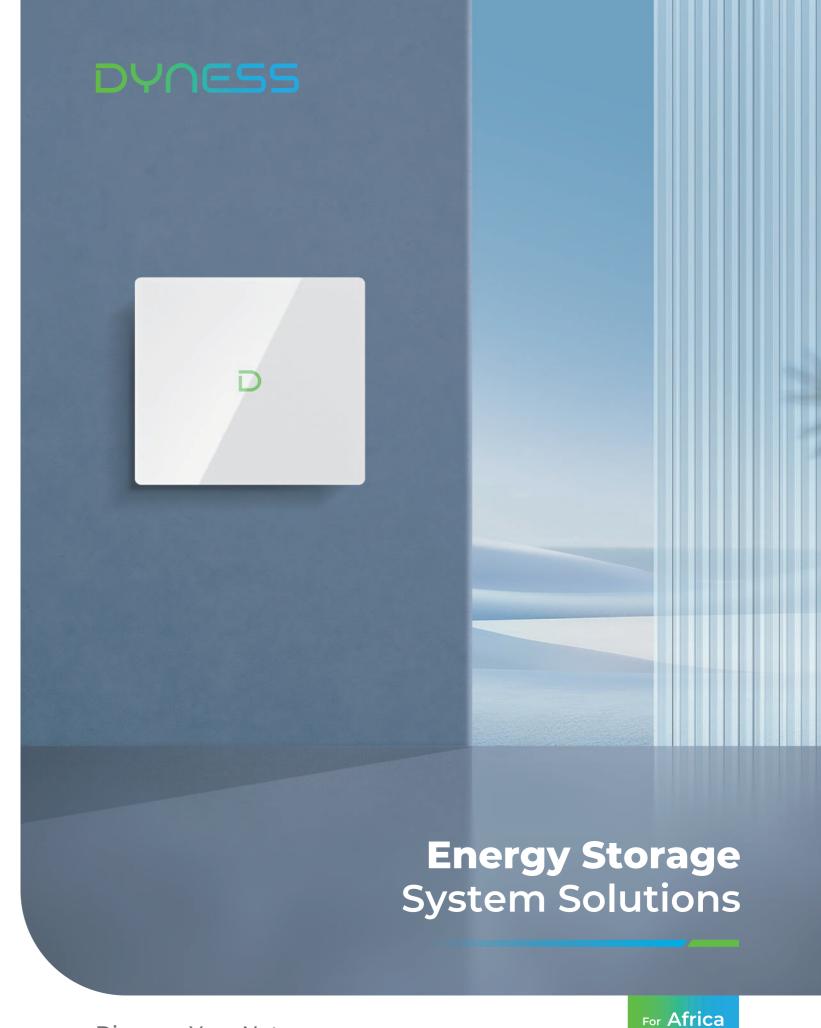
Tel: +86 400 666 0655

Web: www.dyness.com

E-mail: dynessSA@dyness-tech.com

Address: No. 688 Liupu Road, GuoxiangStreet, Wuzhong Economic Development Zone, Suzhou(Headquarters)
151 Katherine Street, Sandown, Sandton. Block B, First Floor (South Africa Branch)

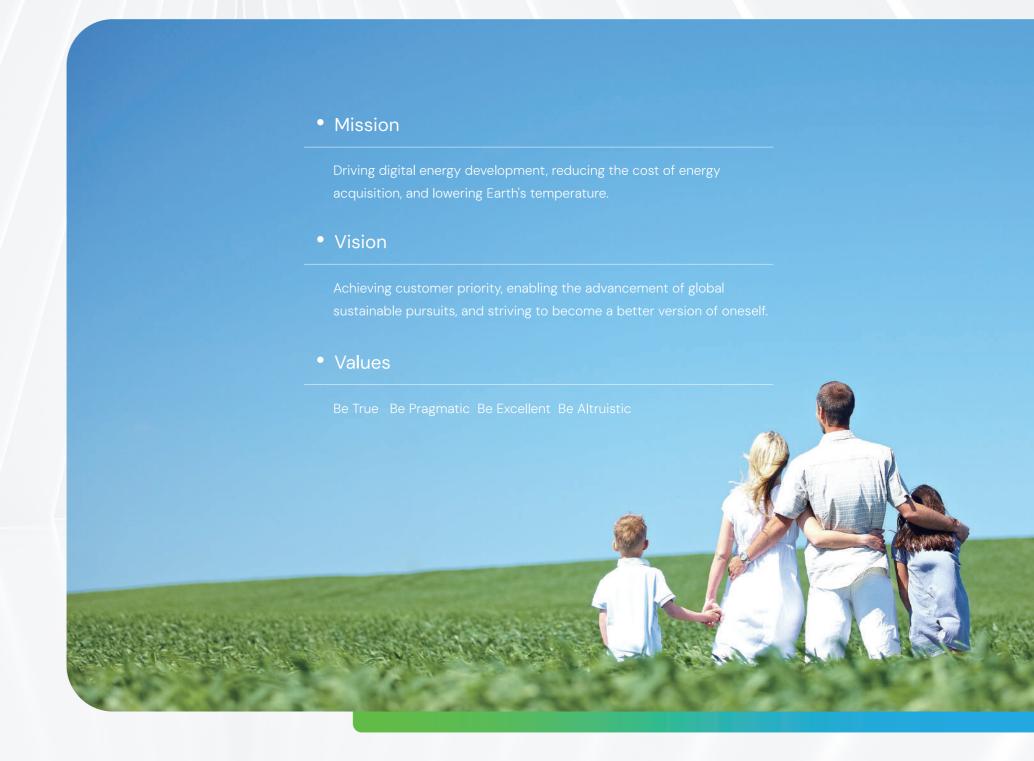
File version-20250514-EN(Africa) Information might be subject to change without notice during product improving



# **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 over 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.



O1 | Discover Your Nature

# **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



13

Global Branches

2

**Production Centres** 

2

R&D Centres

3GWh

**Annual Production Capacity** 

100+

Global Markets

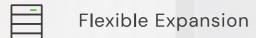
500,000+

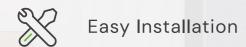
Users

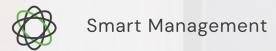
O3 | Discover Your Nature

# Residential Energy Storage Products















Light Weight

The weight is about 1/3 of a lead-acid battery of the same capacity.

