

# Residential Series

## Battery Storage Solutions

FOR EU MARKET



**Renon Power Technology Inc.**

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2025-4-22



# Renon Power

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## We Care About Sustainability

With our own R&D team and automated production factory, we are dedicated to delivering innovative, reliable, and affordable energy storage solutions to customer globally.

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.**

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

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# Content

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

Industry Application	01
Products	02
Solution	27
Renon Smart	28
Installation Cases	30
Renon Exhibition	31



# Industry Application

Renon's energy storage products are extensively applied across residential, commercial, and industrial sectors. With exceptional performance, cutting-edge technology, and efficient energy management, they provide reliable, innovative, and eco-friendly energy solutions, helping global users achieve their sustainability goals.



Residential  
Multi-Family



Residential  
Single Family



Residential  
Detached Housing

Industrial  
Manufacturing

Commercial  
Retail

Commercial  
Office Space



Commercial  
Lowercase

Commercial  
Data Centers

Commercial  
Lowercase



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

Featuring straightforward installation and flexible, scalable capacity, these products address a broad spectrum of home energy storage requirements.

## ■ LV Battery Storage System



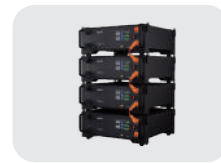
P03  
Xtreme LV



P05  
Xcellent



P07  
Xcellent Plus



P09  
EBrick

## ■ HV Battery Storage System



P11  
Xtreme HV 1.0

## ■ One-stop Solution



P19  
Flex LV-EU 01 Series



P23  
Flex LV-EU 03



P25  
Flex HV-EU 03



# Xtreme LV

## Modular LV Battery System

**Scalability:** The system can be expanded with up to 30 systems in parallel, offering flexibility and future-proofing for growing energy needs.

**High Efficiency:** Designed for peak shaving and self-consumption, it helps reduce energy bills by optimizing the use of solar power and minimizing reliance on the grid.

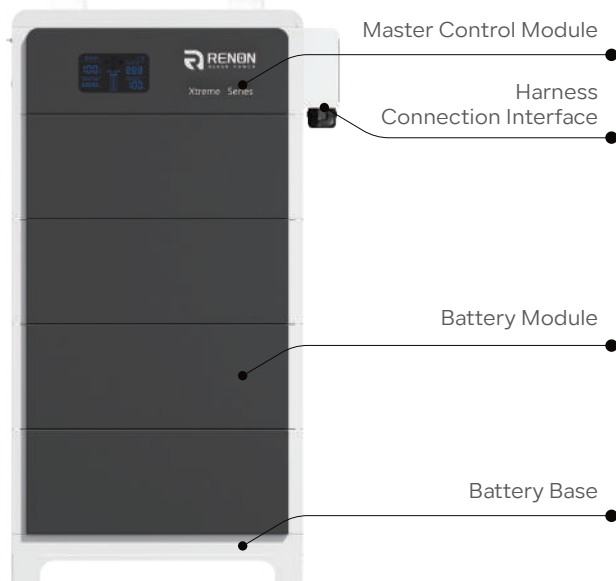
**Strong Compatibility:** The system is designed to work seamlessly with various inverters and energy management systems, providing flexibility in integration with existing setups.

**Comprehensive Warranty:** Backed by a 10-year warranty, the Xtreme LV system assures long-term peace of mind and protection for the investment.

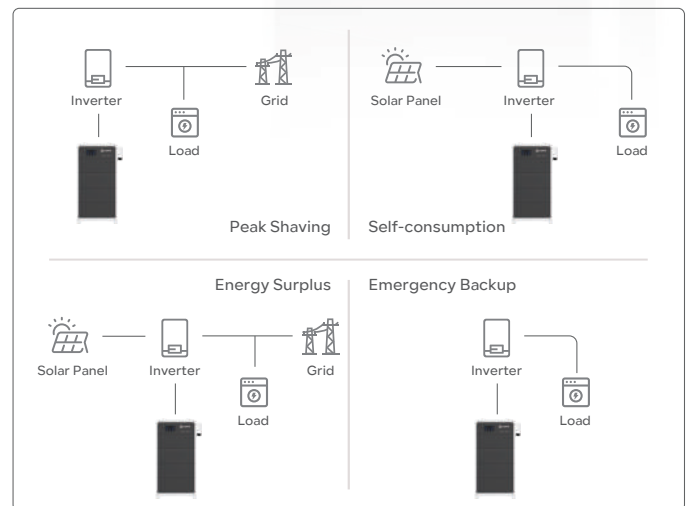
**Wi-Fi Connectivity and APP Control:** Enables remote monitoring and management of the energy storage system through a dedicated mobile application, enhancing user convenience and control.



