

# **Battery-Buffered**

# **Fast Charging Solutions**

**FOR US MARKET** 



# **Renon** Power

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# We Care About Sustainability

With our own R&D team and automatic production factory, we are dedicated to delivering innovative, reliable, and affordable energy storage solutions to global customers.

At Renon, we believe that sustainable energy is the future. We are passionate about reducing carbon emissions and preserving our planet for future generations. That's why we invest heavily in research and development, leveraging the latest technologies to design and manufacture energy storage systems that are efficient, scalable, and adaptable.

Our products are designed to meet the needs of a wide range of applications, from residential and commercial buildings to industrial facilities and utility-scale projects. Whether you're looking to reduce your energy bills, increase your energy independence, or support your sustainability goals, Renon has the right solution for you.

Our commitment to quality and customer satisfaction is unwavering. We work closely with our clients to understand their unique needs and provide customized solutions that meet or exceed their expectations. We also provide comprehensive technical support, maintenance, and warranty services to ensure that our customers get the most out of their investment.

JOIN US ON OUR MISSION TO MAKE RENEWABLE ENERGY WITHIN REACH.

PROVIDE INNOVATIVE,
RELIABLE, AND
AFFORDABLE ENERGY
STORAGE SOLUTIONS
TO CUSTOMERS
WORLDWIDE.



# Content

Meeting the highest standards of quality and safety in the US market.

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# **Industry** Application

Renon's energy storage products are widely utilized in the electric vehicle, charging, and energy storage sectors. With outstanding performance, advanced technology, and efficient energy management, they deliver reliable, innovative, and eco-friendly solutions, empowering global users to achieve their sustainability objectives.

















As a company that values renewable energy, we are passionate about developing solutions that contribute to a greener, more sustainable future. Our products are designed to reduce carbon emissions and promote environmental conservation.

# **Products**

Our integrated Cabinet Fast Charging solutions offer autonomous energy storage and management for commerce and industry.

## Cabinet Fast Charging System



P03 ECube 60AP



P09 MPack 233C

## Hybrid Generator



P19 XGen

# ECube 60AP

# **60kWh Air-Cooling Battery**

The ultimate commercial and industrial energy storage solution with optimized temperature control, high-rate energy cycling, comprehensive fire and gas safety detection, and advanced integrated power management technologies.





#### Product Function



#### **Efficient Energy Storage**

Stores 60 kWh of electricity for future use, ensuring a stable energy reserve. It supports multiple energy inputs, including solar power, diesel generators, and the grid, providing flexible power integration.



#### Smart Load Balancing

Optimizes energy usage by charging during off-peak hours and discharging during peak demand, helping balance the grid load. By leveraging time-of-use pricing, it effectively reduces electricity costs.



#### Intelligent Energy Management

Utilizes an advanced Energy Management System (EMS) to optimize charging and discharging strategies. Remote monitoring and management capabilities enhance operational efficiency and system performance.



#### Reliable Backup Power

Acts as an emergency power source during grid failures, ensuring critical equipment remains operational. With uninterrupted power supply capabilities, it is ideal for data centers, hospitals, and other essential facilities.



#### Independent Off-Grid Power

Provides a reliable power supply in areas without grid access, making it suitable for homes, businesses, and communities. As a core component of microgrids, it ensures stable and efficient energy distribution.



#### Scalable & Flexible Design

Features a modular design that supports parallel system integration for expanded capacity. Its flexible configuration allows adjustments in power output and storage capacity to meet diverse energy needs.

#### Product Features

#### **High Energy Density**

Built with high-energy-density 1P16S 100Ah batteries, this system features a compact design, making it ideal for space-constrained environments. Its lightweight structure enhances ease of installation and transportation.

#### **Extended Lifespan**

Designed for longevity, it supports over 8000 charge-discharge cycles with minimal degradation, ensuring stable long-term performance.

#### **High-Efficiency Power Conversion**

With superior charge and discharge efficiency and a charge/discharge current of 95A, it minimizes energy loss while delivering millisecond-level response times to meet urgent power demands.

#### **Enhanced Safety & Reliability**

Equipped with multiple protection mechanisms, including safeguards against overcharging, over-discharging, overheating, and short circuits. With an IP55 protection rating, fire-resistant materials, and a flame-retardant design, it further enhances operational safety.

