LV INTEGRATED HOUSEHOLD ENERGY STORAGE SYSTEM-US

RenonEBlock

•Three-layer energy management system, strong protection, high reliability and long cycle life

- Integrated battery, inverter, and master controller for a compact package.
- Long cycle life, the system life can reach over 8000 times
- Wi-Fi, Ethernet, and LTE connectivity facilitate over-the-air updates.

Renon EBlock Series is an integrated household battery system that stores energy from the generator, grid or photovoltaic. EBlock has a split-phase inverter that is optimized to work with a power system. Its integrated design and stacked installation allow for rapid build to any home, and improved surge power capacity bring whole home backup in a compact system. The intelligent EMS platform enables users to customize system behavior and monitor the system operation.



RENON

EBlockSeries

BESS Specification	
Nominal Energy (kWh)	20.48@4 battery modules
Nominal Voltage (V)	51.2
Cycle Life	8000times
Designed Calendae Life	≥10 years
Battery Number	3~5

Hybrid Inverter Specification

Max. DC Input Power for Single MPPT (KW)	12/7/7
Max PV Input Power (kW)	18
DC Input Voltage Range (Vdc)	100~600
Nominal DC Input Voltage (Vdc)	360
MPPT Operating Voltage Range (Vdc)	120~500
Full Power MPPT Voltage Range (Vdc)	230~500
Start-up Voltage (Vdc)	140
Max DC Input Current (A)	25/15/15
MPPT Number/(Strings per MPPT)	3(2/1/1)
Nominal Power (kW)	12
Nominal AC Voltage (Vac)	240
Operating voltage range (Vac)	180~270
Max.continuous AC Current (Vac)	50A@240
Nominal AC Frequency(Hz)	50/60
MPPT Efficiency	99.90%
Max. Efficiency	97.50%

General Parameters

Dimension (L*H*W mm) 635*1	820*268 @4 battery modules
Net Weight (Approximate)	288kg @4 battery modules
Level of Protection	IP55
Operating Temperature	Discharge -20°C~50°C Charge 0°C~50°C
Relative Humidity Range (RH)	10% ~ 90%
Max. Operating Altitude (m)	2000
Cooling	FAN+Free convection
Communication	RS485/Wi-Fi/CAN

System Layout





System CharacteristicCertificationsUL1741, UL9540, UL1642,UN38.3,
IEE E1547a-2003/2014EmissionsFCC Part 15 Class BCommunication InterfaceCAN, Wi-Fi, EthernetWarranty5Years Unconditional + 5Years ConditionalGrid ConnectionUnited States

HV INTEGRATED HOUSEHOLD ENERGY STORAGE SYSTEM-EU

Renon EBlock

- Modular stacking design supports parallel connection of systems for capacity expansion.
- Off-grid output peak power is twice the rated power for 10S, which is suitable for high power load start-up.
- •Three-layer energy management system, strong protection, high reliability and long cycle life.
- IP55 protection level, smart controlling of operating temperature so that can adapt to the harsh environment

RENON

· Complete application mode, including self-powered, time-based power control and backup power mode

Renon EBlock Series is an integrated household Battery system that stores energy from photovoltaic, grid, or generator. EBlock has a three-phase hybrid inverter for EU standards. The integrated design and intelligent energy management system help optimize the use of electricity in the home. Its stacked installation perfectly matches the energy storage capacity needs of different homes and is simple to connect to any residential scheme. The Smart Cloud monitoring and control system enables users to customize system behavior or implement remote firmware updates for easy day-to-day use and maintenance.



EBlockSeries

BESS Specification	
Cell Capacity	50Ah
Nominal Energy	11.2kWh
Nominal Voltage	224V
Nominal Current	50A
Max. Current @10S	100A
Operating Voltage Range	205.1V~248.5V
Cycle Life	8000 times

Hybrid Inverter Specification

Rated Output Power	10kVA
Nominal Grid Voltage (Input/Output)	400/380VAC
Nominal AC Grid Frequency	50Hz/60Hz
Phase	3L/N/PE
Max. Output Current	15.2A
Max. Input Current	26A
Max. Total Harmonic Distortion	<3%
Power Factor - 1 (Adjustable from 0.8 lea	ading to 0.8 lagging)
Max Allowed PV Power	18kWp
PV Maximum Input Voltage	1000Vdc
PV DC MPPT Voltage Range	150Vdc~900Vdc
Nominal Voltage	620Vdc
Starting Voltage	180Vdc
Number of MPPT	2
Max Solar Strings Per MPPT	2/1
Max. DC Current Per MPPT(Self Limiting)	27A/16A
Max. short Circuit Current per MPPT	34A/20A