### Product Details



### System Layout



### Application Scenario



Battery Energy Storage(48/51.2V)	2 Modules	3 Modules	4 Modules	5 Modules	6 Modules
Product Model (48V)	R-XL009021	R-XL014031	R-XL019021	R-XL024021	R-XL028021
Product Model (51.2V)	R-XL010021	R-XL015031	R-XL020041	R-XL025051	R-XL030061
Nominal Energy (kWh)	9.6/10.24	14.4/15.36	19.2/20.48	24/25.6	28.8/30.72
Output Power (kW)	9.1/9.7	13.7/14.6	14.4/15.4	14.4/15.4	14.4/15.4
Max. Operation Current (A)	190	285	300	300	300
Peak for 10s (A)	196	297	392	490	500
Peak for 2s (A)	240	360	480	500	500
Max. Charging Voltage (Vdc)	54.75/58.4				
Discharge Cut-off (Vdc)	40.5/43.2				
Nominal Voltage (Vdc)	48/51.2				
Recommend Charging Voltage(Vdc)	53.25/56.8				
Battery Chemistry	LiFePO4				
Dimension (W*D*H)	635*268*795mm 25*10.6*31.3in	635*268*1023mm 25*10.6*40.3in	635*268*1250mm 25*10.6*49.2in	635*268*1478mm 25*10.6*58.2in	635*268*1705mm 25*10.6*67.1in
Net Weight (Approximate)	139/141kg 306/311lb	192/194kg 423/428lb	245/247kg 540/545lb	298/300kg 656/661lb	351/353kg 773/778lb

#### General Parameters

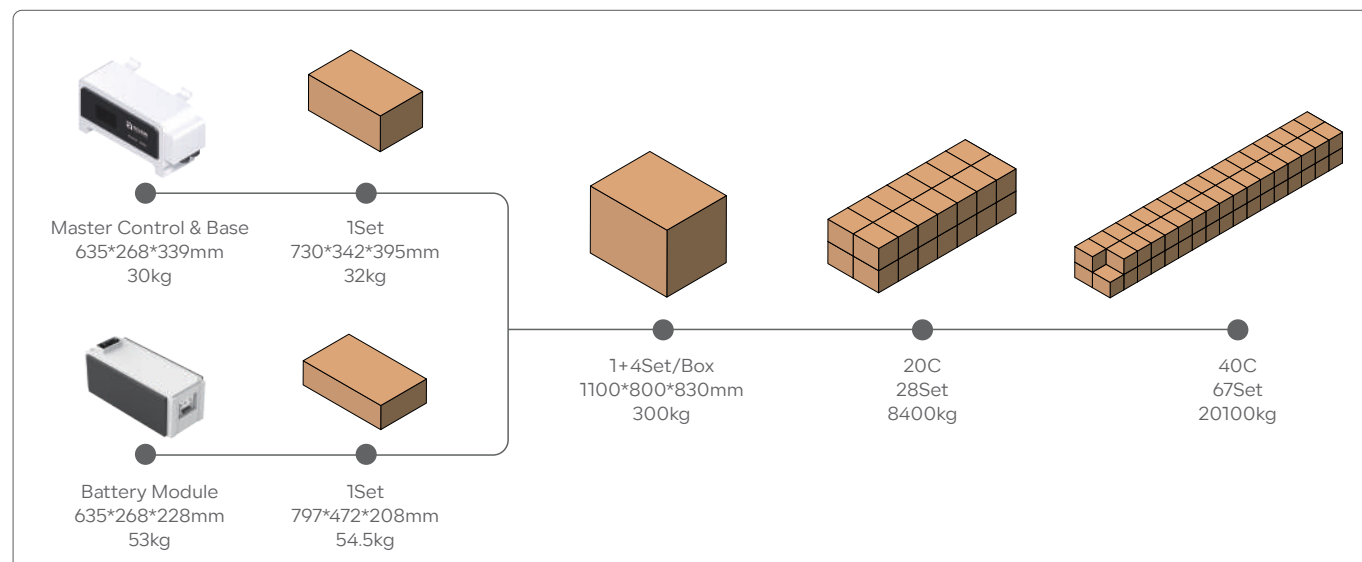
Scalability	Max. 15 systems in parallel
Storage Conditions	-20°C ~ 55°C(0°C ~ 35°C Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 0°C ~ 50°C Discharge: -20°C ~ 50°C
Cooling	Natural Cooling
Max. Altitude	4000m / 13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

#### System Characteristic

Master Control Model	R-MC300-XTL01
Battery Model	R-EM51100-XTL01
Battery Compliances	UL1973,UL9540, UL9540A UKCA, IEC 62619, IEC62040 CEI 0-21, UN 38.3, EN-61000, EN-62311
Installation Method	Stack Mounting
Installation Scene	Indoor or Outdoor
IP Rating	IP65
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

