



Store Energy, Save The Planet



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Dyness Battery

LiFePO4 Energy Storage System



SMART ENERGY
COUNCIL
SOLAR, STORAGE, SMART ENERGY



DYNESS
ENERGY STORAGE SYSTEM

COMPANY PROFILE

The growing popularity of solar rooftop installation on residential and commercial building is increasing interest in batteries that could store electricity from those installations.

Such battery storage systems could benefit homeowners, by giving them more control over how and when they obtain the power they need, while helping utilities to regulate the peak and frequency by shifting demand to off-peak hours and smoothing out the load on the system.

R&D Center · Xi'an City



About Dyness

Dyness owns the professional team with top class experts in the battery storage industry. All products in our company are produced according to international standards, and passed TUV / CE / EN62619 / UN38.3 / IEC62040 testing issues. We also formed a joint laboratory with Shaanxi Normal University, focusing on power battery research and development.

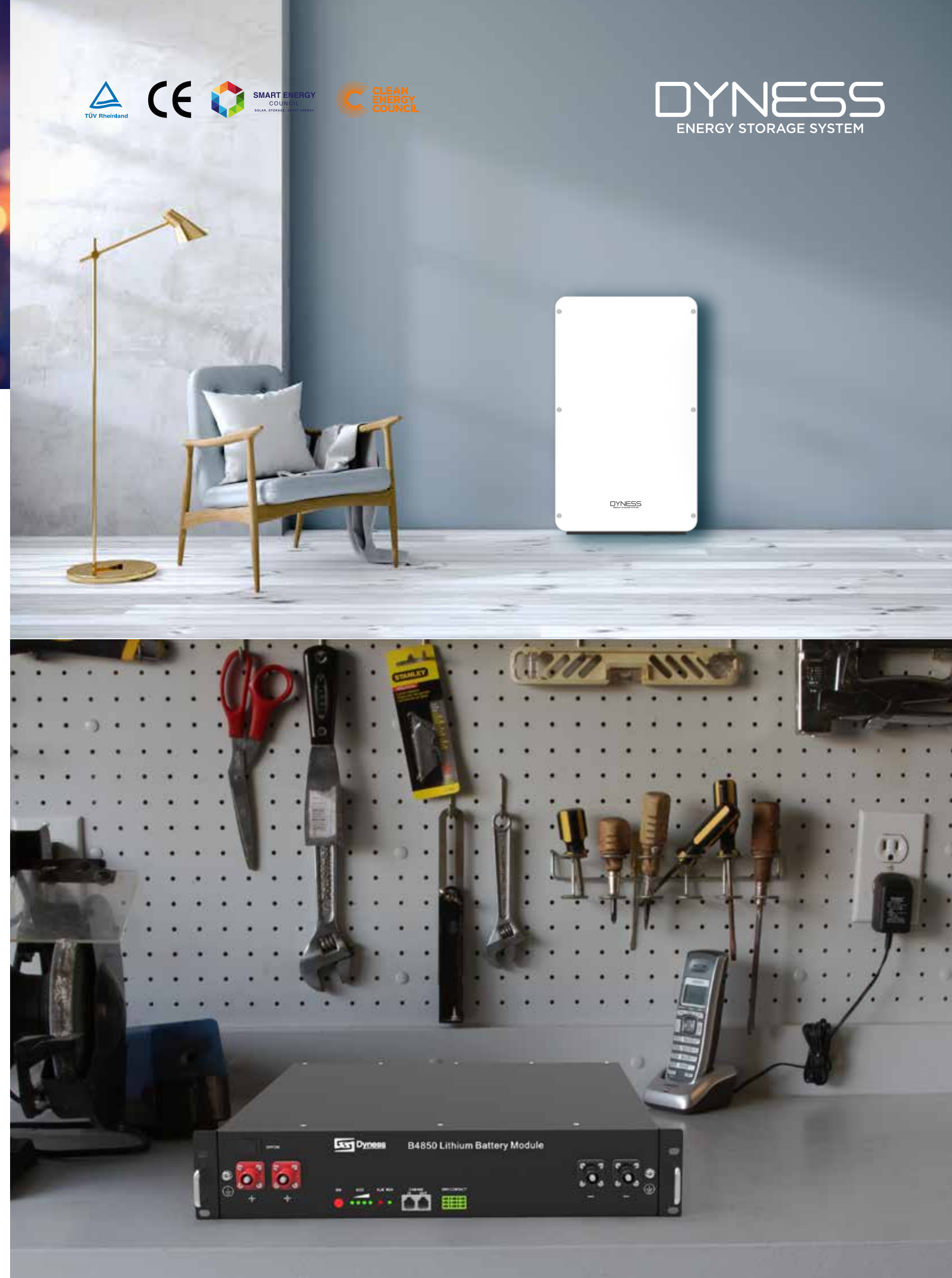
Our energy storage system stores excess power produced from solar in daytime, it can be used at night to increase greater energy self-sufficiency and security, or used at peak time to reduce household electric charges. Our battery is suitable for existing solar PV systems, also easy to be installed with new solar systems.