Riexible Module

Module design, easy expansion in series and parallel

Easy Installation

<12kg, convenient for handling and can be used in various scenarios

Long Service Life

More than 3000 cycles

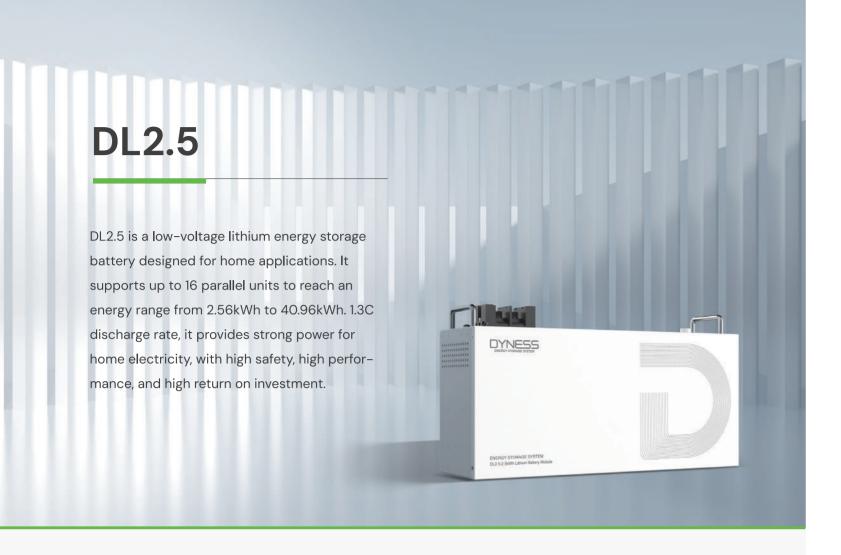
High Protection Level

IP65

# Specification

Model	LR1.2
Battery Type	LiFePO <sub>4</sub>
Nominal Battery Energy	1.28kWh
Nominal Capacity	100Ah
Nominal Voltage	10-14.8V
Max. Power Charge/Discharge Current	100A (1C)
Depth of Discharge (DOD)	100%
Net Weight	<12kg
Dimension[W/D/H]	330mm/172mm/214mm
Charging Temp. Range	0~50°C
Discharging Temp. Range	-20~55°C
Protection level	IP65
Cycle Life *	≥3000cycles
Expansion	4 in series and parallel
Certification & Safety Standard	UN38.3

\*3000 cycles: Test Conditions: 0.5C Discharging.@25°C, 100% DOD 4000 cycles: Test Conditions: 0.5C Discharging. @25°C, 80% DOD



Flexible Expansion

Up to 16 units in parallel, 2.56kWh--40.96kWh capacity

Easy Installation

30% less volume, high space utilization

Battery Equalization

Supports for mixing modules under different SOC

1.3C Discharge

Simultaneously supplying power to multiple loads, no need to worry about power outages

All-round Safety

Short-circuit lockout, surge-resistant, safe and reliable

Smart Management

Real-time system monitoring, remote control, OTA updates

# Specification

Model	DL2.5		
Cell Technology	LiFePO <sub>4</sub>		
Battery Module Capacity	2.56 kWh		
Battery Module Voltage	25.6V		
Battery Module Capacity	100 Ah		
Battery Module Charge Voltage	28.5V		
Recommended Charge/Discharge Current	50A		
Max. Charge Current	75A		
Max. Discharge Current	130A		
Depth of Discharge (DOD)	90%		
Cycle Life *	≥6000		
Dimension(W/D/H, mm)	481/221/133		
Communication	CAN/RS485		
WiFi Module	Optional		
IP Grade	IP20		
Weight	23kg		
Charging Temp. Range	0°C~+55°C		
Discharging Temp. Range	-20°C~+55°C		
Compatible Inverters	Growatt/Victron/MUST/Steca/Sorotec/SRNE/SOSEN/TBB		
Certification	UN38.3/CE-EMC/IEC62619/ECE R10/GOST-R		

<sup>\*</sup> Test conditions: 0.2C Charging & Discharging. @25°C, 90% DOD



Flexible Expansion

Up to 50 units in parallel, 5.12kWh--256kWh capacity

Long-term Reliability

LFP cells, 6000+ cycles

All-round Safety

Short-circuit lockout, surge-resistant, safe and reliable

1C Discharge

Simultaneously supplying power to multiple loads, no need to worry about power outages

Easy Installation

Support wall-mounted, floor-mounted, stacked and rack-mounted installations, high space utilization

# Specification

Model	DL5.OC		
Battery Type	LiFePO <sub>4</sub>		
Nominal Battery Energy	5.12 kWh		
Nomina Capacity	100Ah		
Nominal Voltage	51.2V		
Operating Voltage	44.8~57.6V		
Recomended Charge & Discharge C Rate	0.5C		
Maximum Discharge C rate	1C		
Recommended Charge/Discharge Current	50A		
Max. Charge/Discharge Current	Charge 75A Discharge 100A		
Peak Discharge Current	110A(15s)		
Depth of Discharge (DOD)	90%		
Net Weight	54kg		
Dimension[W/D/H](mm)	558/545/150		
Charging Temp. Range	0~55°C		
Discharging Temp. Range	-20~55°C		
Communication	CAN/RS485/RS232		
Cycle Life *	≥6000 Cycles		
Protection Level	IP20		
WIFI Module	Optional		
Expansion	Up to 50 units in parallel		
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/CEI-021/GOST-R		
Compatible Inverters	SMA/Schneider/Victron energy/Ingeteam/Solis/GoodWe/ Growatt/Soplanet/Luxpower/DEYE etc.		

<sup>\*</sup> Test conditions: 0.2C Charging & Discharging. @25°C, 90% DOD



Flexible Expansion

Up to 50 units in parallel, 5.12kWh--256kWh capacity

Easy Installation

Support wall-mounted, floor-mounted installations, high space utilization

Smart Management

Real-time system monitoring, remote control, OTA updates

(ii) 1.2C Discharge (10min)