## Packaging & Shipping Details



# Xcellent

## Wall-Mounted LV Battery System

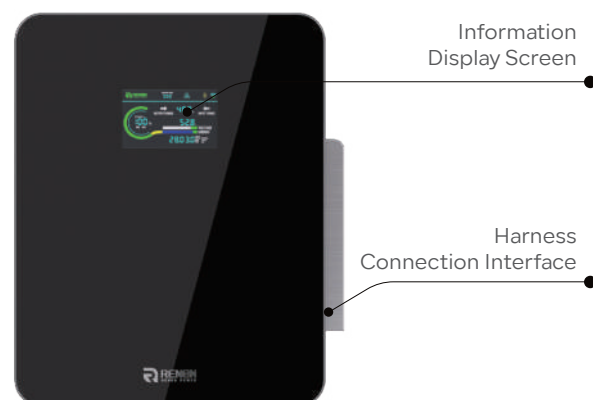
**Safe and Stable LFP Technology:** The Xcellent series uses Lithium Iron Phosphate (LFP) battery chemistry, known for its safety, stability, and long lifespan, ensuring reliable performance.

**Minimalist and Compact Design:** The Xcellent batteries feature a minimalist, noise-free design that can be seamlessly integrated into various residential settings, both indoor and outdoor.

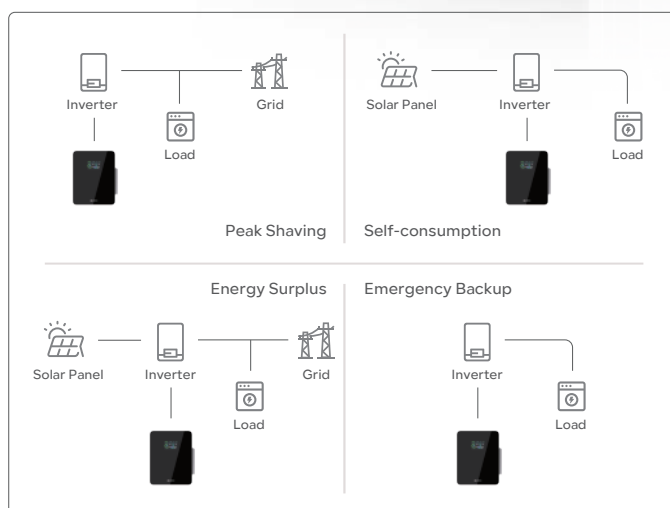
**High Compatibility and Flexibility:** The Xcellent series is designed to be highly compatible with various inverters and can be easily scaled to meet different energy storage needs, from small residential setups to larger installations.



### Product Details



### System Layout



### Application Scenario





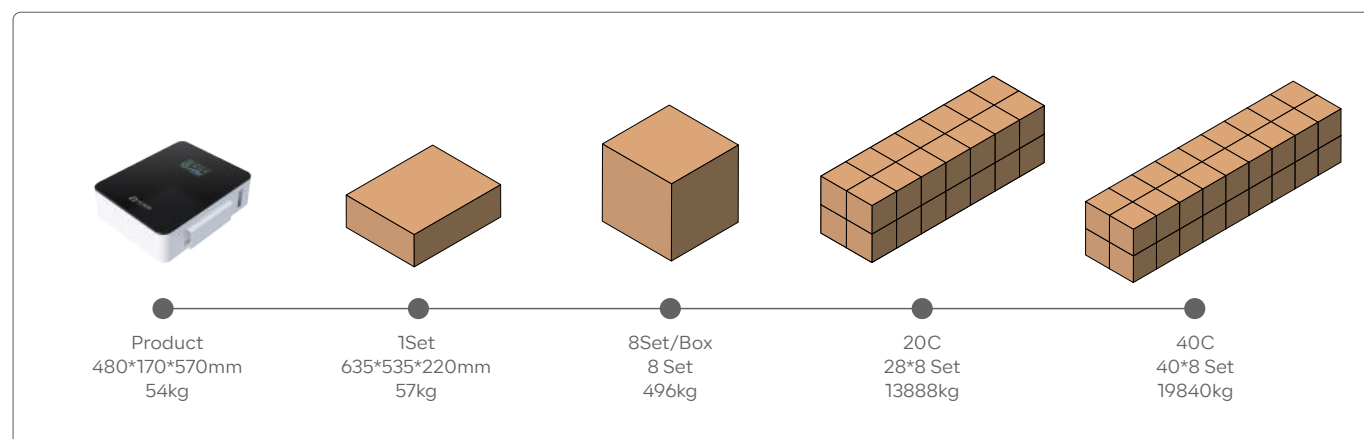
Battery Energy Storage	
Battery Chemistry	LiFePO4
Cell Capacity (Ah)	100
Nominal Energy (kWh)	5.12
Output Power (kW)	4.8
Default Voltage (V)	51.2
Voltage Range (V)	43.2 ~ 59.2
Max. Operation Current (A)	95
Primary Overcurrent Protection (A)	98@10S
Secondary Overcurrent Protection (A)	120@2S
Max. Charging Voltage (V)	58.4
Discharge Cut-off (V)	43.2
Recommended Charging Voltage (V)	56.8
Dimension (W*D*H)	480*170*570mm 18.9*6.7*22.4in
Net Weight (Approximate)	54kg 119lb