We, Dyness devote ourselves to responsible engineering of the safest, greenest possible future for you and your family. We have launched our latest Battery Energy Storage System (BESS) Powerbox to Australia, South-America, Africa, Europe with moderate price and top class quality.

Let's start using the sunshine by schedule!



DYNESS
ENERGY STORAGE SYSTEM



Dyness B4850

Battery module

Intelligent

Safe

Modular



【Intelligent】

- Each module is equipped with an independent BMS system

【Compact design】

- Weight/Kg 22
- Size/mm 480 * 360 * 90
- Practical pull ear design improves operation convenience

【Safe】

- Safe lithium iron phosphate battery cell
- Compact size ultralight module

【Intelligent management】

- Dyness is equipped with intelligent BMS for each battery pack to manage modules effectively.
- Compared with the traditional module, B4850 can meet the capacity storage and greatly enhance the cycle life.

【Application】

- The Dyness battery B4850 module is widely used in energy storage and electrical products. Household energy storage systems; Centralized power station energy storage system.

Intelligent · Safe · Modular



SPECIFICATION

Model	B4850
Battery Type	LiFePO4
Nominal Battery Energy	2.4kWh
Nominal Capacity	50Ah
Nominal Voltage	48V
Charging Cut-off vol.	54V
Discharging End-off vol.	40.5V
Recommend C Rate	0.5C
Continuous Max C Rate	1C
Net Weight	22Kg
Dimension [W*D*H]	480*360*90mm
Charging Temp. Range	0 ~ 50℃
Discharging Temp. Range	-20 ~ 50℃
Calendar Life ^[1]	6000 Cycles
Protection Level	IP20
Communication	CAN / RS485 / DRY CONTACT
Certification & Safety Standard	TUV/CE/EN62619/IEC62040/UN38.3/CEC Accredited
Warranty	10 Years

[1] Test conditions: 0.2C Charging/Discharging, @25℃, 80% DoD

B3



Features and advantages

- LiFePO4 battery, Safe, Longer life span
- Modular design, Easy to stack, Quick installation
- Larger energy capacity
- Natural cooling with optional heat/fan configuration
- Wide temperature range of -20~50°C



SPECIFICATION

Model	B3
Nominal Energy	3.6kWh
Nominal Capacity	75Ah
Nominal Voltage	48V
Max. Continuous Discharge Current	50A
Max. Continuous Charge Current	50A
Charging Cut-Off Vol.	54V
Discharging End-Off Vol.	40.5V
Net Weight	30Kg
Dimension[W*D*H]	400*360*133.5mm
Protection Level	IP20
Calendar Life ^[1]	6000 Cycles
Charging Temperature Range	0~50°C
Discharging Temperature Range	-20~50°C
Communication	CAN / RS485
Configuration	40 modules parallel at most
Recommend C Rate	0.5C
Warranty	10 years