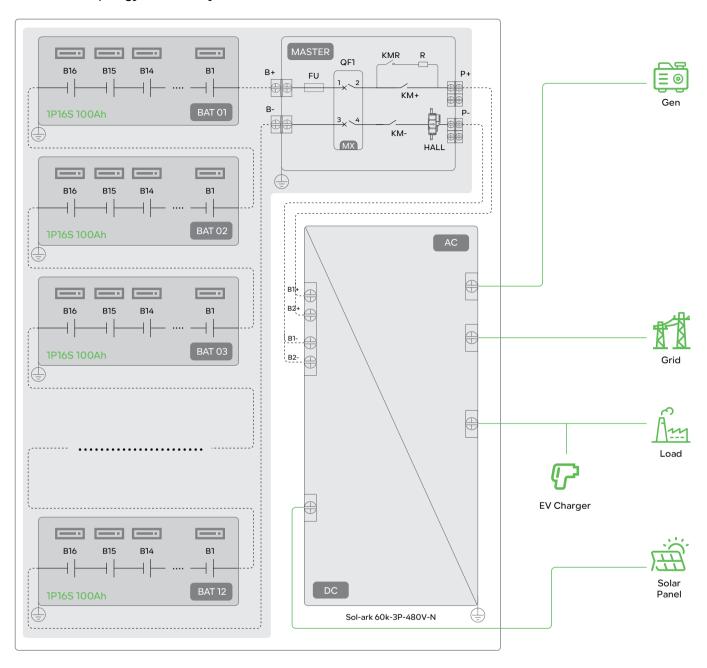
#### Application Scenario



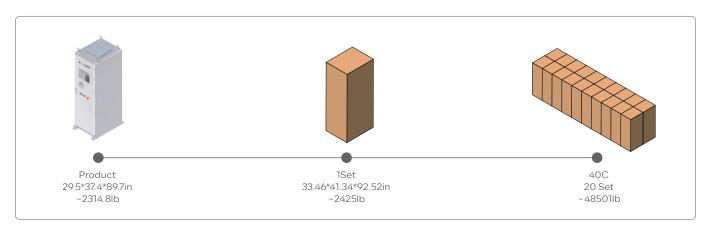




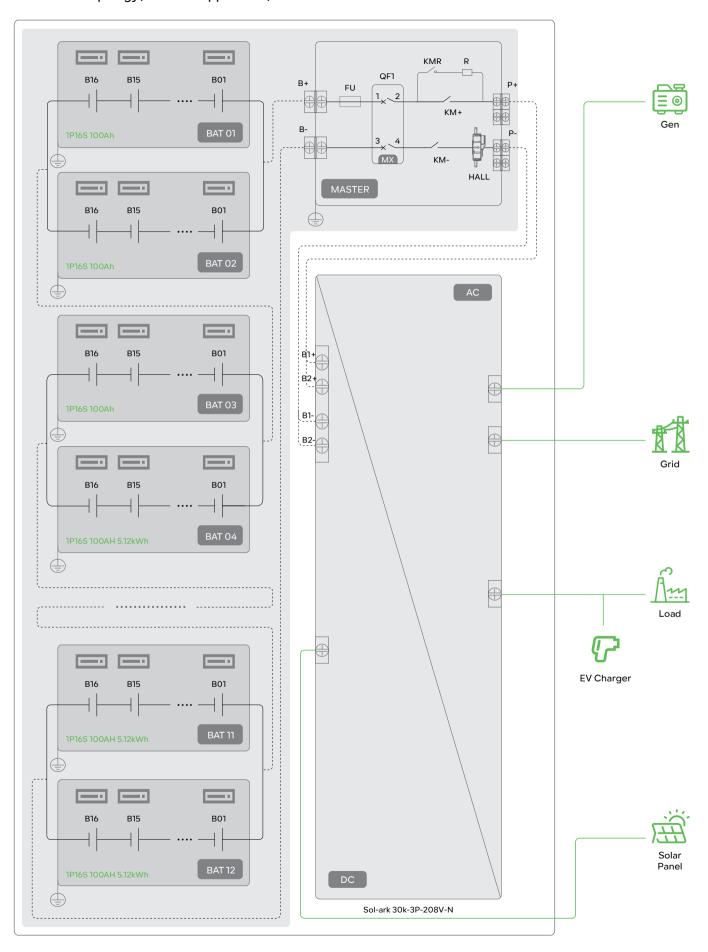
## Product Topology(For 480V System)



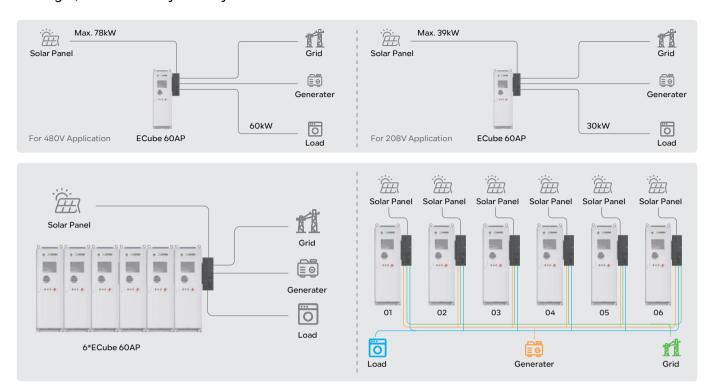
#### Packaging & Shipping Details



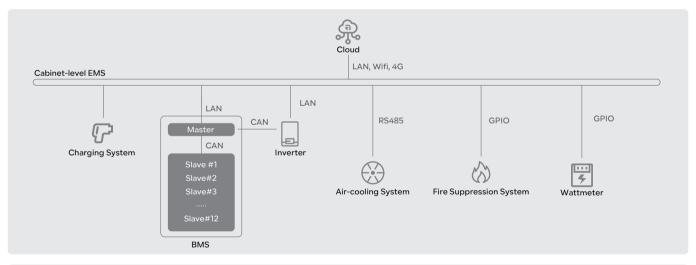
## Product Topology(For 208V Application)

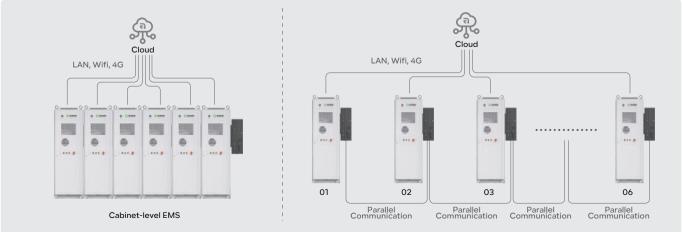


## Single / Max. Parallel System Layout



#### Energy Management System(EMS) Structure





## Product Parameter(For 480V Application)

Cell Chemistry	LiFePO4
Module Energy (kWh)	5.12
Module Nominal Voltage (V)	51.2
Module Capacity (Ah)	100
Battery Module Combination	12S1P
System Nominal Voltage (V)	614.4
System Operating Voltage (V)	562.5~681.6
System Energy (kWh)	61.44
Charge/Discharge Current (A)	95

