



ALL IN ONE 100KW/215KWH ESS

MICROGRID SYSTEM SOLUTIONS



High Efficiency

- Transformer-less design, higher system efficiency
- Wide AC Grid voltage range
- Smart Air cooling, energy saving
- Single battery string. No circular current. Saving battery capacity loss



Safety & Reliability

- Full function of heat management, fault detection and protection
- Inbuilt BMS, PCS, MPPT and EMS. Multiple levels of software & Hardware protection
- Two level fire extinguisher system



Flexible Application

- Modular Design, flexible configuration, small footprint
- Power module supports "N+1" redundancy
- All in One design. Easy Installation & maintenance



Full Functional

- Fast reaction of Active/ Reactive power adjustment
- STS Inbuilt. Supporting On grid/ off grid transfer without interrupted
- Standard with EMS function. Peak saving, virtual enlargement, EPS, New Energy power absorption

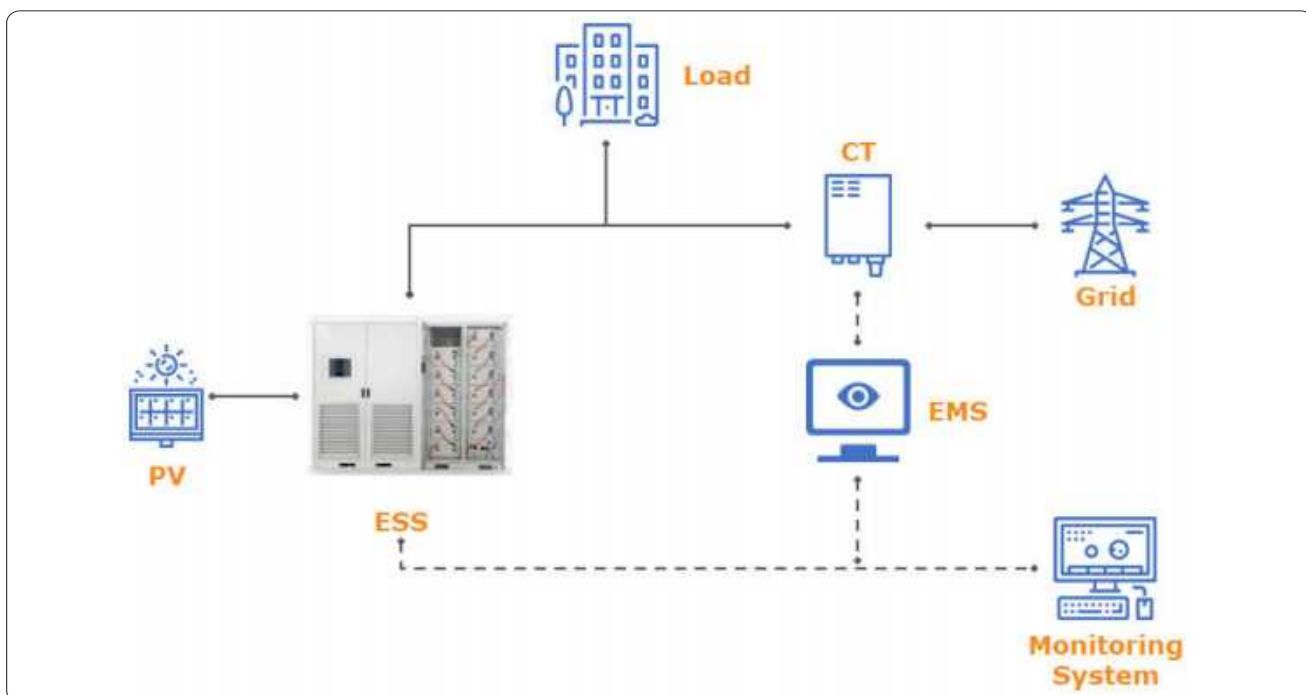
MODEL	HNESS-W215
Battery Specification	
Battery Type	LFP
Cell Capacity	3.2V/280Ah
PACK Config	1P16S
PACK Qty.	15
Rated Capacity	215kWh
Rated Voltage	768V
Voltage Range	650~900Vdc(3P4L)
Charge/Discharge Rate	0.5C Rated
DOD	95%
Cooling System	Air Cooling
Fire Fighting	Two Level Protection. Standard: Aerosol+ HFC-227ea. Optional: PERFLUORO
AC Specification	
Rated Voltage	400Vac
Voltage Range	320Vac~460Vac
Frequency Range	50/60±2.5Hz(50/60Hz self-adaption)
Grid System	3P+N+PE
Transformer Ratio	270/400
Rated Power	100kW
Peak Power	110kW
Rated Current	144A
Over load Capacity	≤110% Continues Running. ≤120% 1 Min
Power Factor	-0.99~+0.99
On Grid THDI	< 3%, Full Load
DC Voltage Range	600~900Vdc
Max. DC Current	192A
Rated Voltage(Off grid)	400Vac
Rated Frequency(Off grid)	50/60±1%
THDV(Off grid)	< 3%, Full Load
Rated Power(Off grid)	100kW
Load Unbalance(Off grid)	100%
Over Load Capacity(Off grid)	≤110% Continues Running. ≤120% 1 Min
STS Module	Inbuilt
Max STS Power	200kW
STS Rated Voltage	400Vac
STS Max. Current	290A
Transfer Time(On-off Grid)	≤20ms