General Parameters	
Scalability	Max. 31 systems in parallel
Storage Conditions	-20°C ~ 55°C(0°C ~ 35°C Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 0°C ~ 50°C Discharge: -20°C ~ 50°C
Cooling	Natural Cooling
Max. Altitude	4000m / 13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

System Characteristic	
Battery Model	R-XC005161
Battery Compliances	IEC 62619, UN 38.3, UL1973 UKCA, CEI 0-21, EN-62311, EN-61000
Installation Method	Wall-Mounting
Installation Scene	Indoor
IP Rating	IP20
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

## Packaging & Shipping Details



# Xcellent Plus

## Wall-Mounted LV Battery System

**Dependable Safety:** Designed with a high level of safety features, including dependable lithium iron phosphate (LiFePO<sub>4</sub>) technology, ensuring safe and stable operation.

**Sleek Aesthetics:** Modern and sleek design that integrates seamlessly into residential environments, enhancing the aesthetic appeal of installation areas.

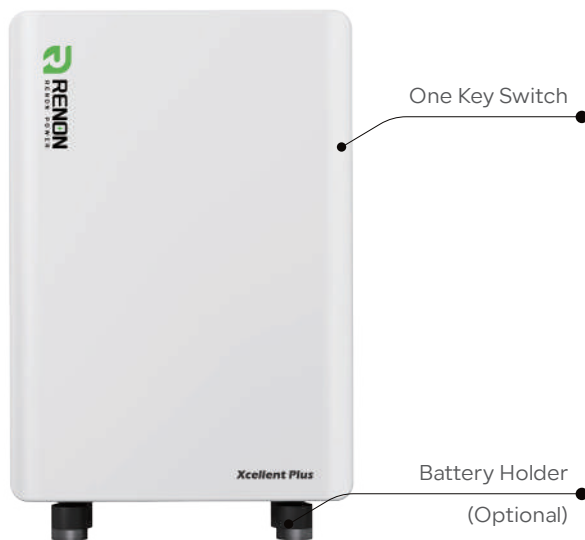
**Whisper-Quiet Operation:** Engineered for silent operation, making it ideal for home settings where noise levels need to be minimal.

**Versatile Compatibility:** Compatible with various inverters and energy systems, allowing for flexible integration with existing home energy setups.

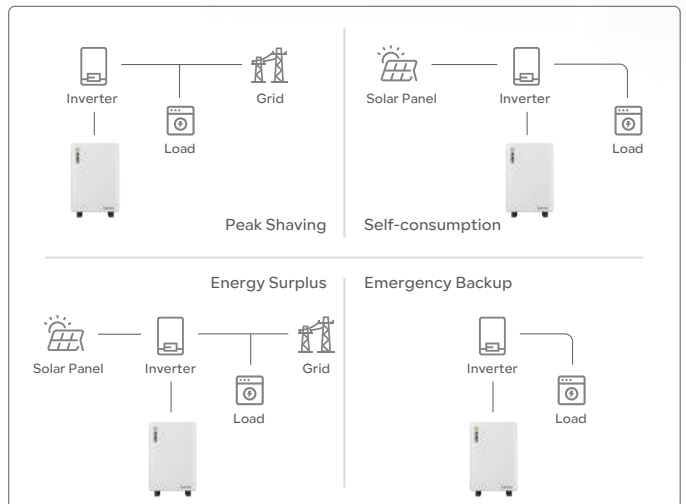
**Long Cycle Life:** Offers an impressive cycle life of up to 8000 cycles, providing long-term reliability and cost-effectiveness.