General Parameters

Dimension(W*T*H)	715mm*228mm*1562mm
BESS Weight	140kg
Inverter Weight	50kg
Enclosure	IP55
Operating Temperature	–20°C to 50°C
Recommended Temperature	e O°C to 30°C
Storage Conditions	–20°C to 30°C Up to 95% RH, non-condensing State of Energy (SoE): 50% initial
Operating Humidity (RH)	Up to 100%, non-condensing
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Noise Level @1m	< 40 db(A) optimal, < 50 db(A) maximum

System Layout





System Characteristic

Certifications	VDE AR-N-4105, VDE 2510-50, IEC/EN 62109-1, IEC/EN 62109-2, EN61000, VDE 0126-1-1, VDE V0124-100, EN 50549-1
Remote Shutdown	Optional
Surge Protection	DC Type III / AC Type III
Communication Interface	CAN, Wi-Fi, Ethernet
Warranty	5Years Unconditional + 5Years Conditional
Grid Connection	Europe Union

HVINTEGRATED HOUSEHOLD ENERGY STORAGE SYSTEM-US

RenonEBlock

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RENON

Eblock Serie

• Complete application mode, including self-powered, time-based power control and backup power mode.

Renon EBlock Series is an integrated household Battery system that stores energy from photovoltaic, grid or generator. EBlock has a split-phase hybrid inverter for US standards. The integrated design and intelligent energy management system help optimize the use of electricity in the home. Its stacked installation perfectly matches the energy storage capacity needs of different homes and is simple to connect to any residential scheme. The Smart Cloud monitoring and control system enables users to customize system behavior or **implement remote firmware updates for easy day-to-day use and** maintenance.



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EBlockSeries

BESS Specification	
Cell Capacity	100Ah
Nominal Energy	20.48kWh
Nominal Voltage	204.8V
Nominal Current	100A
Max. Current @10S	200A
Operating Voltage Range	187.52V~227.2V
Cycle Life	8000 times

Max. PV Power Delivered to Battery & AC Outputs
PV Maximum Input Voltage
PV DC MPPT Voltage Range

PV DC MPPT Voltage Range	120Vdc~550Vdc
Nominal Voltage	384Vdc
Starting Voltage	150Vdc
Number of MPPT	4 (2 Strings per MPPT)
Max DC Current per MPPT (Self Limiting)	26*4
Max AC Coupled Input (Micro/String Inverter	s) 22kVA
Solar Generation CEC Efficiency	97.5% at 208 V 98.0% at 240 V
Nominal Grid Voltage (Input/Output)	120/240/208VAC Split Phase
Grid Voltage Range	211.2~264VAC
Frequency	50Hz/60Hz
Phase	240VAC: 2W+N+GND
Continuous Power On-Grid/Off-Grid	15KW
Peak Off-Grid Power (10s)	30 kVA
Max. Continuous Current On-Grid/Off-Grid	62.5A
Continuous AC Power with Grid or Generator	48kW 200A L-L (240V) 24kW 200A L-N (120V)
CEC Efficiency	96.5% (Peak 97.5%)
Power Factor	+/- 0.9 - 1.0

Certifications	UL1741, UL9540, UL1642,UN38.3, IEE E1547a-2003/2014
Emissions	FCC Part 15 Class B
Surge Protection	DC Type II / AC Type II
Communication Interface	CAN, Wi-Fi, Ethernet
Warranty	5Years Unconditional + 5Years Conditional
Grid Connection	United States

System Layout

13kW&15kW

600Vdc





General Parameters	
Dimension(W*T*H)	635mm*268mm*1820mm
Battery Assembly	238kg
Inverter Assembly	50kg
Enclosure	IP65 / NEMA 3R
Operating Temperature	–20°C to 50°C
Recommended Temperatur	e O°C to 30°C
Storage Conditions	–20°C to 30°C Up to 95% RH, non-condensing State of Energy (SoE): 50% initial
Operating Humidity (RH)	Up to 100%, non-condensing
Maximum Elevation	3000 m (9843 ft)
Environment	Indoor and outdoor rated
Noise Level @1m	< 40 db(A) optimal, < 50 db(A) maximum