PV Specification

Max. PV Input Voltage	1000Vdc
Max. PV Input Power	120kW
No. of MPPT	2
String per MPPT	1
MPPT Voltage Range	250~850Vdc
MPPT Current	200A(100A/100A)
MPPT Efficiency	99% Max.

System Specification

Temperature Range	-25~65°C, > 45°C power derating
Storage Temperature	-40~75°C
Noice	< 70dB
Dimension(W*D*H)	2250*1600*1190mm/1600*1280*2360mm
Weight	3980kg/2800kg
Protection Level	IP54
Cooling Type	Industry level Air Conditional.
EMS	Manual Mode, Peak saving, virtual enlargement, New Energy power absorption, Anti-flow mode. Support remote management and control
BMS Communication	RS485, CAN
EMS Communication	RS485, TCP/IP
Certificates	EN62109-1/-2, EN62477-1, EN61000-6-2, EN61000-6-4, South Africa NRS097-2-1:2017, Pakistan & India IEC61727, IEC62116, IEC 61683





Wall Mount Battery Series1

25.6V200Ah/5.12KWH

51. 2V100Ah/5.12KWH

PRODUCT INTRODUCTION

LFP-Powerwall box, a Low-voltage lithium battery. With a scalable modular design, the capacity range can be expanded from 5.12kWh to 51. 2kWh. The modules are connected by cables to support high-power work and are easy to install and maintain. Long life technology ensures more than 6000 cycles with 90% DOD.

Convenient

Wall mounted battery&compact design,
ease of installation

Compatible

Compatible with multiple inverters
Multiple communication
interfaces RS232, RS485, CAN

Compliant

IP50 Protection,
indoor application

Scalable

Use of parallel connection;
from 2 to 10 modules

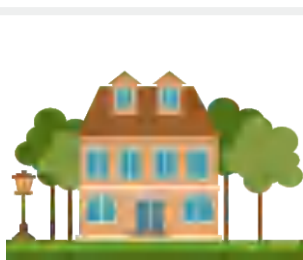
Sufficient

High energy density,
110Wh/kg

Safe

Multiple protection
LiFePO4 material, safe and long life

APPLICATION SCENARIOS



Family



Small store



Office



Church

Technical Specifications(BAT)

Model	TH-24200-W	TH-51100-W
Nominal Voltage	25.6V(8series)	51.2V(16series)
Cell model/Configuration	3.2V 100Ah/8S2P (25.6V)	3.2V 100Ah/16S1P (51.2V)
Capacity(Ah)	200AH	100AH
Rated Energy(KWH)	5.12KWH	
Usable Energy(KWH)	4.6KWH	
Max. Charge/Discharge Current(A)	100A /100A	50A /100A
Voltage Range(Vdc)	20~29.2V	40~58.4V
Scalability	Up to 10 parallel	
Communieation	RS232-PC, RS485-Inverter, Canbus-Inverter	
Cycle Life	≥6000cycles@25°C , 90% DOD , 60%EOL	
Design Life	≥15 Years(25°C)	

MECHANICAL SPECIFICATIONS

Weight(Approx)(KG)	Approx:48kg	Approx:48kg
Dimension (W/D/H)(mm)	580*390*185 mm	
Installation Mode	Wall hanging	
IP Grade	IP50	

SECURITY AND CERTIFICATION

Safety(Pack)	CE-EMC,UN38.3,MSDS
Safety(Cell)	UN38.3,MSDS,IEC62619,CE,UL1973,UL2054
Protection	BMS, Breaker

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature(°C)	Charge:-10°C~50°C ; Discharge : -20°C~50°C
Altitude (m)	≤2000
Humidity	≤95%(Non-condensing)