### Product Details



### System Layout



### Application Scenario



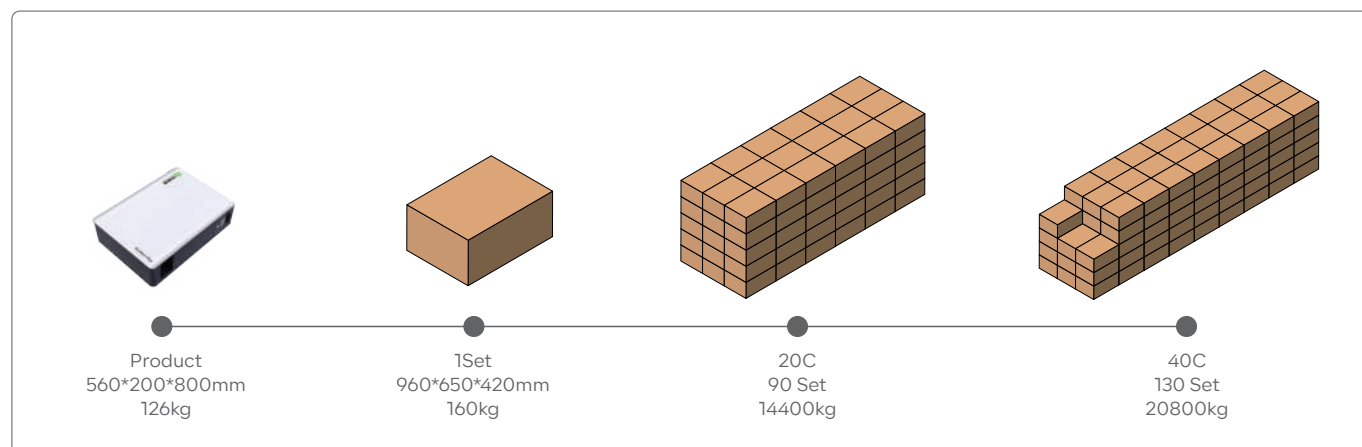
Battery Energy Storage	
Battery Chemistry	LiFePO4
Cell Capacity (Ah)	314
Nominal Energy (kWh)	16
Output Power (kW)	10.2
Default Voltage (V)	51.2
Voltage Range (V)	43.2 ~ 59.2
Max. Operation Current (A)	200
Primary Overcurrent Protection (A)	210@10S
Secondary Overcurrent Protection (A)	250@500mS
Max. Charging Voltage (V)	58.4
Discharge Cut-off (V)	43.2
Recommended Charging Voltage (V)	56.8
Dimension (W*D*H)	560*200*800mm 22*7.8*31.5in
Net Weight (Approximate)	126kg 278lb

General Parameters	
Scalability	Max. 15 systems in parallel
Storage Conditions	-20°C ~ 55°C(0°C ~ 35°C Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 0°C ~ 50°C Discharge: -20°C ~ 50°C
Cooling	Natural Cooling
Max. Altitude	4000m / 13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, RS232

System Characteristic	
Battery Model	R-XC016161
Battery Compliances	IEC 62619, UN 38.3, CEI 0-21, EN-61000
Installation Method	Wall-Mounting or Floor Mounting
Installation Scene	Indoor or Outdoor
IP Rating	IP65
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

## Packaging & Shipping Details



# EBrick

## Rack Mounted LV Battery System

**Modular Design and Easy Installation:** EBrick's rack-mount design allows for customizable and simple installation, with the flexibility to connect multiple units in parallel. This reduces installation time and costs.

**Wi-Fi Connectivity and App Control:** EBrick features Wi-Fi connectivity, enabling users to remotely monitor and control the system via a dedicated app. This enhances user experience with real-time monitoring and efficient system management.

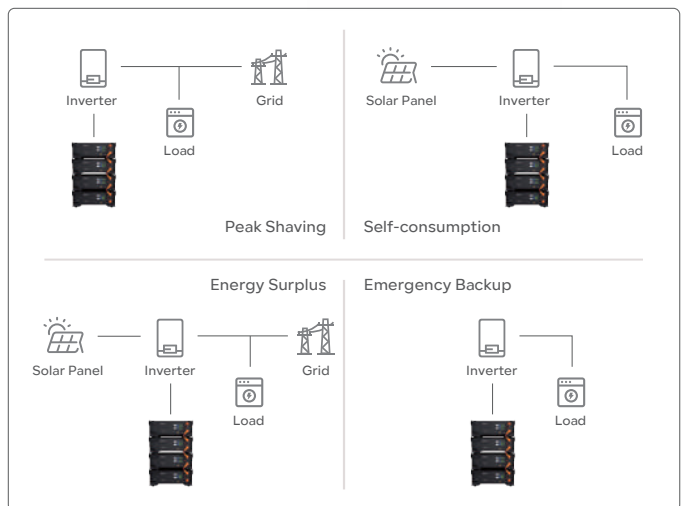
**Stable LiFePO4 Battery Technology:** EBrick uses reliable lithium iron phosphate (LiFePO4) batteries, offering up to 8000 cycles. Its efficient battery management system ensures high performance and safety.