Output 1.2C for 10 min to support peak loads, no worry about random peak powers

Ultra Safe

Intelligent fire extinguishing system, detects and extinguishes fire in 5s

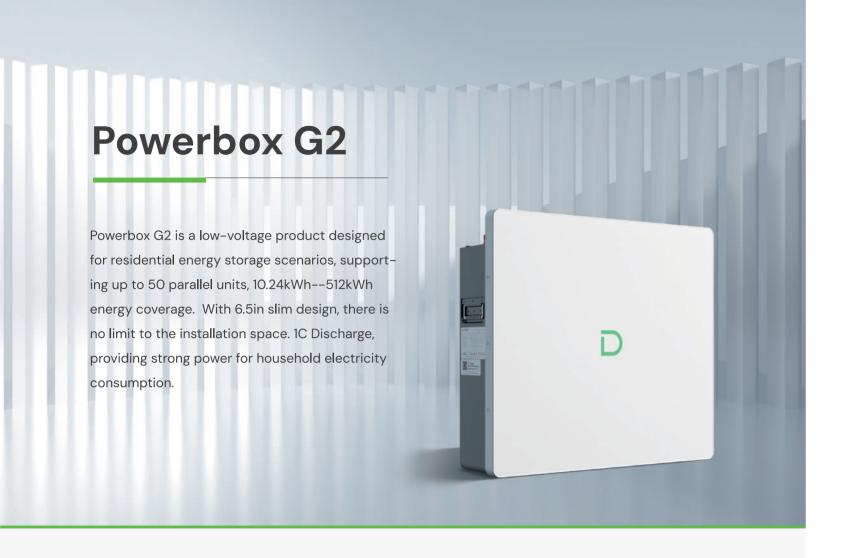
# Specification

Nominal Capacity   100Ah	Model	DL5.OC Pro		
Nominal Capacity  Nominal Voltage  51.2V  Departing Voltage  44.8-67.6V  Recomended Charge & Discharge C Rate  0.5C  Maximum Discharge C Rate  1C  Recommended Charge/Discharge Current  50A  Max. Charge/Discharge Current  50A  Charge/Discharge Current  120A@10min  Depth of Discharge (DOD)  95%  Net Weight  46kg  Dimension[W/D/H]  488/515/150mm  Charging Temp. Range  0-55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  1P20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED	Battery Type	LiFePO <sub>4</sub>		
Nominal Voltage         51.2V           Operating Voltage         44.8-57.6V           Recomended Charge & Discharge C Rate         0.5C           Maximum Discharge C Rate         1C           Recommended Charge/Discharge Current         50A           Max. Charge/Discharge Current         120A@10min           Peak Discharge Current         120A@10min           Depth of Discharge (DOD)         95%           Net Weight         46kg           Dimension[W/D/H]         488/515/150mm           Charging Temp. Range         0-55°C           Discharging Temp. Range         -20-55°C           Communication         CAN/RS485           WIFI Module         Built-in WIFI module; APP OTA function           Cycle Life         26000 Cycles           Protection Level         IP20           Active fire protection system         Built-in aerosol fire extinguisher           Expansion         Up to 50 units in parallel           Pros         Can be used in both off-grid and hybrid setups, compact design           Certification & Safety Standard         UN38.3/CE-EMC/IEC62619/CE-RED           SMA/Victron energy/Ingeteam/Solis/GoodWe/	Nominal Battery Energy	5.12kWh		
Operating Voltage  A44.8-57.6V  Recomended Charge & Discharge C Rate  O.5C  Maximum Discharge C Rate  IC  Recommended Charge/Discharge Current  50A  Max. Charge/Discharge Current  Charge 75A Discharge 100A  Peak Discharge Current  120A@10min  Depth of Discharge (DOD)  95%  Net Weight  46kg  Dimension[W/D/H]  488/515/150mm  Charging Temp. Range  0-55°C  Discharging Temp. Range  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED	Nominal Capacity	100Ah		
Recomended Charge & Discharge C Rate  Maximum Discharge C Rate  Recommended Charge/Discharge Current  SOA  Max. Charge/Discharge Current  Charge 75A Discharge 100A  Peak Discharge Current  120A@10min  Depth of Discharge (DOD)  95%  Net Weight  46kg  Dimension[W/D/H]  Charging Temp. Range  0-55°C  Discharging Temp. Range  -20-55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Nominal Voltage	51.2V		
Maximum Discharge C Rate  Recommended Charge/Discharge Current  SOA  Max. Charge/Discharge Current  Charge 75A Discharge 100A  Peak Discharge Current  120A@10min  Depth of Discharge (DOD)  95%  Net Weight  46kg  Dimension[W/D/H]  Charging Temp. Range  O-55°C  Discharging Temp. Range  Cany Rayse  Temp. Range  Cycle Life  Protection Level  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  Compatible Inverters  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Operating Voltage	44.8~57.6V		
Max. Charge/Discharge Current  Charge 75A Discharge 100A  Peak Discharge Current  120A@10min  Depth of Discharge (DDD)  95%  Net Weight  46kg  Dimension[W/D/H]  Charging Temp. Range  0-55°C  Discharging Temp. Range  -20-55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Recomended Charge & Discharge C Rate	0.5C		
Max. Charge/Discharge Current  Peak Discharge Current  120A@10min  Depth of Discharge (DOD)  95%  Net Weight  46kg  Dimension[W/D/H]  488/515/150mm  Charging Temp. Range  0~55°C  Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Maximum Discharge C Rate	1C		
Peak Discharge Current  Depth of Discharge (DOD)  95%  Net Weight  46kg  Dimension[W/D/H]  488/515/150mm  Charging Temp. Range  0~55°C  Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Recommended Charge/Discharge Current	50A		
Depth of Discharge (DOD)  Net Weight  46kg  Dimension[W/D/H]  488/515/150mm  Charging Temp. Range  0~55°C  Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Max. Charge/Discharge Current	Charge 75A Discharge 100A		
Net Weight  Dimension[W/D/H]  488/515/150mm  Charging Temp. Range  0~55°C  Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Peak Discharge Current	120A@10min		
Dimension[W/D/H]  Charging Temp. Range  O~55°C  Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Depth of Discharge (DOD)	95%		
Charging Temp. Range  O-55°C  Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Net Weight	46kg		
Discharging Temp. Range  -20~55°C  Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Dimension[W/D/H]	488/515/150mm		
Communication  CAN/RS485  WIFI Module  Built-in WIFI module; APP OTA function  Cycle Life  ≥6000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Charging Temp. Range	0~55°C		
WIFI Module  Built-in WIFI module; APP OTA function  ≥ 6000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Discharging Temp. Range	-20~55°C		
Cycle Life  26000 Cycles  Protection Level  IP20  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Communication	CAN/RS485		
Protection Level  Active fire protection system  Built-in aerosol fire extinguisher  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	WIFI Module	Built-in WIFI module; APP OTA function		
Active fire protection system  Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Cycle Life	≥6000 Cycles		
Expansion  Up to 50 units in parallel  Pros  Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Protection Level	IP20		
Pros Can be used in both off-grid and hybrid setups, compact design  Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Active fire protection system	Built-in aerosol fire extinguisher		
Certification & Safety Standard  UN38.3/CE-EMC/IEC62619/CE-RED  SMA/Victron energy/Ingeteam/Solis/GoodWe/	Expansion	Up to 50 units in parallel		
Compatible Inverters SMA/Victron energy/Ingeteam/Solis/GoodWe/	Pros	Can be used in both off-grid and hybrid setups, compact design		
Compatible Invertors	Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/CE-RED		
	Compatible Inverters			

<sup>\*</sup> Test conditions: 0.2C Charging & Discharging. @25°C, 95% DOD

13 | Discover Your Nature

Discover Your Nature



Flexible Expansion

Up to 50 units in parallel, 10.24kWh--512kWh capacity

Long-term Reliability

8000 cycle lives, more usable energy

**Easy Installation** 

30% less volume, 15% less weight save time and labor

Ultra Safe

Intelligent fire extinguishing system, react within 5 seconds, automaticly pressure relief

1C Discharge

Max discharge current:200A, simultaneously supplying power to multiple loads

IP65 Protection

Fearless of outdoor insatallition, strong environmental adaptability

### Specification

Model	Powerbox G2		
Battery Type	LiFePO <sub>4</sub>		
Nominal Battery Energy	10.24kWh		
Usable Energy	9.728kWh		
Operating Voltage	44.8-57.6V		
Nominal Voltage	51.2V		
Nominal Capacity	200Ah		
Nominal Charge or Discharge Power	5.12kW		
Max Discharge Power	10.24kW		
Recomended Charge & Discharge C Rate	0.5C		
Max Discharge C Rate	1C		
Recommended Charge/Discharge Current	100A		
Max Discharge Current	200A		
Peak Discharge Current	300A (2mins, 25°C)		
Recommended Depth of Discharge (DOD)	95%		
Net Weight	96kg		
Dimension[W/D/H]	710/165/640mm		
Charging Temp. Range	0~55°C		
Discharging Temp. Range	-20~55°C		
Communication	CAN/RS485		
Cycle Life *	≥8000 Cycles		
Protection Level	IP65		
Expansion	Up to 50 units in parallel		
Color	White		
WIFI Module	Built-in WiFi module; APP OTA function		
Active fire protection system	Built-in aerosol fire extinguisher		
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/IEC62040/CE-RED/CEC/GOST-R		
Compatible Inverters	SMA/Schneider/Victron energy/Ingeteam/Solis/GoodWe/ Growatt/Soplanet/Luxpower/DEYE etc.		