Product Features

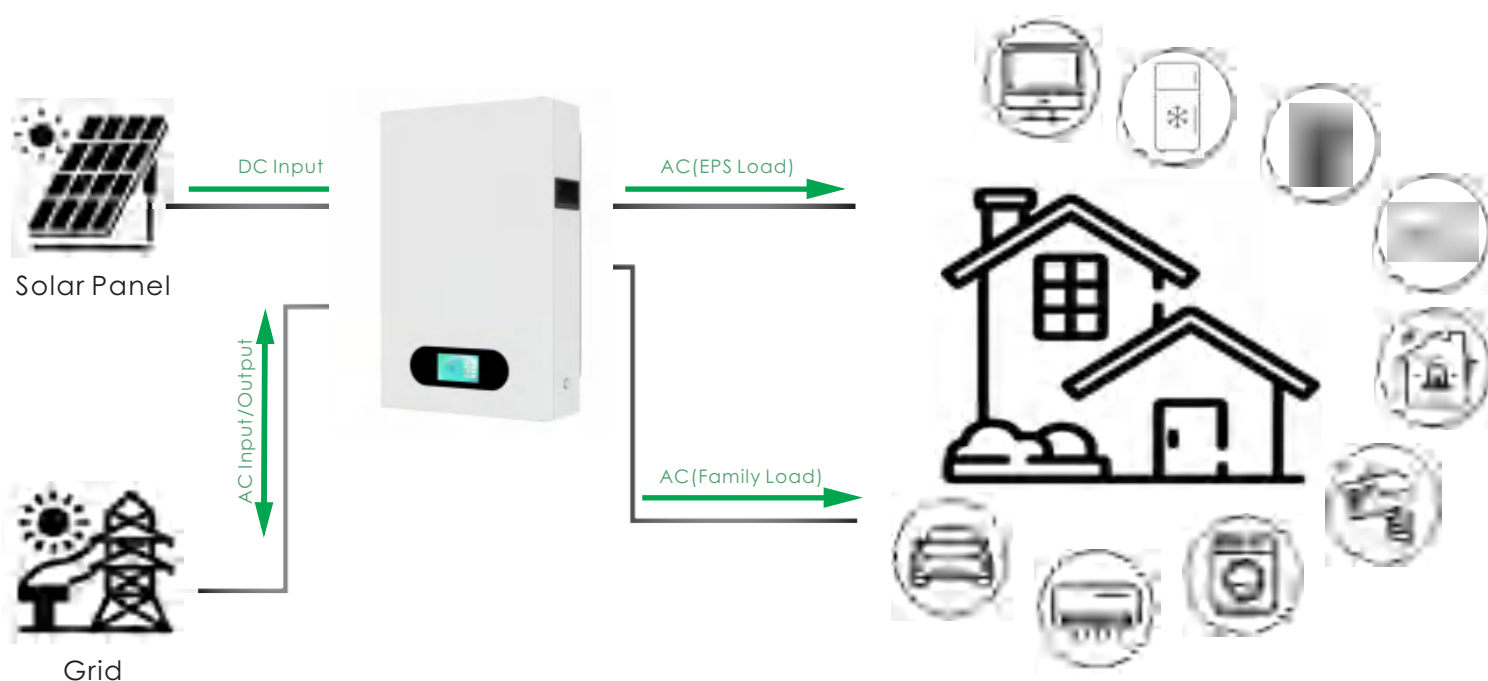
- ◆ LiFePO4 is used as positive material, long cycle life and good safety performance.
- ◆ Cycle life is no less than 6000 cycles @80% DOD, 0.5C.
- ◆ Wall mount compact design, 5/10kWH available.
- ◆ Easy plug and play input/output terminal for easy installation.
- ◆ System capacity available for up-to 102KWH.

Wall-mounted Series
RW-ESS-482000
RW-ESS-512000

48V200Ah/9. 6KWH

51. 2V200Ah/10. 24KWH

SYSTEM SOLUTION(ON/OFF Grid System)



Technical Specifications(BAT)