PV Input	
Max. Allowed PV Power (STC)(kW)	78
MPPT Voltage Range(V)	150~850
Start up Voltage(V)	180
Max. Input Voltage(V)	1000
Max. Operating Input Current per MPPT(A)	36
Max. Short Circuit Current per MPPT(A)	55
No. of MPP Trackers	4
No. of PV Strings per MPPT	2
Max. AC Coupled Input(kW)	60

Charging System(Optiona	()
Charging Type	Charging Mode 3 Case c, level 2
Outlet Options	AC Type 1 (SAEJ1772)
Input/Output Current Rati	ng(A) 32 / 48 / 80
Input/Output Power Rating	g(kW) 7.7 / 11.5 / 19.2@240VAC
Input/Ouput Voltage(VAC)	208~240
Input Frequency(Hz)	50/60
Cable Length	16 feet, Optional: 25 feet
Distribution Systems	Single phase, split-phase
Connector Type	L1 + L2 + PE
Certifications	UL2594, UL2231-1, UL2231-2, UL1998 UL991FCC Part 15 ClasS B, ENERGY STAR

AC Output (EPS)	
Nominal AC Voltage(3 ⊕)(V)	277/480
Grid Frequency(Hz)	50/60
Real Power, max continuous	(3Φ)(kW) 60
Max. Output Current(A)	72.3
Peak Apparent Power (10s,	pff-grid, 3Φ)(kVA) 90
Max. Grid Passthrough Cur	rent (10min)(A) 200
Continuous Grid Passthrou	gh Current(A) 180
Power Factor Output Rang	± 0.8 adjustable
Backup Transfer Time	5ms (adjustable)
CEC Efficiency	96.5%
Design (DC to AC)	Transformerless DC
General Parameters	
Product Model	R-EC060060A1-US
System Scalability	Max. 6 System in Parallel
Dimension - W*D*H (mm/ir	750*950*2280/29.5*37.4*89.7
Weight Approximate (kg/lb	) ~1050/~2314.8
Working Temperature (°C/°	F) -30~50/-22~122
Communication Interface	CAN, RS485, Wi-Fi, LTE
Humidity(RH)	5%~85%, non-condensation
Altitude ≤	4000m/13122ft(2000m/6561ft derating)
IP Rating	IP55
Storage Temperature (°C/°	-20~35/-4~95
Recommend Depth of Disc	harge 90%
Cycle Life	>8000 cycles
Warranty	10 years
Certification(Battery)	ANSI/CAN/UL 1973:2022 ANSI/CAN/UL 9540:2020 UL 9540A, FCC Part 15 Subpart B:2023
Certification(Inverter)	UL 1741-2021 (UL1741SB) CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0) UL 1741 CRD-PCS, UL1699B, CEC, SGIP 4

#### Product Parameter(For 208V Application)

Battery Energy Storage		AC Ou
Cell Chemistry	LiFePO4	Nomin
Module Energy (kWh)	5.12	Grid F
Module Nominal Voltage (V)	51.2	Real P
Module Capacity (Ah)	100	Max. C
Battery Module Combination	6S2P	Peak A
System Nominal Voltage (V)	307.2	Max. C
System Operating Voltage (V)	281.3~340.8	Contir
System Energy (kWh)	61.44	Power
Charge/Discharge Current (A)	95	 Backu
		CEC E
PV Input  Max. Allowed PV Power (STC)(kW)	39	Desig
		Gene
Startup Voltage(V)		Produ
Max. Input Voltage(V)  Max. Operating Input Current per MPPT(A)		Syste
Max. Short Circuit Current per MP		Dime
No. of MPP Trackers	4	Weig
No. of PV Strings per MPPT		Work
Max. AC Coupled Input(kW)	30	Comr
		 Humi
Charging System(Optional)		Altitu
Charging Type	Charging Mode 3 Case c, level 2	
Outlet options	AC Type 1 (SAEJ1772)	IP Rat
nput/Output Current Rating(A) 32 / 48 / 80		Stora
nput/Output Power Rating(kW) 7.7 / 11.5 / 19.2@240VAC		Recoi
Input/ouput voltage(VAC)	208~240	Cycle
Input Frequency(Hz)	50/60	Warra
Cable Length	16 feet, Optional: 25 feet	Certi
 Distribution Systems	Single phase, split-phase	

AC Output (EPS)	
Nominal AC Voltage(3Φ)(V)	120/208
Grid Frequency(Hz)	50 / 60
Real Power, max continuous	3Φ)(kW) 30
Max. Output Current(A)	83.4
Peak Apparent Power (10s, o	ff-grid, 3Φ)(kVA) 45
Max. Grid Passthrough Curre	ent (10min)(A) 200
Continuous Grid Passthroug	h Current(A) 180
Power Factor Output Range	±0.8 adjustable
Backup Transfer Time	5ms (adjustable)
CEC Efficiency	96.5%
Design (DC to AC)	Transformerless DC
General Parameters	
Product Model	R-EC060030A1-US
System Scalability	Up to 6 in parallel
Dimension - W*D*H (mm/in)	750*950*2280/29.5*37.4*89.7
Weight Approximate (kg/lb)	1050/2314.8
Working Temperature (°C/°F	-30~50/-22~122
Communication Interface	CAN, RS485, Wi-Fi, LTE
Humidity	5%~85%, non-condensation
Altitude ≤4	000m/13122ft(2000m/6561ft derating)
IP Rating	IP55
Storage Temperature	-20~35/-4~95
Recommend Depth of Disch	arge 90%
Cycle Life	>8000 cycles
Warranty	10 years
Certification(Battery)	ANSI/CAN/UL 1973:2022 ANSI/CAN/UL 9540:2020 UL 9540A, FCC Part 15 Subpart B:2023
Certification(Inverter)	UL 1741-2021 (UL1741SB) CSA C22.2 No 107.1-16, IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0) IL 1741 CRD-PCS, UL1699B, CEC, SGIP 4

UL2594, UL2231-1, UL2231-2, UL1998 UL991FCC Part 15 ClasS B, ENERGY STAR

L1 + L2 + PE

Connector Type

Certifications

# MPack 233C

# **Cabinet Fast Charging Solution**

MPack 233C is a high-performance energy storage solution for commercial and industrial use, featuring optimized thermal management, efficient energy cycling, advanced fire and gas detection, and intelligent power management for reliable and scalable energy integration.