<sup>\*</sup> Test conditions: 0.2C Charging & Discharging. @25°C, 95% DOD



Flexible Expansion

Up to 50 units in parallel, 10.24kWh—512kWh capacity

IP65 Protection

Fearless of outdoor insatallition, strong environmental adaptability

All-round Safety

Short-circuit lockout, surge-resistant, safe and reliable

🛭 Easy Installation

Support wall-mounted, floor-mounted installations, high space utilization

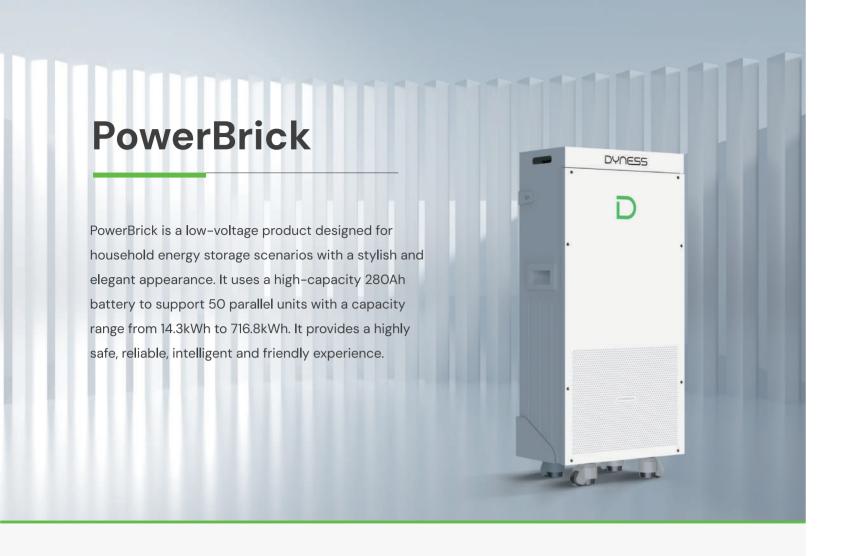
Battery Equalization

Supports for mixing modules under different SOC

## Specification

Model	Powerbox Pro		
Battery Type	LiFePO <sub>4</sub>		
Nominal Battery Energy	10.24 kWh		
Operating Voltage	44.8~57.6V		
Nominal Voltage	51.2V		
Nominal Capacity	200Ah		
Nominal Power	5.12kW		
Peak Power	10.24kW		
Recomended Charge & Discharge C Rate	0.5C		
Recommended Charge/Discharge Current	100A		
Recommended Depth of Discharge (DOD)	90%		
Net Weight	103kg		
Dimension[W/D/H]	555/210/928 mm		
Charging Temp. Range	0~55°C		
Discharging Temp. Range	-20~55°C		
Communication	CAN/RS485		
WIFI Module	Optional		
Cycle Life *	≥6000 Cycles		
Protection Level	IP65		
Expansion	Up to 50 units in parallel		
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/IEC62040/UKCA/CEC		
Compatible Inverters	SMA/Schneider/Victron energy/Ingeteam/Solis/GoodWe/ Growatt/Soplanet/Luxpower/DEYE etc.		

<sup>\*</sup> Test conditions: 0.2C Charging & Discharging. @25°C, 90% DOD



Flexible Expansion

Up to 50 units in parallel, 14.3kWh--716.8kWh capacity

Ultra Safe

Intelligent fre extinguishing system, react within 5 seconds

Long-term Reliability

LFP cells, 8000+ cycles,

No Black Out

Maximum discharge current: 200A, simultaneously supplying power to multiple loads

Easy Installation

60% less volume, 25% less weight, easy to move by one person with wheels

Smart Management

Real-time system monitoring, remote control, OTA updates

#### Specification

Model	PowerBrick		
Battery Type	LiFePO₄		
Nominal Battery Energy	14.336kWh		
Nominal Voltage/Capacity	51.2V/280Ah		
Recommended Charge/Discharge Current	140A (0.5C)		
Max. Charge Current	200A		
Max. Discharge Current	200A		
Peak Discharge Current	300A (2mins, 25°C)		
Depth of Discharge	95%		
Communication	CAN/RS485		
Cycle Life*	≥8000 cycles		
Protection Level	IP20		
Net Weight	114kg		
Dimension[W*D*H]	435*233*857mm (No wall-mounted bracket)		
Regulating wheel (4pcs)	1kg, 80/80/80mm(optional)		
Top cover	2kg, 422/232/60mm(optional)		
Maximum Parallel Modules	50		
Charging Temp. Range	0~55°C		
Discharging Temp. Range	-20~55°C		
WIFI Module	Built-in WIFI module; APP OTA function		
Fire Protection System	Built-in aerosol fire extinguisher		
Certification & Safety Standard	UN38.3/CE-EMC/IEC62619/GOST-R		
Compatible Inverters	SMA/Schneider/Victron energy/Ingeteam/Solis/GoodWe/ Growatt/Soplanet/Luxpower/DEYE etc.		

<sup>\*</sup> Test conditions: 0.2C Charging & Discharging. @25°C, 95% DOD



Flexible Expansion

Up to 12 clusters in parallel,

IP54 Protection

Indoor&outdoor installations

7.1kWh~255.72kWh capacity

Easy Installation

O wiring, plug&play, allow one people to install

Smart Management

Real-time system monitoring, remote control, OTA updates

# Specification

Model	Tower T7	Tower T10	Tower T14	Tower T17	Tower T21	
Product Pattern						
Battery Module Type	LiFePO₄	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	LiFePO <sub>4</sub>	
Battery Module Quantity	2	3	4	5	6	
Nominal Energy	7.10 kWh	10.66 kWh	14.21 kWh	17.76 kWh	21.31kWh	
Usable Energy	6.745kWh	10.127kWh	13.499kWh	16.872kWh	20.245kWh	
Operating Voltage	168~216V	252~324V	336~432V	420~540V	504~648V	
Nominal Voltage	192V	288V	384V	480V	576V	
Nominal Capacity	37Ah	37Ah	37Ah	37Ah	37Ah	
Max. Continuous Charge/ Discharge Power *	4.26 kW	6.39 kW	8.52 kW	10.65 kW	12.78 kW	
Recommended Depth of Discharge (DOD)	95%	95%	95%	95%	95%	
Dimensions [W/D/H] (mm)	504/380/700	504/380/900	504/380/1100	504/380/1300	504/380/1500	
Net Weight [kg]	105	146	187	228	269	
Charging Temperature Range		0~50°C				
Discharging Temperature Range			-10~50°C			
Communication			CAN/RS485			
Cycle life **		≥6000 Cycles				
Protection Level		IP54				
Battery Module Name		HV9637				
Expansion		Max. 12 towers can be connected in parallel				
Certification		UL1973/CE-EMC/CE-RED/IEC62040/IEC62619/IEC62477/IEC63056/ UKCA/ROHS/VDE2510-50/ISO14067/CEC/GOST-R/UN38.3/CEI-021				
Compatible Inverters		Kostal/Ingeteam Hoymiles/S	n/Solis/GoodWe/ olinteg/SINENG/S	Solplanet/Deye/ Sinexcel ect.		

 $<sup>^{\</sup>ast}$  Maximum Continuous Discharge/Charge Power when communicating with inverter is 0.6C

<sup>\* \*</sup> Test Conditions:0.2C Charging & Discharging.@25°C,95%DOD



Expandable On Demand

All in one, 2.4kWh/4.8kWh capacity options

Dual MPPT

Suitable for multi-orientation roofs, high PV conversion efficiency

No Black Out

UPS≤20ms, ensuring the stability of household electricity consumption

Flexible Applications

Suitable for a wide variety of scenarios, equipped with wheels to make it easy to move.