Model	RW-ESS-482000	RW-ESS-512000
Nominal Voltage	48V	51.2V
Cell model/Configuration	3.2V100Ah 15S2P	3.2V100Ah 16S2P
Capacity	200Ah	
Rated Energy	9.6kWh	10.24kWh
Usable Energy	8.64kWh	9.2kWh
Max. Charge/Discharge Current	100A/100A	
Voltage Range	37.5~54.75V	40~58.4V
Scalability	up to 10 parallel	
Communication	RS232-PC, RS485(B)-BAT, RS485(A)-Inverter, Canbus Inverter	
Cycle Life	≥ 6000 cycle@25°C, 80%DOD, 60%EOL	
Design Life	≥ 15 Years@25°C	
Weigh	92kg	96kg
Dimension	485*690*186 (226 including hanger) mm	
Installation Mode	wall hanging	
IP Grade	IP50	
Safety(Pack)	CEC-EMC, UN38.3, MSDS	
Safety(Cell)	UN38.3, MSDS, ICE62619, CE, UL1973, UL2054	
Protection	BMS, Breaker	
Operating Temperature	Charging: -10~50°C/Discharging: -10~55°C	
Altitude	≤ 2000 m	
Humidity	$\leq 95\%$ (Non-condensing)	



PRODUCT INTRODUCTION

RE-ESS Series, a Low-Voltage lithium battery. With a stackable modular design the capacity range can be expanded from 5.12kWh to 51.2kWh. The installation and maintenance is easier and faster with free of cables between modules. Long life technology ensures more than 6000 cycles with 90% DOD.

Convenient

Stackable & compact design
ease of installation

Compatible

Compatible with multiple inverters
Multiple communication

Compliant

IP50 Protection
indoor or outdoor application

Scalable

Use of Series connection
from 2 to 5 modules

Sufficient

High energy density
110Wh/kg

Safe

Multiple protection
LiFePO4 material, safe and long life



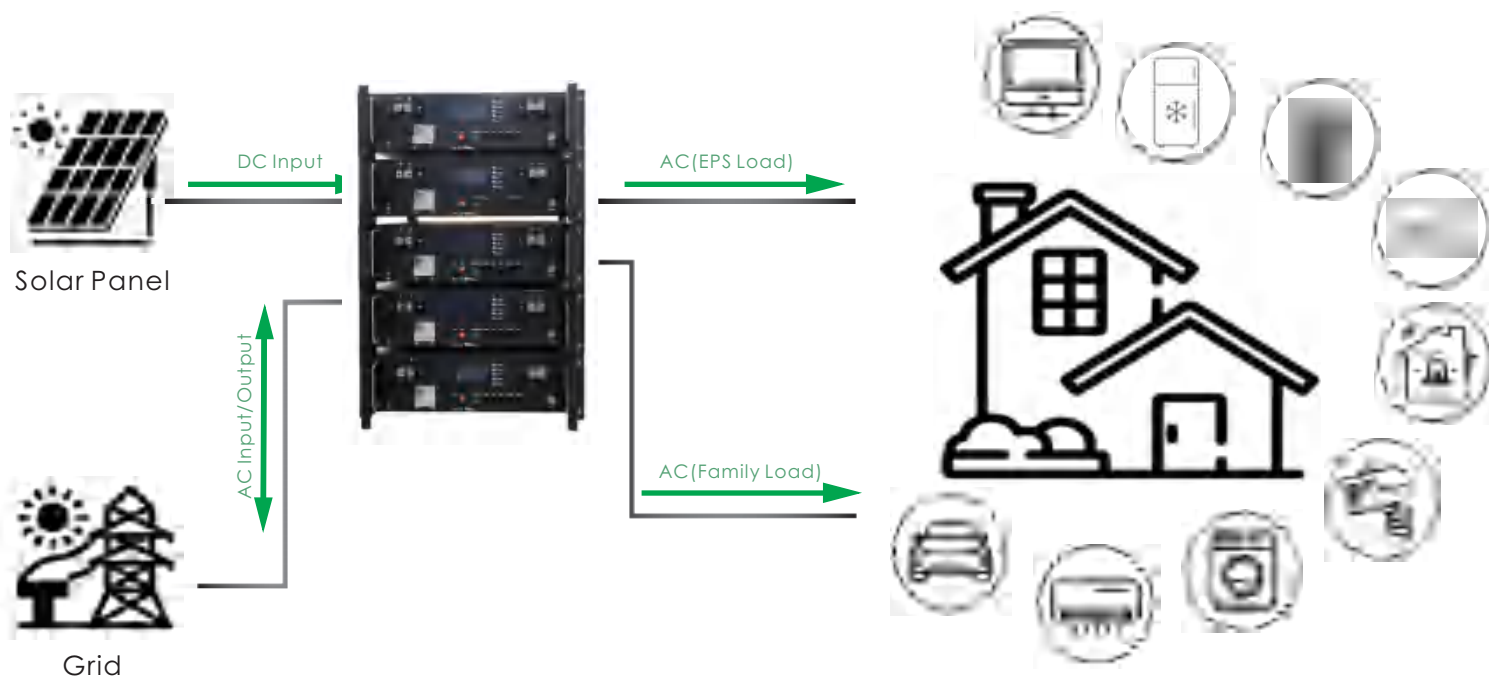
Items	RS-ESS-05	RS-ESS-10	RS-ESS-15	RS-ESS-20
Model	51.2V/100Ah*1	51.2V/100Ah*2	51.2V/100Ah*3	51.2V/100Ah*4
Rated Capacity	100Ah	200Ah	300Ah	400Ah
Rated Voltage	51.2V			
Cell Type	LFP			
Toatl Energy	5.12kWh	10.24kWh	15.36kWh	20.48kWh
Charging Voltage	58.4V			
Max. Charging Current	100A			
Max. Discharging Current	100A			
Discharging End-off Voltage	40V			
Dimension	681.4*414*463 mm	681.4*559*463 mm	681.4*704*463 mm	681.4*849*463 mm
Weigh	≈ 65kg	≈ 112kg	≈ 158kg	≈ 203kg
Color	White			
Installation Mode	Stackable			
IP Grade	IP50			
Safety(Pack)	CE-EMS, UN38.3, MSDS			
Safety(Cell)	UN38.3, MSDS, IEC62619, CE, UL1973, UL2054			
Protection	BMS, Breaker			
Storage Temperature	-20~55℃			
Operating Temperature	Charging: -10~50℃/Discharging: -10~55℃			
Altitude	≤2000m			
Humidity	≤95% (Non-condensing)			