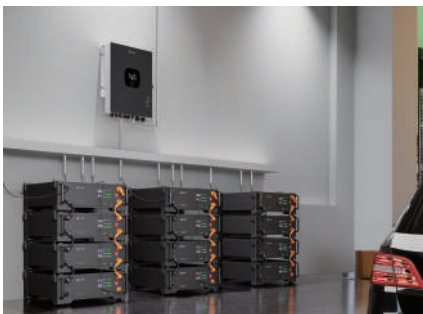
### Product Details



### System Layout



### Application Scenario





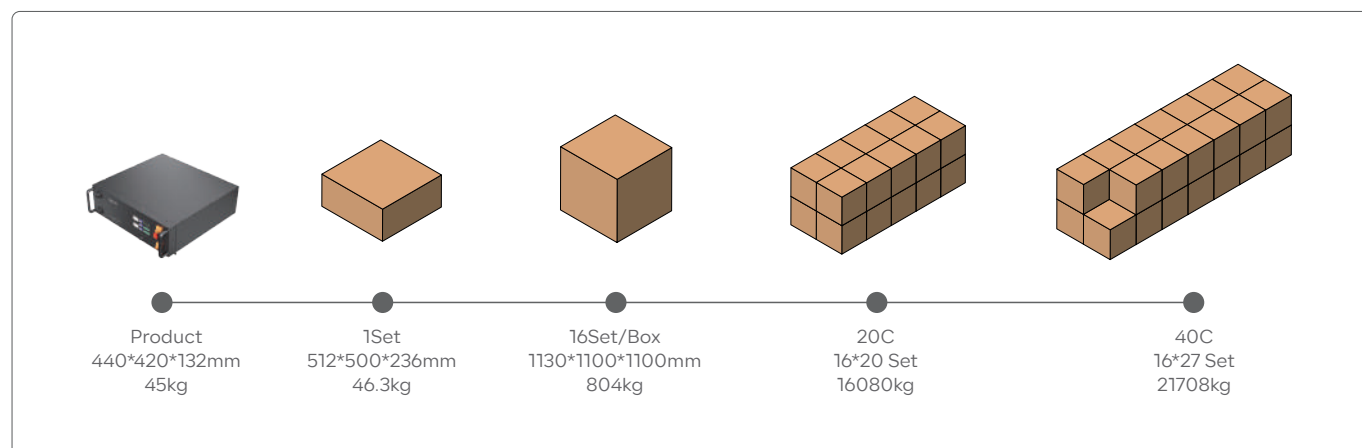
Battery Energy Storage	
Battery Chemistry	LiFePO4
Cell Capacity (Ah)	100
Nominal Energy (kWh)	5.12
Output Power (kW)	4.8
Default Voltage (V)	51.2
Voltage Range (V)	43.2 ~ 59.2
Max. Operation Current (A)	95
Primary Overcurrent Protection (A)	98@10S
Secondary Overcurrent Protection (A)	120@30mS
Max. Charging Voltage (V)	58.4
Discharge Cut-off (V)	43.2
Recommended Charging Voltage (V)	56.8
Dimension (W*D*H)	440*420*132mm 17.3*16.5*5.2in
Net Weight (Approximate)	45kg 99.2lb

General Parameters	
Scalability	Max. 31 systems in parallel
Storage Conditions	-20°C ~ 55°C(0°C ~ 35°C Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 0°C ~ 50°C Discharge: -20°C ~ 50°C
Cooling	Natural Cooling
Max. Altitude	4000m / 13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

System Characteristic	
Battery Model	R-EB005161
Battery Compliances	UL1973, UL9540A, IEC 62619, UN 38.3 CEI 0-21, UKCA, EN-61000, EN-62311
Installation Method	Rack Mounting
Installation Scene	Indoor
IP Rating	IP20
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

## Packaging & Shipping Details



# Xtreme HV 1.0

## Modular HV Battery System

**High Efficiency and Scalability:** The high voltage system offers a nominal voltage of 204.8–614.4V, reducing transmission losses, and its modular design provides 2 to 6 module stacking solutions, ensuring high operational reliability with dynamic current equalizing techniques.