#### Product Function



#### Stable & Reliable Performance

Featuring a 233kWh energy storage system, it delivers consistent power even during grid instability. An advanced thermal management system ensures efficient heat dissipation, enabling long-term stable operation.



#### **Energy-Efficient & Eco-Friendly**

With high-efficiency power conversion, it minimizes energy loss and reduces operational costs. It is also compatible with renewable energy sources such as solar and wind, helping lower carbon emissions and promote sustainability.



#### Space-Saving Design

The dual-gun charger adopts a compact design that conserves installation space, making it ideal for various application scenarios including urban and commercial environments.



#### Intelligent Management System

Supports remote operation and real-time monitoring for easier maintenance and control. It also logs detailed charging data, helping operators optimize energy usage and refine charging strategies.



#### **Enhanced User Experience**

Designed with user convenience in mind, it features an intuitive interface and supports multiple payment methods. Built-in protections like over-voltage and over-current safeguards ensure a safe and reliable charqing experience.



#### Cost-Effective Operation

Its high charging efficiency reduces power loss, improving overall energy utilization. Intelligent system control and optimized cooling also extend equipment lifespan, further reducing long-term operational costs.

#### Product Features

#### **High-Power Fast Charging**

Delivers up to 320kW for ultra-fast EV charging and supports dual-vehicle charging to improve efficiency and reduce wait times.

#### Comprehensive Safety Protection

Equipped with over-voltage, over-current, over-temperature, and short-circuit protection, plus insulation monitoring and emergency stop for maximum safety.

#### Integrated Energy Storage & Off-Grid Power

Features a 233kWh battery system that provides backup power during grid outages or peak hours, ensuring continuous charging even when off-grid.

#### **Smart Data Tracking & Energy Analysis**

Automatically records detailed charging data, including energy usage, duration, and cost, for both users and operators. It also offers energy consumption reports to help optimize the operation and efficiency of the charging station.