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80%Dod

Dyness

DYNESS
ENERGY STORAGE SYSTEM

H2



Features and advantages

- Maximum safety performance with LFP technologies
- Built-in aluminum heat sink, optional heating solutions
- Compact design with flexible size options
- Free configuration in parallel and series
- Black start function available, quick installation
- Stacked in Powercube cabinet with IP65 protection level



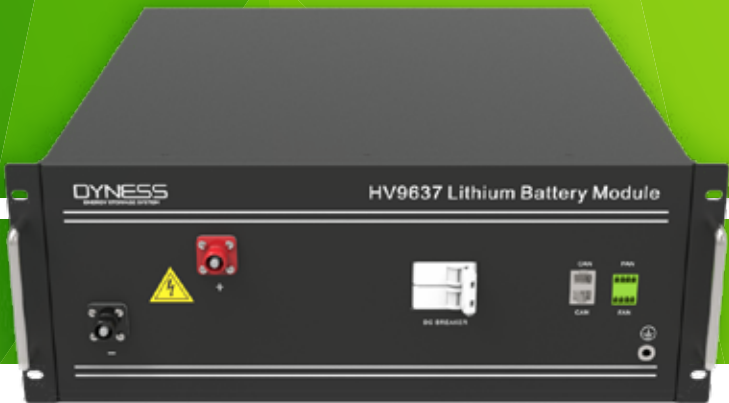
SPECIFICATION

Model	H2
Battery Type	LiFePO4
Usable Energy	2.0kWh
Nominal Capacity	25Ah
Nominal Voltage	80V
Maximum Continuous Discharge Power	2kW
Maximum Continuous charge Power	2kW
Net Weight	19Kg
Dimension[W*D*H]	480*434*90mm
Protection Level	IP20
Calendar Life ^[1]	6000 Cycles
Charging Temperature Range	0~45°C
Discharging Temperature Range	-10~45°C
Communication	CAN
Warranty	10 Years

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80%Dod

Dyness

H3



Features and advantages

- LiFePO4 battery, Safe, Longer life span
- Modular design, Easy to stack, Quick installation
- Flexible in series to acheive higher voltage
- Natural cooling with optional heat/fan configuration
- Wide temperature range of -20~50°C



SPECIFICATION

Model	H3
Battery Type	LiFePO4
Usable Battery Energy	3.55kWh
Nominal Capacity	37Ah
Nominal Voltage	96V
Working Voltage	75~109V
Nominal Power Output	1.77kW
Max. Power Output	3.55kW
Recommend Charging Current	18.5A
Recommend Discharging Current	18.5A
Net Weight	37Kg
Dimension [W*D*H]	400*434*177mm
Calendar Life ^[1]	6000 cycles
Configuration	Up to 26.88kWh total energy, 8 modules series at most
Communication	CAN
Warranty	10 Years

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% Dod

Dyness Powerbox

【Powerbox】

Adopts LiFePO4 chemistry battery with safety performance and long life time, which offers you four capacities to meet your more requirements.

TUV Certified · CEC Accredited · IP65 Protection · Flexible Expansion



Features and advantages

- Compact Size & Light Weight
- High Power Output & Usable Energy Ratio
- Modular Design & Expandable System
- Safest Battery & Perfect Compatibility
- Natural cooling & Easy Installation
- Certifications Available