PRODUCT INTRODUCTION

LFP-Rack box, a Low-voltage lithium battery. With a scalable modular design, the capacity range can be expanded from 14.3kwh-143kwh. The modules are connected by cables to support high-power work and are easy to install and maintain. Long life technology ensures more than 6000 cycles with 90% DOD.

SYSTEM SOLUTION(ON/OFF Grid System)



PERFORMANCE SPECIFICATIONS

Model	HN-Rack-15KWH
Nominal Voltage	51.2V
Cell model/Configuration	3.2V280ah/16S1P
Capacity(Ah)	280AH
Rated Energy(KWH)	14.334KWH
Usable Energy(KWH)	12.9kwh
Max. Charge/Discharge Current(A)	50A /100A
Voltage Range(Vdc)	40-58.4V
Scalability	Up to 10 parallel
Communieation	RS232-PC,RS485(B)-BAT RS485(A)-Inverter,Canbus-Inverter
Cycle Life	≥6000cycles@25°C, 90% DOD, 60%EOL
Design Life	≥15 Years(25°C)

MECHANICAL SPECIFICATIONS

Weight(Approx)(KG)	140kg
Dimension (W/D/H)(mm)	482*742*230mm
Installation Mode	Stack
IP Grade	Ip50

SECURITY AND CERTIFICATION

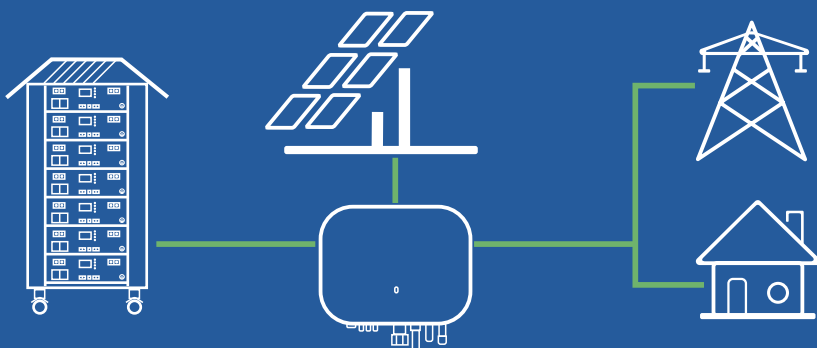
Safety(Pack)	CE, UN38.3,MSDS
Protection	BMS, Breaker

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature(°C)	Charge:-10°C~50°C; Discharge: -20°C-50°C
Altitude (m)	≤2000
Humidity	≤95%(Non-condensing)

*Text and images correspond to the current state of technology at the time of printing. Subject to modifications.

All information is without guarantee in spite of careful editing-liability excluded.



- High security technology ensures stable and excellent performance.
- Compatible with multiple inverters including KSTAR DEYE GOODWE Solis Growatt Voltronic....
- It provides highly efficient energy solutions for household scenarios and small commercial scenarios.