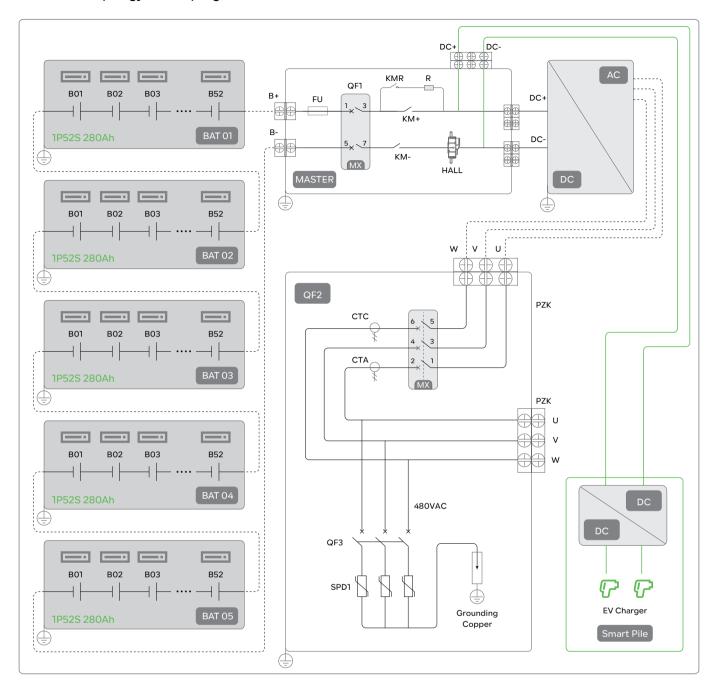
#### Application Scenario



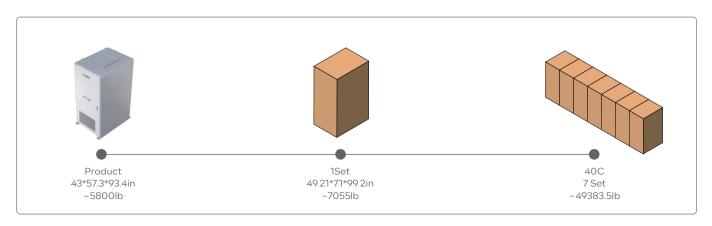




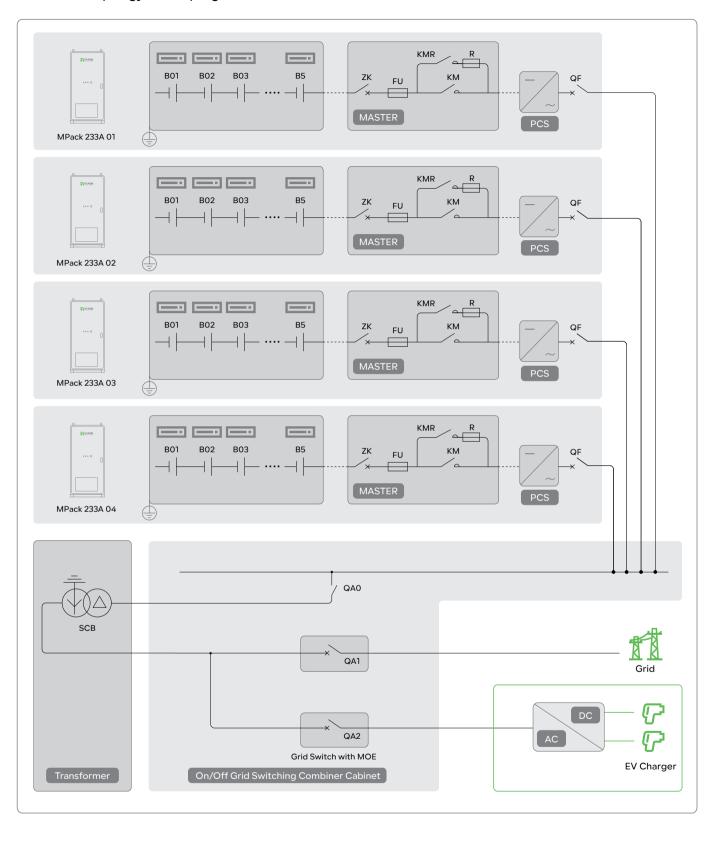
## Product Topology(DC coupling)



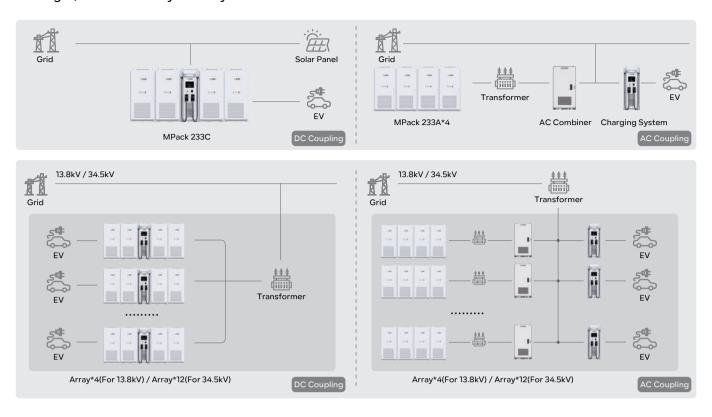
#### Packaging & Shipping Details



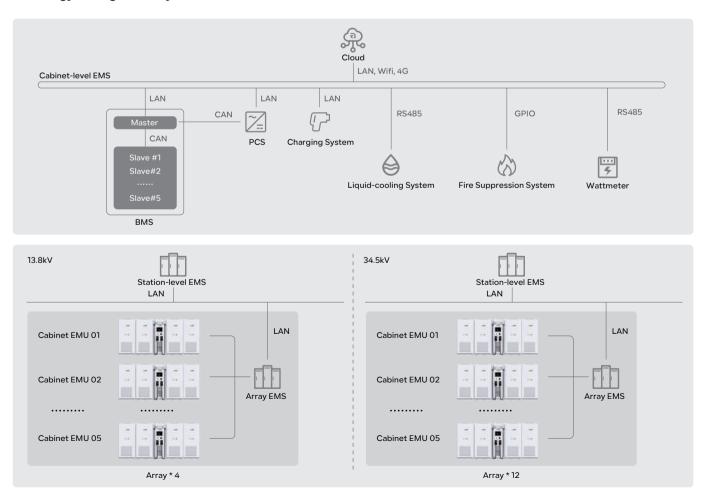
## Product Topology(AC coupling)



### Single / Max. Parallel System Layout



#### Energy Management System(EMS) Structure



#### BESS Parameter

Battery Energy Storage	MPack 233C	MPack 466C	MPack 699C	MPack 932C
Battery Capacity(kWh)	233	466	699	932
Battery Charge/Discharge Rate		≤0	.5C	
Battery Efficiency		≤9	5%	
Battery Module IP Rating		IP	54	
Battery Cooling System		Liquid-	cooling	
Thermal Control Management		Aerosol Ex	tinguishing	
AC Output				
Rated AC Output Power(kW)	125	250	375	500
Max. AC Output Power(kVA)	137.5	275	412.5	550
Rated Output Voltage(Vac)	480			
Output Voltage Range(Vac)	-15%~10%(Settable)			
Rated Grid Frequency(Hz)		60(Settable)		
Max. Output Current(A)	165.4	330.8	496.2	661.6
Adjustable Power Factor	>0.99			
THDi	<3%			
DC/DC				
Max. Charge/discharge Power(kW)	250	500	750	1000
Voltage Range for Charge/discharge(Vdc)	761~923			
Max. Current (A)	320	576	864	1152
*The charging power of the DC interface is related t	o the load power, battery SOC	and temperature.The discharge p	power of the DC interface is relate	ed to the battery's state
System Characteristic				
Communication Interface	CAN, RS485, Wi-Fi, LTE			

System Characteristic	
Communication Interface	CAN, RS485, Wi-Fi, LTE
Warranty	3 years free, paid from the 4th to the 15th year
Certifications	ANSI/CAN/UL 1973:2022, ANSI/CAN/UL 9540:2020, UL 9540A:2019,

ANSI/CAN/UL 1973:2022, ANSI/CAN/UL 9540:2020, UL 9540A:2019, UL 1741:2012 Ed.3+R:19May2023, UL 1741:2021 Ed.3(Supplement SB), CSA C22.2#107.1:2016 Ed.4+U1, IEEE 1547:2018 IEEE 1547.1:2020, FCC Part 15 Subpart B:2013

General Parameters				
Battery Model	R-MP233125C1-US	R-MP466250C1-US	R-MP699375C1-US	R-MP932500C1-US
Dimensions - W*D*H (mm/in)	~2200*1450*2320 ~86*57*91.3	~3300*1450*2320 ~129*57*91.3	~4400*1450*2320 ~172*57*91.3	~5500*1450*2320 ~215*57*91.3
Total Weight (kg/lb)	3685(±5)/8124(±11)	6545(±5)/14429(±11)	9405(±5)/20734(±11)	12265(±5)/27039(±11)
Operation Altitude	≤2000m / 6561ft			
Noise Level @1m	<80 dB(A)			
IP Rating	IP54			
Operating Temperature (°C/°F)	-20~55/-4~131*			
Operating Humidity (RH)	0 to 95%, non-condensation			
Storage Conditions	-20~30°C/-4~86°F, Up to 95% RH, non-condensation, State of Energy (SoE): 50% initial			

<sup>\*</sup> We can offer a wider range of temperatures if required, please speak to one of our sales colleagues.