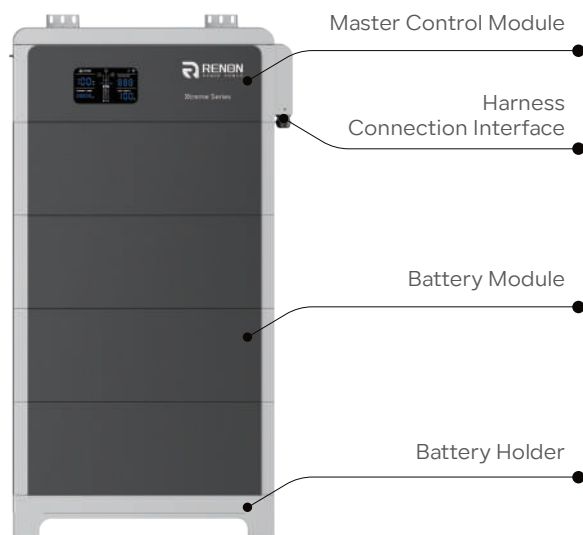
**Advanced Smart Management:** Wireless design with Wi-Fi connectivity, and the intelligent energy management system (EMS) allow for easy activation, unified management, and real-time monitoring and fault pre-warning.

**Superior Safety and Durability:** With a built-in battery optimizer, up to 8000 cycle life, IP55 protection rating, and comprehensive certifications, the system ensures long-term stable operation and global safety compliance.

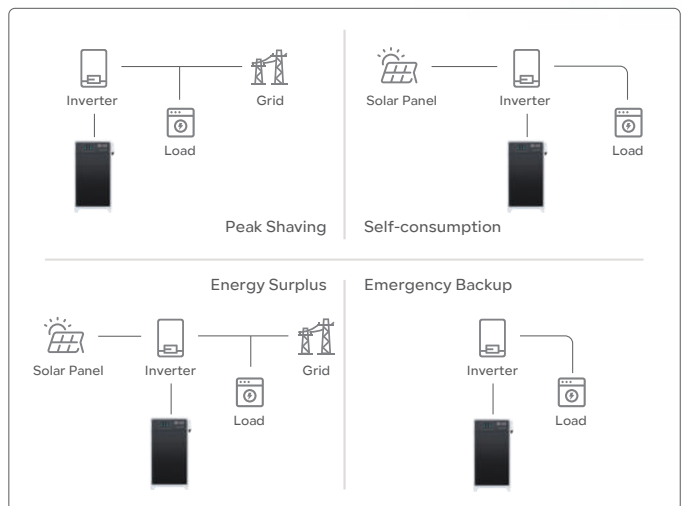
**User-Friendly Integrated Solutions:** The integration with Renon Flex Inverter eliminates the need for additional third-party inverters, and the 10-year warranty enhances user confidence and satisfaction.



### Product Details



### System Layout



### Application Scenario



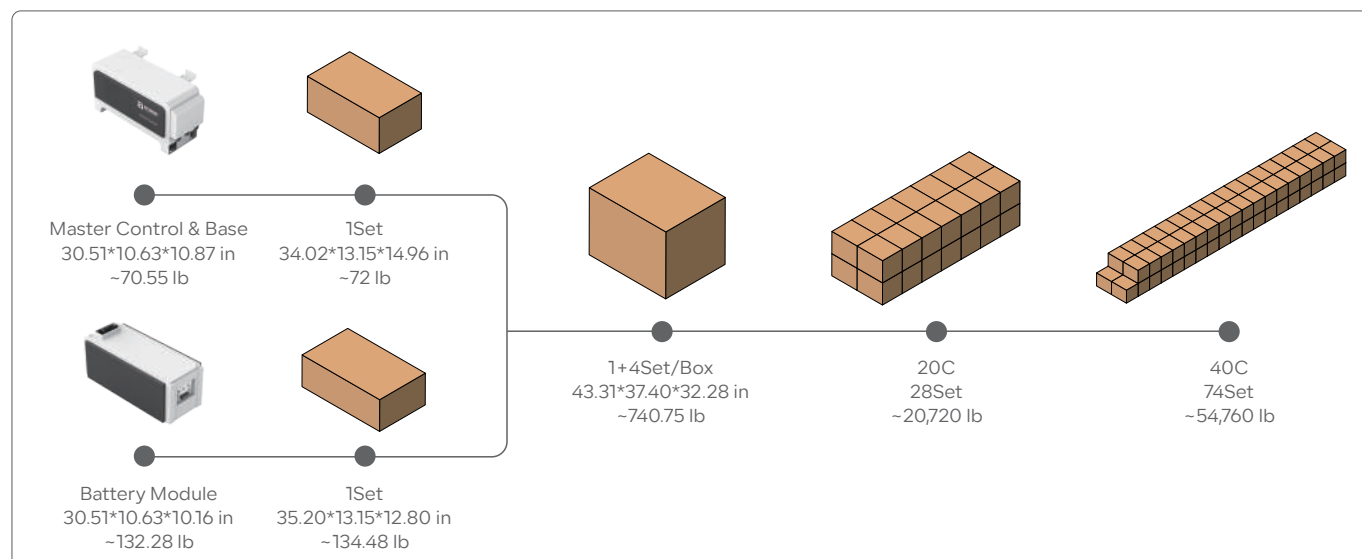
Battery Energy Storage					
Product Model	R-XH009021	R-XH014031	R-XH019041	R-XH024051	R-XH028061
Product Module QTY	2	3	4	5	6
Battery Chemistry	LiFePO4				
Battery Combination	1P60S	1P90S	1P120S	1P120S	1P150S
Cell Capacity (Ah)	50				
Nominal Energy (kWh)	9.6	14.4	19.2	24	28.8
Nominal Power (kW)	9.216	13.824	18.432	230.4	27.648
Nominal Voltage (V)	192	288	384	480	576
Max. Charging Voltage (A)	219	328.2	438	547.5	657
Recommend Discharge Cut-off Voltage	175.8	263.7	351.6	439.5	527.4
Dimensions - W*D (mm/in)	775*270/30.5*10.6	775*270/30.5*10.6	775*270/30.5*10.6	775*270/30.5*10.6	775*270/30.5*10.6
Dimensions - H (mm/in)	854/33.6	1112/43.8	1370/53.9	1628/64	1886/74.1
Total Weight - (kg/lb)	152/335	212/467	272/599	332/731	392/863