SPECIFICATION

Model	Powerbox			
Battery Type	LiFePO4			
Battery Module	1 Module	2 Modules	3 Modules	4 Modules
Battery Capacity [Ah]	50	100	150	200
Nominal Battery Energy [kWh]	2.4	4.8	7.2	9.6
Max Output Power [kW]	2.4	4.8	4.8	4.8
Net Weight [Kg]	47	69	91	113
Dimension [H*W*D, mm]	928*555*210			
Working Voltage [V]	40.5~54			
Operating Temp. Range [°C]	-20~50			
Calendar Life [Cycles] ^[1]	6000			
Nominal Voltage [V]	48			
Protection Level	IP65			
Communication	CAN / RS485 / DRY CONTACT			
Certification & Safety Standard	TUV/CE/EN62619/IEC62040/UN38.3/CEC Accredited			
Scalability [kWh]	Up to 3 units to parallel			
Compatible Inverters	Goodwe Victron Imeon Solis Luxpower Growatt GMDE Sofar Voltronic Deye More brands will be announced			
Warranty	10 Years			
Warranty Document Supplied	Yes			
Color	White			
Alarms	Overcharge Overdischarge Overcurrent Overtemperature Short Circuit			
Pros	Can be used in both off-grid and hybrid setups, compact design, modular expansion			
Monitoring & Protection	Each module has BMS, breaker embedded in system			

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% DOD



Dyness Powercube

Dyness Powercube is tailor made for larger residential and light commercial.
TUV Certified · CEC Accredited · IP65 Protection · Flexible Expansion



Features and advantages

- Compact Size & Light Weight
- High Power Output & Usable Energy Ratio
- Modular Design & Expandable System
- Safest Battery & Perfect Compatibility
- Natural cooling & Easy Installation
- Certifications Available



SPECIFICATION

Model	Powercube				
Battery Type	LiFePO4				
Battery Module	5 Modules	6 Modules	7 Modules	8 Modules	9 Modules
Battery Capacity [Ah]	250	300	350	400	450
Nominal Battery Energy [kWh]	12	14.4	16.8	19.2	21.6
Working Voltage [V]	40.5~54				
Operating Temp. Range [°C]	-20~50				
Calendar Life [Cycles] ^[1]	6000				
Nominal Voltage [V]	48				
Protection Level	IP65				
Communication	CAN / RS485 / DRY CONTACT				
Certification & Safety Standard	TUV/CE/EN62619/IEC62040/UN38.3/CEC Accredited				
Scalability [kWh]	Up to no limit				
Compatible Inverters	Goodwe Victron Imeon Solis Luxpower Growatt GMDE Sofar Voltronic Deye More brands will be announced				
Warranty	10 Years				
Warranty Document Supplied	Yes				
Color	White				
Alarms	Overcharge Overdischarge Overcurrent Overtemperature Short Circuit				
Pros	Can be used in both off-grid and hybrid setups, compact design, modular expansion				
Monitoring & Protection	Each module has BMS, breaker embedded in system				

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% DOD

Dyness Rack System

Take time for greater control in energy with Dyness Rack System

TUV Certified · CEC Accredited · IP20 Protection · Flexible Expansion



Features and advantages

- LiFePO4 energy storage system , longer life span
- Safest kind battery with modular design
- Quick installation and wide operation temperature range
- Flexible control , cover all needs in commercial fields
- Keep you powered on all the time, cut the charges now



SPECIFICATION

Model	Dyness Rack System
Nominal Voltage	48V
Operating vol. Range	40.5-54V
Nominal Capacity	800Ah
Nominal Battery Energy ^[1]	38.4kWh
Max Charging Current	50-800A can set
Protection Level	IP20
Operating Temperature Range	-20~40°C
Humidity	10%~90% no condensing
Noise	≤70dB
Cabinet Dimension ^[1]	560*600*1900mm
Weight	430Kg
Communication	CAN / RS485 / DRY CONTACT
Certification & Safety Standard	TUV/CE/EN62619/IEC62040/UN38.3/CEC Accredited
Compatible Inverters	Goodwe Victron Imeon Solis Luxpower Growatt GMDE Sofar Voltronic Deye More brands will be announced
Monitoring & Protection	Each module has BMS, breaker embedded in system
Scalability	Easily Customized
Alarms	Overcharge Overdischarge Overcurrent Overtemperature Short Circuit
Warranty	10 years

[1] The energy and cabinet size can be designed according to the power supply time required by customer.