## Charging System Parameter

Power Input	220//00 7500/
Input Voltage(V)	832(600~1500)
Rated Current(A)	495
Power Output	
DC Voltage(Vdc)	200~1000
Max. Current(A)	400
Max. Power(kW)	400
Efficiency	>97%
Voltage Stabilized Accuracy	≤±0.5%
Current Stabilized Accuracy	≤±1%
Current Sharing Unbalance	≤±3%
Peak-peak Ripple	≤1%
Sturcture Design	
Installation Method	Floor-stand
Charging Outlet	DC CCS1
Cable Length	5.0m
 LED Indicator	Yes
Authentication	RFD, On-screen PIN code authorization Option: payment terminal Autocharge Other Customization
Communication Charge and FV	DLC/DIN 70101-2014-10 /(CO15110)
Charger v.s. EV	PLC(DIN 70121:2014-12/ISO15118)
Communication Protocol	OCPP 1.6J
Safety Protection	
Over/under Voltage Protection	Yes
Over Current Protection	Yes
Overload Protection	Yes
Short Circuit Protection	Yes
Leakage Protection	Yes
Over Temperature Protection	Yes
Grounding Protection	Yes
Integrated Surge Protection	Yes
General Parameters	
Battery Model	R-SP400C01-EU
Dimensions - W*D*H (mm/in)	~1100*900*2320/43*35.4*91.3
Total Weight (kg/lb)	~825/1818.8
Operating Temperature (°C/°F)	-30~50/-22~122
Humidity (RH)	5%~95%, non-condensation
Operation Altitude	≤2000m/6561ft
IP Rating	IP55
IK Rating	IK10(HMI: IK08)
Application Site	Indoor/Outdoor
Cooling Method	Air-cooling
Noise	<65dB(Ambient Temperature)
140130	~oodb(Ambient Temperature)

# XGen

# Vehicle-mounted Mobile Power Supply

XGen is a highly adaptable and energy-efficient power solution, offering multiple output options (120V, 208V, 240V, 480V) to ensure high performance, flexible operation modes, and broad compatibility across diverse applications.





#### Product Function



#### Power Generation & Storage for Max. Efficiency

No need for high-power generators—XGen intelligently balances PCS power and generation to reduce fuel consumption.



#### Versatile Compatibility for All Power Needs

Multiple voltage outputs (480V, 208V, 240V, 120V) for residential, commercial, and industrial use.



#### Flexible Power Modes for Any Scenario

With a large 560kWh capacity, it supports hybrid, off-grid, AC/DC coupling, and more, adapting seamlessly to diverse energy needs.



#### High-Power Output, Handles Heavy Loads with Ease

Delivers up to 324kW instant output, ensuring stable power supply for demanding applications.



#### Smart Management with Remote Control

Built-in EMS system enables real-time monitoring and remote control via Web & App for effortless operation.



#### All-in-One Charging Solution

Supports Combo fast charging, Type-C & Type-A ports, powering EVs, storage systems, and digital devices.

#### Product Features

#### Multi-Source Energy Input

Powered by a 560 kWh LiFePO4 battery, supporting grid, diesel generators, and 120 kW solar DC charging for seamless energy integration.

### Portable Durability

Towable for rapid deployment, with IP54/NEMA 3R protection ensuring durability in harsh environments.

#### **Optimized Generator Usage**

Pairs with 400kVA generators, reducing upfront investment, fuel consumption, and maintenance costs for smarter power solutions.

#### **Smart Operation and Maintenance**

Comes with a complete EMS that is easy to upgrade, featuring big data management checks, proactive handling, and intelligent SOC calibration to ensure optimal performance with zero downtime.