# Specification

Model	Ultra Cube			
Model Name	D2.4XC-2.4 D2.4XC-4.8			(C-4.8
Battery Data				
Battery Type		LiFe	ePO <sub>4</sub>	
Single Cell Rated Energy (kWh)		2	2.4	
Single Cell Nominal Capacity (Ah)		Ę	50	
Number of modules	1			2
System capacity(kWh)	2.4	ļ	4	.8
Rated Voltage (V)			18	
Maximum Input power of the battery system (W)	120	0	24	.00
Maximum Output power of the battery system (W)	120	0	2000	2400
Cycle Life		60	000	I
Max Grid Charging Power (W)	120	0	16	80
Max Grid Continuous Charging Current (A)	25	1	3	10
Max PV Charging Power (W)	120	0	24	.00
Max PV Continuous Charging Current (A)	25		5	0
PV String Input Data			1	
Max.PV Input Power (W)	1200 2400			.00
Number of DC input	4			
Number of MPP Trackers	2			
Max. Input Voltage (V)	65			
MPPT Range(V)	18-60			
Max.Input Currrent(A)	28/28			
Off-grid Output Data				
Nominal Output Voltage (V)	120	230	120	230
Nominal Apparent Power (VA)	120	0	2000	2400
Nominal Output Frequency (Hz)		50	)/60	
THDv	≤3%			
Overvoltage Protection	Integrated			
Short Circuit Protection		Integ	grated	
Overtemperature Protection		Integ	grated	
AC Input Data (On-grid)				
Input Voltage Range (V)	90-132	180-264	90-132	180-264
Nominal AC Grid Frequency (Hz)		50	/60	
Max. AC Current From Utility Grid (A)	18 12 18		12	
Grid Input Overload Current (A)	20	12	20	12
Power Factor	≥0.97			
Grid To Off-grid Transfer Time (ms)	≤20			
Off-grid To Grid Transfer Time (ms)	≤10			
General Data				
Dimension (W/H/D mm)	540/560/252(Without Wheel)			
Weight (kg)	43.5 65.5			
Ingress Protection Rating	IP20			
User Interface			CD	
Communication with BMS		С	AN	
	Fan Cooling			



Generator Connectivity

Generator connectivity with multiple input methods and automatic generator On/Off control

No Black Out

Automatic UPS switching <4ms, ensuring the stability of household electricity consumption

Peak Shaving Control

Supports peak shaving control in both "self-use" and "generator" mode

Customizable Settings

6 customizable charge/discharge time settings,Up to 135A(3.6/5.0/6.0K) and 190A (8.0K) max charge/discharge current

Surge Power Backup Capability

10 seconds 200% surge power backup overload capability

Flexible Connection

Supports 1ph and 3ph flexible connection

#### Specification

Model	3.6L-1P-A	5.OL-1P-A	6.OL-1P-A	8.OL-1P-A
Input DC (PV side)				
Recommended max. PV power	5.76 kW	8 kW	9.6 kW	12.8 kW
Max. input voltage		60	0 V	
Rated voltage		33	OV	
Start-up voltage		90	OV	
MPPT voltage range		90 -	520 V	
Max. input current		16 A / 16 A		32A/2OA
Max. short circuit current		24 A / 24 A		36A/30A
MPPT number/Max. input strings number		2/2		2/3
Battery				1
Battery type		LiFe	PO4	
Battery voltage range		40 -	60 V	
Max. charge/discharge power	3.6 kW	5 kW	6 kW	8 kW
Max. charge/discharge current	80 A	112 A	135 A	190 A
Communication	CAN / RS485			'
Output AC (Grid side)				
Rated output power	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	4 kVA	5.5 kVA	6.6 kVA	8.8 kVA
Operation phase		1 / N	/ PE	
Rated grid voltage		220 V	/ 230 V	
Rated grid frequency		50 Hz ,	/ 60 Hz	
Rated grid output current	16.4 A / 15.7 A	22.7 A / 21.7 A	27.3 A / 26.1 A	36.4 A / 34.8 A
Max. output current	20 A	25 A	30 A	40 A
Power factor		>0.99 (0.8leadi	ng - 0.8lagging)	
Input AC (Grid side)				
Input voltage range	187-253 V			
Max. input current	25 A 32 A 40 A		50 A	
Frequency range	45-55 Hz/55-65 Hz			
Output AC (Back-up)				
Rated output power	3.6 kW	5 kW	6 kW	8 kW
Max. apparent output power	2 times of rated power, 10s			1
Back-up switch time	<4ms			
Rated output voltage	1/N/PE, 220 V/230 V			

Model	3.6L-1P-A	5.OL-1P-A	6.0L-1P-A	8.0L-1P-A
Rated frequency	50 Hz/60 Hz			
Max. output current	20 A	25 A	30 A	40 A
THDv (@linear load)			<2%	
Efficiency				
Max.efficiency		>9	96.9%	
EU efficiency		>9	96.5%	
Protection				
DC reverse-polarity protection			Yes	
Ground fault monitoring			Yes	
Integrated AFCI(DC arc-fault circuit protection)	Yes			
Protection dass/Over voltage category	I/II (PV and BAT), III (MAINS and BACKUP and GEN)			I GEN)
General Data				
Dimensions(W/H/D)	406/560/205mm 406/560/21			406/560/215 mr
Weight	24 kg 26k			26kg
Topology		High frequency is	solation (for battery)	
Operating ambient temperature range		- 40	- 60 °C	
Ingress protection		I	P66	
Cooling concept	Natura	convection	Intelligent redu	ndant fan-cooling
Max.operation altitude	4000m			
Certification & Standard	NRS 097-2-1, IEC/EN 62109-1/-2, IEC/EN 61000-6-1/-2/-3/-4			
Features				
DC connection	MC4 plug (PV port)/ Terminal Block (BAT port)			
AC connection	Terminal Block			
Display	LED + APP			
	RS485, CAN, Optional: Wi-Fi, LAN			

# D8.0HS/D12.0HS

D8.0HS/D12.0HS is an inverter designed for hybrid power systems, with 4-channel MPPT input and high efficiency of PV conversion. It also supports 150% PV overload, and a UPS switching time ≤ 10ms, to protect uninterrupted home power.