Dyness Powercube HV

Safe and Reliable ▪ IP65 Protection ▪ Flexible Size ▪ Higher Efficiency



SPECIFICATION

Model	Powercube H3-7	Powercube H3-10	Powercube H3-14	Powercube H3-17
Usable energy	7.10kWh	10.65kWh	14.20kWh	17.76kWh
Nominal capacity	37Ah	37Ah	37Ah	37Ah
Nominal voltage	192V	288V	384V	480V
Max. continuous discharge power	7kW	10kW	14kW	17kW
Max. continuous charge power	7kW	10kW	14kW	17kW
Net weight	120Kg	155Kg	190Kg	235Kg
Dimension [W*D*H]	1040*600*526	1040*600*526	1040*600*526	1218*600*526
Protection level	IP65	IP65	IP65	IP65
Calendar life ^[1]	6000 Cycles	6000 Cycles	6000 Cycles	6000 Cycles
Charging temp. range	0~45°C	0~45°C	0~45°C	0~45°C
Discharging temp. range	-10~45°C	-10~45°C	-10~45°C	-10~45°C
Internal battery module	H3	H3	H3	H3
Module connection	Series	Series	Series	Series
Module number	2	3	4	5
Communication	CAN	CAN	CAN	CAN
Warranty	10 year	10 year	10 year	10 year

[1] Test conditions: 0.2C Charging/Discharging, @25°C, 80% DoD

Features and advantages

- Maximum safety performance with LFP technologies
- Higher system efficiency and power output
- Compact design with flexible size options
- IP65 protection for indoor and outdoor use
- Compatible with leading inverter brands
- Natural cooling and quick installation



Dyness Tower

Safe and Reliable ▪ IP65 Protection ▪ Flexible Size ▪ Quick Installation



SPECIFICATION

Model	Tower T10	Tower T14	Tower T17	Tower T21
Usable Energy	10.65KWh	14.20KWh	17.76KWh	21.31KWh
Nominal Capacity	37Ah	37Ah	37Ah	37Ah
Nominal Voltage	288V	384V	480V	576V
Maximum Continuous Discharge Power ^[2]	6.39KW	8.52KW	10.65KW	18.78KW
Maximum Continuous Charge Power ^[2]	6.39KW	8.52KW	10.65KW	18.78KW
Net Weight	149Kg	192Kg	235Kg	278Kg
Dimension[W*D*H]	800*510*510mm	988*510*510mm	1175*510*510mm	1360*510*510mm
Protection Level	IP54	IP54	IP54	IP54
Calendar Life ^[1]	6000 Cycles	6000 Cycles	6000 Cycles	6000 Cycles
Charging Temperature Range	0~45℃	0~45℃	0~45℃	0~45℃
Discharging Temperature Range	-10~45℃	-10~45℃	-10~45℃	-10~45℃
Internal Battery Module	T9637	T9637	T9637	T9637
Module Connection	series	series	series	series
Module Number	3	4	5	6
Communication	CAN	CAN	CAN	CAN
Warranty	10 Years	10 Years	10 Years	10 Years
Compatible Inverter	Goodwe, Luxpower, more brands are under testing			
Certification	TUV/CE/IEC62619/IEC62040/UN38.3			

[1] Test conditions: 0.2C Charging/Discharging, @25℃, 80% Dod

[2] Maximum Continuous Discharge/Charge Power when communicate with inverter is 0.6C



Features and advantages

- Maximum safety performance with LFP technologies
- Built-in aluminum heat sink, optional heating solutions
- Compact design with flexible size options
- IP54 protection for indoor and outdoor use
- Compatible with leading inverter brands
- Black start function available, quick installation