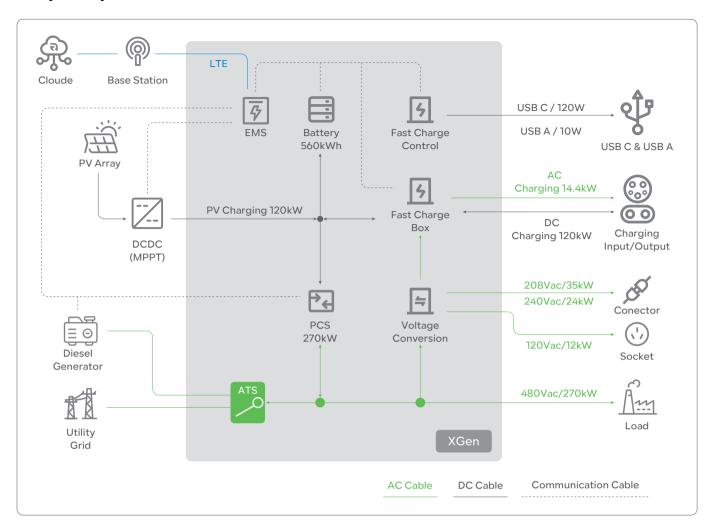
#### Application Scenario



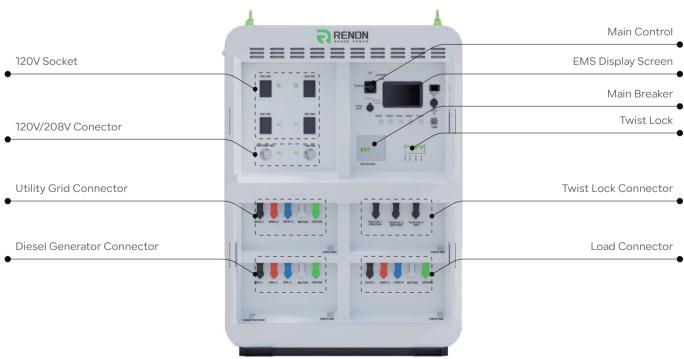




### System Layout



## System Interface



Choosing the right generator solution

Assumed Load for System Design: Peak Power: 600kW, Rated Power: 260kW

## If a Diesel Generator is used as the power source:



- An initial overpurchase of a high-power DG is required to accommodate the maximum starting current of the motors.
- High fuel consumption is inevitable due to frequent motor startups and prolonged operation at low power.
- Conventional diesel generators do not support capacity expansion.
- High maintenance costs caused by frequent motor starts and significant inrush current.



Not suitable because of the load's high inrush current.





There's no need to purchase a high-capacity DG thanks to the shared power output from the XGen.



8



# (C) XGen PROPOSAL

- Reduced upfront investment for a low-power DG.
- Reduced fuel consumption.
- Enable simultaneous operation of multiple DGs.
- Reduce maintenance expenses.



## Product Parameter

Battery Energy Storage	
Cell Chemistry	LiFePO4
Nominal Energy(kWh)	560
Voltage Range(Vdc)	750~908.8
Nominal Charging Current(A)	330
Nominal Discharging Current(A)	330
Max. Discharging Current(A)	400
DOD	90%
Mobile Charging	700
USB C *1(W)	120
USB A *1(W)	10
PV Input	
Input Power(kW)	120
Input Voltage Ranger(Vdc)	750~908.8
AC Output(480Vac On-Grid)	
Rated Power(kVA)	270
Rated Voltage(Vac)	480 (-15%~15%)
Rated Frequency(Hz)	60 (-5~5)
AC Connection	3P4W
THDi	≤ 3%
Voltage Ripple Coefficient	≤ 1%
Power Factor	0.99/-1~
AC Output(For Load 480Vac Off-Grid)	
Rated Power(kVA)	270
Max. Power(kVA)	324
Rated Voltage(Vac)	480(±15%)
Rated Frequency(Hz)	60(±5)
AC Connection	3P4W
Power Factor	0.99/-1~
AC Outes #/Fax Camacatax 200\/ac Outes #1	
AC Output(For Conector 208Vac Output)  Rated Power(kVA)	35
Rated Voltage(Vac)	208
AC Connection	3P4W
- Confidential	JP4VI
AC Output(For Conector 240Vac Output)	
Rated Power(kVA)	24
Rated Voltage(Vac)	240
AC Connection	2P3W

AC Output(For Socket 120Vac Output)	
Rated Power(kVA)	12
Rated Voltage(Vac)	120
AC Connection	1P2W

EV Charging & Charging ESS(AC Charging)	
Interface Type	Combo (SAEJ1772)
Current Rating(A)	60
Power Rating(kW)	14.4
Input/output Voltage(Vac)	240±10%
Input Frequency(Hz)	60
AC Connection	2P3W

EV Charging & Charging ESS(DC Charging)	
Interface Type	Combo (SAEJ1772)
Rated Power(kW)	120
Output Voltage(to EV)(Vdc)	150~1000
Input Voltage(to ESS)(Vdc)	750~908.8

Compatible Diesel Generator	
Rated Power(kVA)	≤400
Rated Voltage(Vac)	480
Rated Frequency(Hz)	60

General Parameters	
Product Model	R-XG560270H1-US03
Parallel Capable	Yes ( Up to 6)
Ingress Rating	IP54 / NEMA 3R
Working Temperature(°F/°C)	-4~131 / -20~55
Storage Temperature(°F/°C)	-40~149 / -40~65
Relative Humidity	5~ 95% (No condensing)
System Noise(dB)	<75
Cooling	Air cooling
Fire Suppression System	Included
Altitude(m)	5,000 (>3,000 derating)
Certifications UL1741, UL9	UL1973, UL9540, UL9540A 9741, UL2202(UL2231-1, UL 2231-2) UL991, UL1998
Dimensions- W*D*H (mm/in)	1752*4140*2000 / 69*163*79
Weight(kg/lb)	~5800 / ~12,786.8

# **ProControl** Base

### **Cabinet Level Local ESMU**

High-end integrated display and control systemfor commercial and industrial energy storage solutions.



#### Features



#### High-Performance Data Processing MCU

Equipped with a powerful processor and ample memory, ensuring fast response to demand-side instructions and efficient data processing.



#### Advanced Graphics and AI Capabilities

Featuring advanced graphics processing and Al capabilities, offering robust performance for enhanced device intelligence.



#### High-Brightness Full-View Touch Display

1280\*800 resolution, 45cd/m² brightness, full viewing angle, and three-point capacitive touch screen, allowing easy viewing of system data and settings both indoors and outdoors.



#### Independent Smart Local Control

Built-in modes such as self-use, peak shaving, PV priority, grid priority, backup, and battery modes provide convenient local operation. Supports local intelligent monitoring, data curve generation, parameter settings, firmware updates, maintenance report generation, and log recording for simplified after-sales service.



#### Flexible Cloud Connectivity

Supports multiple interfaces including LAN, WiFi, and LTE for versatile cloud platform connections based on customer needs.