### Features and Advantages

4 MPPT

60-550V wide MPPT voltage range, 150% PV overload

Ultra Safe

DC&AC side secondary lightning protection, built-in AFCI, supports DC Arc detection

Generator Connectivity

Extreme backup capability, powers loads and charges the battery

No Black Out

UPS<10ms, ensuring the stability of household electricity consumption

IP65 Protection

Fearless of outdoor insatallition, strong environmental adaptability

Intelligent O&M

Real-time system monitoring and OTA updates

27 | Discover Your Nature | Discover Your Nature

# Specification

Model	D8.OHS	D12.OHS	
Battery Input Data			
Battery Type	LiFePO <sub>4</sub>		
Battery Voltage Range (V)	80~490		
Max.Charge/Discharge Current (A)	40/40		
Max.Charge/Discharge Power (W)	8800	13200	
PV String Input Data			
Max.PV Input Power (W)	12000	18000	
Max.PV Input Voltage (V)	600		
MPPT Range (V)	60~550		
SPS Start-up Voltage (V)	60		
MPPT Range For Nominal Power (V)	200~500	200~500	
NominalPVInputVoltage (V)	390		
Max.Input Current (A)	16		
Max.Short Crrent (A)	23		
No.of MPPTrackers	3	4	
Strings per MPPTracker	1		
AC Output Data (On-grid)			
Nominal Power Output To Grid (VA)	8000	12000	
Max.Power Outpur To Grid (VA)*	8000	12000	
Max.Power From Grid (VA)	8000 12000		
Nominal Output Voltage (V)	230		
Nominal Output Frequency (Hz)	50		
Nominal.AC Current To Grid (A)	34.8	52.2	
Max.AC Current From Grid (A)	34.8	52.2	
Output Power Factor	Adjustable from 0.8 lead	ing to 0.8 lagging	
Output THDi (Nominal Power)	<3%		
AC Output Data (Back-up)			
Norminal. Output Power(VA)	8000 12000		
Peak Output Power(VA)	12000, 10s	16000, 10s	
Rated. Output Current(A)	34.8 52.2		
Nominal Output Voltage (Vac)	230		
Nominal Output Frequency (Hz)	50		
Output THDv (@Linear Load)	<3%		
Switch time	<10ms		

Model	D8.0HS D12.0HS		
Generator input	Yes		
Efficiency			
MPPT effciency	99.9%		
Max.effciency	97.5%		
Protection			
Anti-island Protection	Integrated		
PV&Battery AFCI	Integrated		
PV Reverse Protection	Integrated		
Battery Reverse Protection	Integrated		
Residual Current Monitoring Unit	Integrated		
Over Current/Voltage Protection	Integrated		
DC Switch(PV)	Integrated		
Surge Protection	DC Type II /AC Type III		
Communication Interface			
Battery BMS	CAN		
EMS	RS485		
Meter	RS485		
E-Stop	YES (DI)		
Dry-Point	YES (DO)		
Cloud	Wi-Fi.Bluetooth		
Display/User Interface	LED/APP		
General Data			
Operating Tenperature Range (F)	-13-140(-25-60°C)		
Relative Humidity (%)	0-100%		
Operating Altitude (m)	3000m		
Cooling	Nature Cooling		
Noise (dB)	<35		
Weight (kg)	30		
Size(W/H/D)(mm)	486*730*210		
Installation	Wall-Mounted		
Endosure Type	IP65		
Certifications&Standards			
Grid Regulation	NRS 097		
Safety Regulation	IEC/EN 62109-1, IEC/EN 62109-2		
EMC	IEC/EN 61000-6-1/2/3/4		

29 | Discover Your Nature | Discover Your Nature



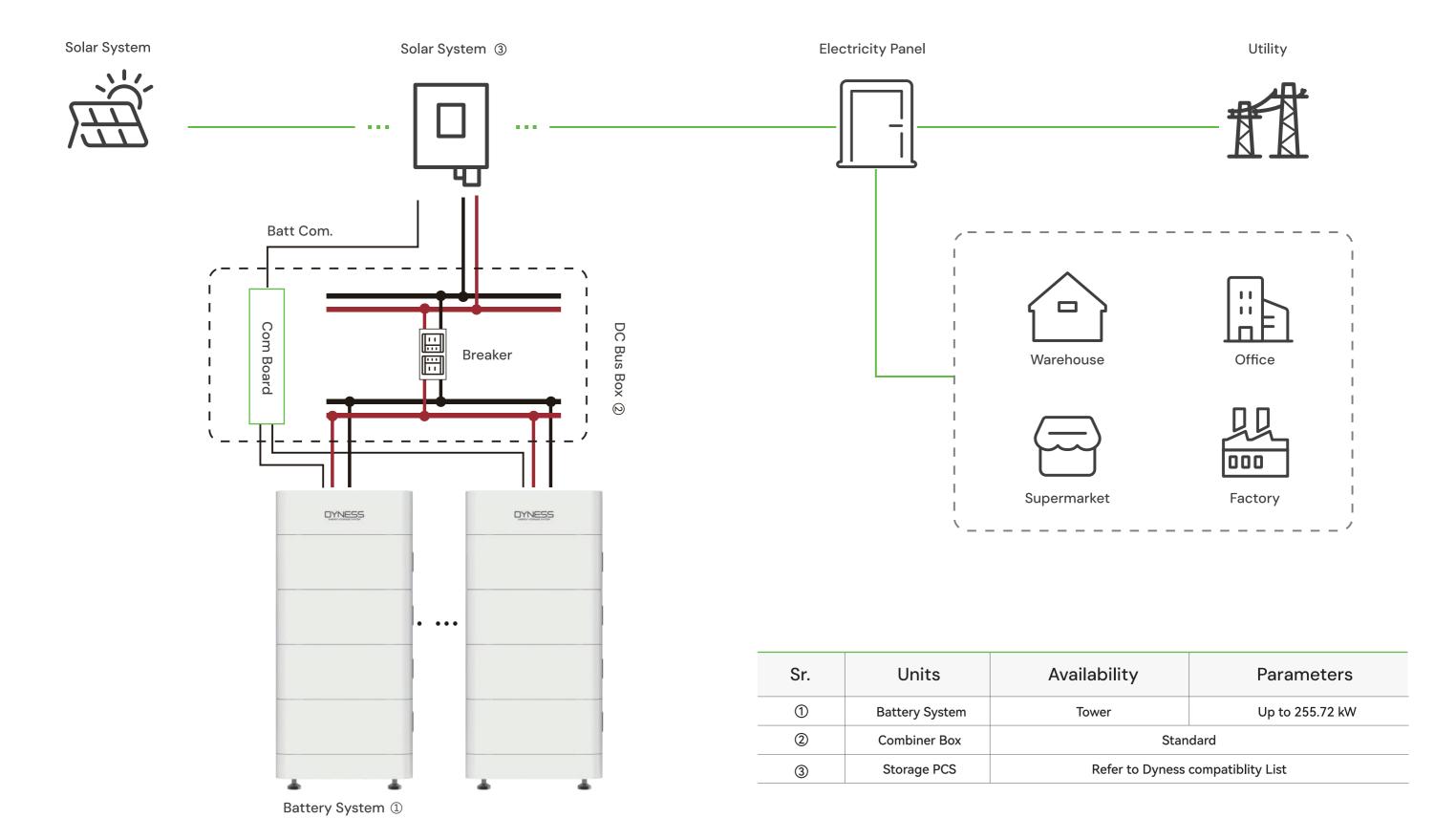
# Dyness Tower Matching Guide (Dyness D12.0HS Single Phase Hybrid Inverter)

	Dyness Tower Matching Guide				
	Inverter D12.0HS		OHS		
	Quantity of Tower	2	3	4	5
Tower – T7	Max. charging power (kW)	7.68	7.68	7.68	7.68
	Max. discharging power (kW)	7.68	7.68	7.68	7.68
	Max. charging/discharging current(A)	40	40	40	40
	Nominal battery energy (kWh)	14.2	21.3	28.4	35.5

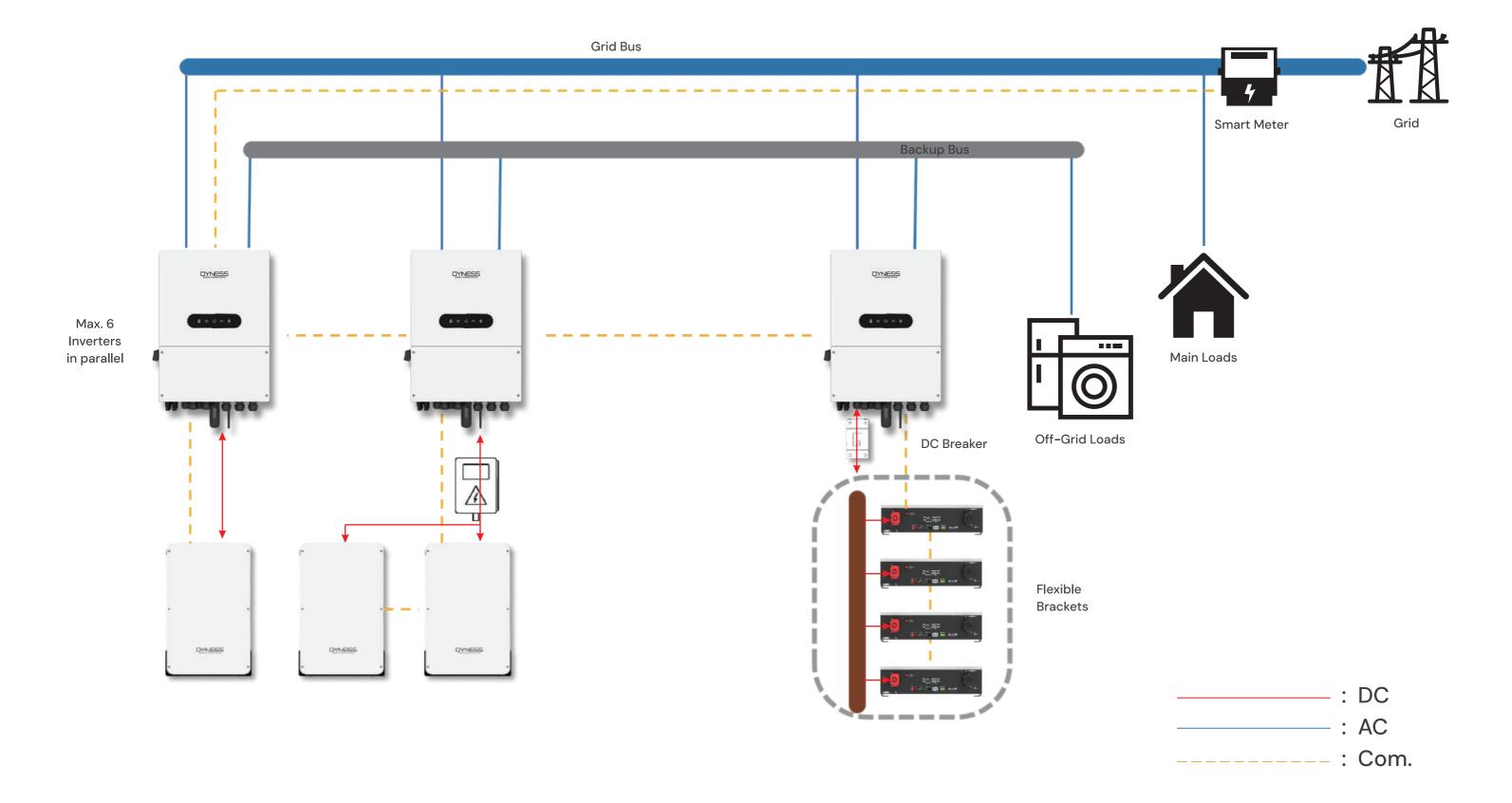
	Dyness Tower Matching Guide					
	Inverter	D12.0HS				
	Quantity of Tower	2	3	4	5	
Tower – T10	Max. charging power (kW)	11.5	11.5	11.5	11.5	
	Max. discharging power (kW)	11.5	11.5	11.5	11.5	
	Max. charging/discharging current(A)	40	40	40	40	
	Nominal battery energy (kWh)	21.3	31.98	42.6	53.25	

	Dyness Tower Matching Guide				
	Inverter	D12.0HS			
	Quantity of Tower	2	3	4	5
Tower-T14	Max. charging power (kW)	13.2	13.2	13.2	13.2
	Max. discharging power (kW)	13.2	13.2	13.2	13.2
	Max. charging/discharging current(A)		40	40	40
	Nominal battery energy (kWh)	28.4	42.63	56.8	71