#### Comprehensive Communication & Control Interfaces

Includes CAN, RS485, RS232, Type-C, USB3.0, LAN, TF card slot, Nano SIM, HDMI, and RTC interfaces, enabling connection to various external devices and sensors for centralized management and control.

#### Interface Showcase







#### Parameters

General Parameters	
CPU	RK3568 4xA53@2.0GHz
Memory	RAM: 4GB, EMMC: 64GB, EEPROM:64KB, SSD: 1T(Optional)
GPU	Mail-G52
NPU	Support 1 Tops computing power
OS	Ubuntu 20.04
Brightness	450cd/m <sup>2</sup>
Resolution	1280*800
Angle	Full viewing Angle
Touch	3 point capacitive screen
Communication interface	3* CAN, 6* RS485, 1*RS232, 1*Type-C, 1* USB3.0, 4* 1000Mbps, Lan, 1* TF card, 1* Nano SIM card, 1* HDMI, 1* RTC
Control interface	12* DO, 16* DI, 2* NTC, 1* Buzzer
Wireless communication	Wifi/BT, 4G, GPS
IP Rating	IP65
Operating temperature	-20°C~70°C

# **ProControl** Prime

### Station Level Local EMS

Reliable control and display solution for large distributed energy storage systems.



#### Features



#### Information Summarization and Monitoring

EMS collects and uploads operational data of distributed energy storage systems for centralized monitoring. It displays system trends, performance metrics, and fault history to help users optimize operations.



#### Strategy Algorithm Configuration

EMS offers flexible strategy algorithms for customizing energy storage system operations based on specific needs and system conditions. This allows for optimal energy dispatch and management to maximize efficiency and cost-effectiveness.



#### Alarm Generation and Handling

EMS provides a user-friendly tool for creating graphical interfaces of energy storage systems. It allows real-time monitoring and management through topology, status diagrams,



#### **Energy Metering and Anti-Reverse Flow Control**

EMS handles energy metering and anti-reverse flow control, effectively managing energy flow within the storage system and ensuring stable PCS operation.



#### **BMS Data Collection and Display**

EMS communicates with Battery Management Systems (BMS) to collect real-time data on battery parameters and displays it graphically. This includes battery health, charge/discharge status, SOC, and SOH.



#### **Profit Analysis**

EMS includes robust profit analysis capabilities for in-depth assessment of energy storage system operational data. This analysis helps users evaluate economic benefits, providing strong support for decision-making.

#### Interface Showcase









#### Parameters

General Parameters	
СРИ	2U Rack Server
Memory	Intel® Xeon® Gold 5218 Processor 22M Cache, 2.30 GHz, Qty 2
Hard disk capacity	64G
NIC	3*1.2T SAS
PCIE	4 Gigabit LAN cards6 PCLe 3.0
Power Supply	slots 550W power supply*2
Chassis Size	Chassis Specifications: 445*87*746mm
IP Rating	IP20
Operating Temperature	5.0°C~40.0°C (41.0°F~104.0°F)
Operating Humidity	85% RH

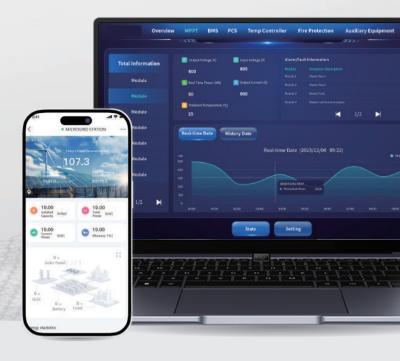
# **Renon** Smart

**Cloud Energy Management System** 

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# We're Using Smart Power to Simplify Your Life.

Renon Smart is a comprehensive device management and monitoring solution for national agents, secondary agents, installers and users. Comprehensive system for managing large-scalepower station and commercial and industrial energy storage systems



#### Features



# Instant Clarity with Remote Data Monitoring and Analysis

Remote data monitoring, automatic curve generation, and big data analysis management make the product operation status clear at a glance.



# Enhanced Security with Distributed Architecture and Data Encryption

Distributed architecture deployment and data security encryption ensure that cloud data is more secure and reliable.



# Seamless Connections with Intelligent Mall and Trial Applications

Intelligent mall application and new product trial application enable users to contact source manufacturers directly, making product promotion faster and more accurate



# Boost Customer Satisfaction with Remote Firmware Upgrades

Remote firmware upgrading and intelligent operation and maintenance report generation effectively improve customer satisfaction.



# Optimized Channel Construction with a Six-Level Distribution System

The six-level distribution system, from the brand owner to end-users, is more conducive to robust product channel construction.

#### Interface Showcase





# **Installation Cases**

Renon Power's global installations of microgrid systems enhance energy efficiency and sustainability,providing reliable power solutions for diverse commercial and industrial applications.

Tokyo, Japan



Renon EStation 430A



Renon DC ECube 157kWh\*2 Kitsuki City, Japan



Renon DC ECube 38kWh



Chiba Prefecture, Japan Renon DC ECube 157kWh





Renon DC ECube 157kWh



Kagoshima, Japan



Renon DC ECube 15kWh\*4 Saitama, Japan



Renon DC ECube 215kWh\*5



Renon DC Ecube 38kWh\*4



Gunma prefecture, Japan

Utsunomiya, Japan

# **Renon** Exhibition

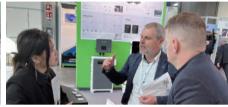
At Renon Power, our team is our greatest asset.

We are a diverse group of passionate professionals, united by a shared mission to make green power within reach.

RIMINI Expo Italy







Intersolar 2025 San Diego

The United States







PV EXPO 2025 Tokyo

Japan







RE+ 2024 The United States







The Smarter E 2024 Germany

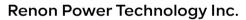






## **Note Book**

PROVIDE	
INNOVATIVE,	
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