# Product topology diagram

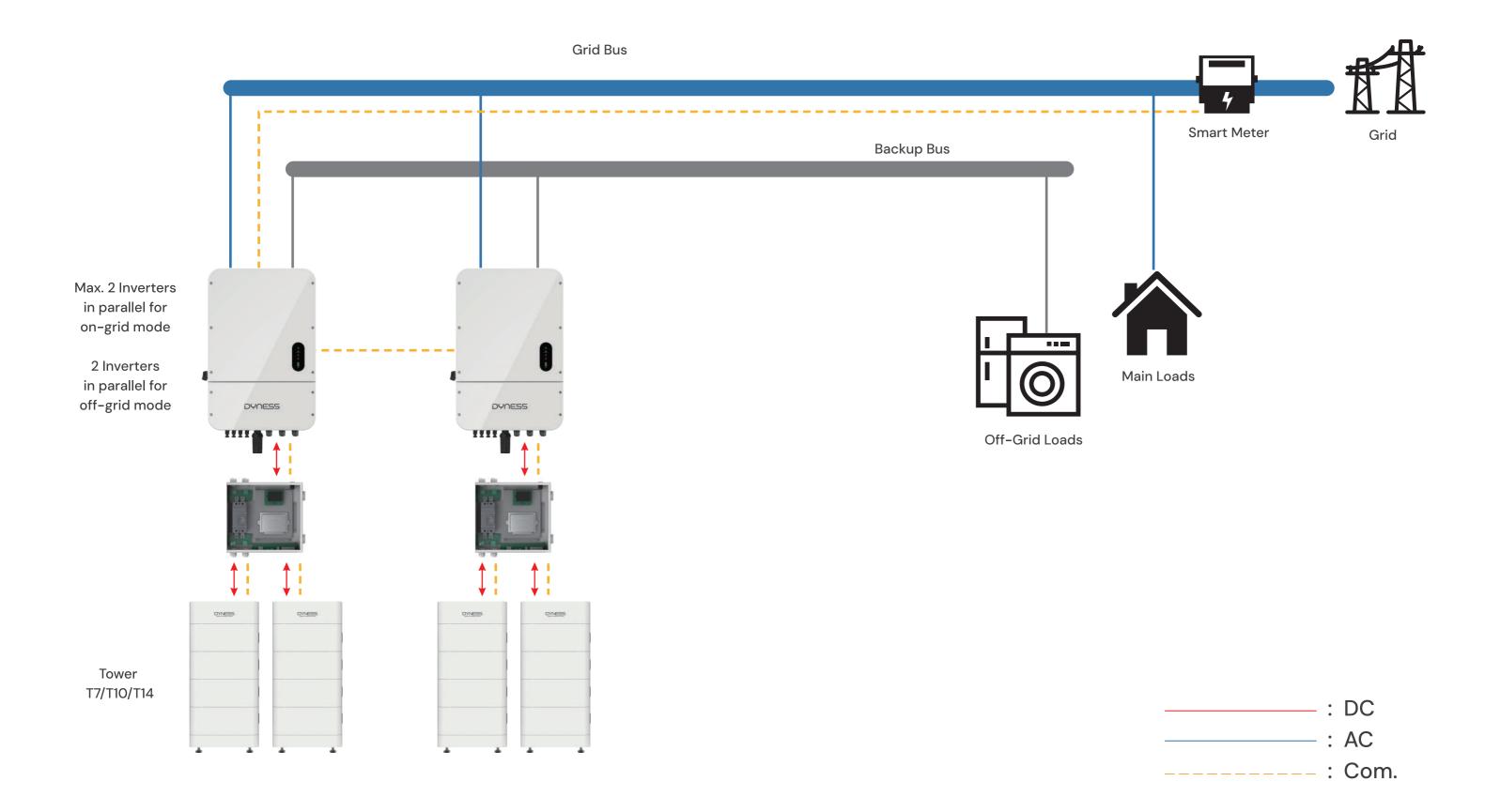


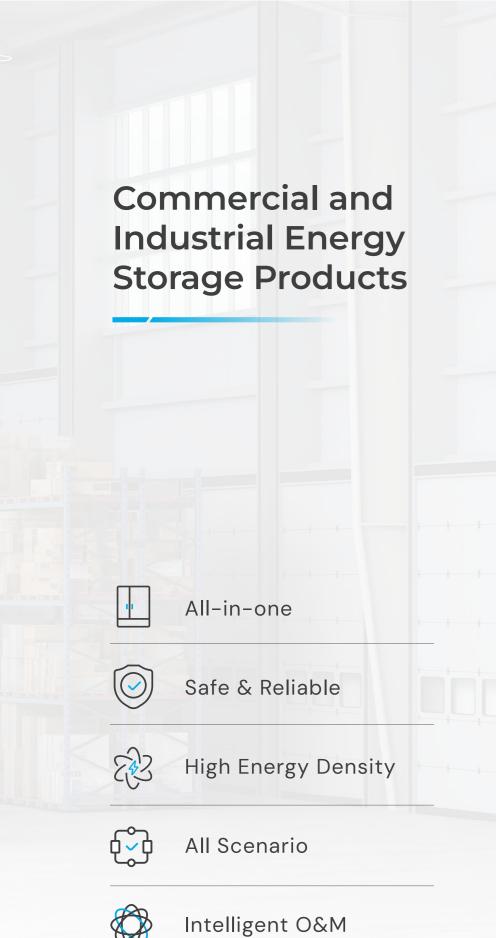
# Dyness Energy Storage System Parallel Connections



35 | Discover Your Nature | Discover Your Nature

# Dyness Energy Storage System Parallel Connections









Flexible Expansion

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

Economical

Rack structure, less footprint, lower cost, higher space utilization

Long-term Reliability

LFP cells, Intelligent BMS monitors battery status in real time

# Specification

Model	HV51100
Battery Type	LiFePO₄
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	IP2O
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

<sup>\*</sup> 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	

Discover Your Nature | 42 41 | Discover Your Nature



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

Long-term Reliability

LFP cells, 6000+ cycles

Ultra Safe

Intelligent fire extinguishing system, react within 5 seconds

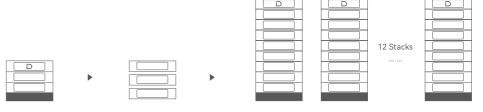
🔀 Easy Installation

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

Module Mixing

Free mixing of modules within three years

#### Specification



Model	STACK100
Battery Type	LiFePO₄
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	≥6000 cycles
Single Cluster Dimension[W*D*H] (mm)	590*390*(233+133*n), "n" stands for the number of battery modules
Charging Temp. Range	0~55°C
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.

<sup>\*</sup> Test conditions: 0.2C Charging& Discharging. @25 °C, 95% DOD



Flexible Expansion

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

Resistance up to C3/C5 corrosion level, Handles harsh environments such as high humidity and salt spray corrosion with ease. Simple O&M

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

Safe & Reliable

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

#### Specification

Maralal			
Model	BF100-C70	BF100-C80	BF100-C100
Battery	1		
Battery Type	LiFePO <sub>4</sub>		
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%		
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		
Display	Touch screen		
Elevation	3000m (Derating above 2000m)		
Fire Protection	Aerosol (Optional Perfluorohexanone)		
Communication	Ethernet/4G/RS485		
Certification	CE, LVD, UN38.3		



Flexible Expansion

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

8 No Black Out

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

6 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 <sub>4</sub>	
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%	
Air Conditioner Power	3kW (Cooling), 1kW (Heating)	
Temperature	-20~50°C(Derating above 40°C)	
Humidity	O~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	
JOI UIIIGUUII	CQC, CE, TOV	

# **Residential Application Cases**



• 40.96kWh 8 units DL5.OC South Africa



• **61.44kWh** 12 units DL5.0C Yemen



• 19.2kWh 4 units A48100 South Africa



• 14.21kWh Tower T14 Sri Lanka



• 10.66kWh Tower T10 Czech Republic



• 48kWh 10 units A48100 Lebanon



• 10.24kWh Powerbox G2 Romania

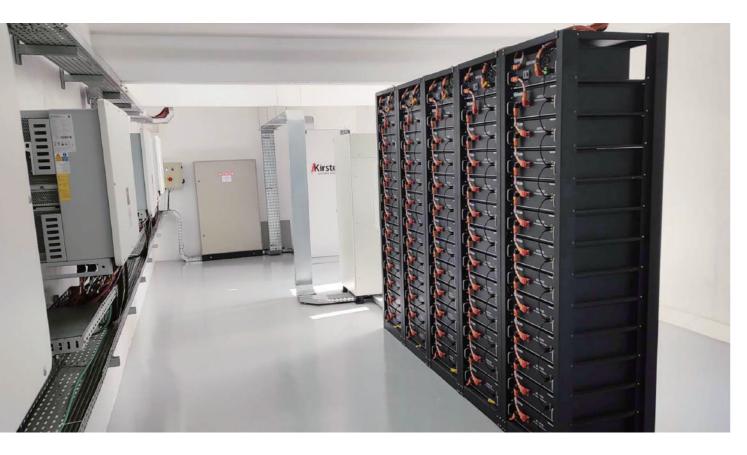


• 172.8kWh 48 units B3 South Africa



• **61.44kWh** 6 units Powerbox Pro South Africa

# **C&I Application Cases**



• Brazil 100kW/307kWh
PowerRack HV4 Dynamic capacity expansion (peak-shaving) + PV consumption



• Netherland DH200F 300kW/645kWh Dynamic capacity expansion + PV consumption+ Charging pile



• Spain DH200Y 500kW/1160kWh Self-generation and self-use+PV consumption



SS Dyness
SS Dyness
SS Dyness
SS Dyness

Bulgaria

BowerPook UV/

112.64 kWh

PowerRack HV4F Peak-to-valley arbitrage+Self-generation and self-use



• The Netherlands DH200F 100kW/215kWh PV consumption (self-use)



• China DH200F 5MW/18MWh Peak-shaving+PV consumption



• China DH200F 100kW/215kWh 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 Centers

Worldwide Service Locations



# Online

Sophisticated Online Service Platform 200+ Online Service Engineers https://support.dyness.com



#### **Professional**

Localized technical support and costomized service solutions.



#### **Efficient**

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



# Responsible

Customer centricity and 98% customer satisfaction