General Parameters	
Scalability	Max. 5 cluster in parallel
Storage Conditions	-4°F ~ 131°F(32°F ~ 95°F Recommended) Up to 90%RH, non-condensing Initial SoC: 50%
Operating Temperature	Charge: 32°F ~ 122°F Discharge: -4°F ~ 122°F
Cooling	Natural Cooling
Max. Altitude	4000m / 13123ft
Cycle Life	8000 Cycles
Communication	RS485, CAN, WiFi

System Characteristic	
Master Control Model	R-MC050-XTH01
Battery Model	R-EM102050-XTH01
Battery Compliances	IEC62619, MSDS, UN38.3 UL 1973, UL 9540, UL 9540A(Coming soon)
Installation Method	Stack Mounting
Installation Scene	Indoor or Outdoor
IP Rating	IP55
Warranty [1]	10 Years

[1] Please refer to the warranty letter for details

## Packaging & Shipping Details



# Flex LV-EU 01

## LV Single-phase Hybrid Inverter

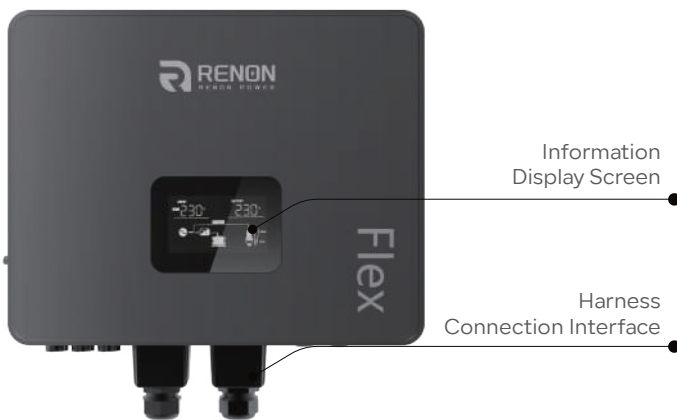
**Integrated Design:** Renon Power's Flex LV-EU 01 series includes a built-in Renon Flex inverter, eliminating the need for third-party inverters. Users can monitor and control the system through the Renon Smart app, simplifying the user experience.

**Easy Installation and Expansion:** The system supports stackable modules without cables, simplifying installation. It allows easy expansion to meet future energy needs, and its compact design saves space.

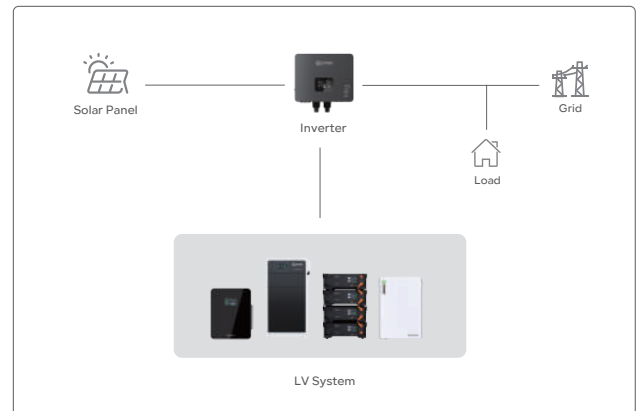
**Durability and User-Friendly:** With an IP65 protection rating, the Flex LV-EU 01 series is water and dust resistant. It offers mobile access for setup and maintenance, customizable charging profiles, and remote firmware upgrades, enhancing user experience and efficiency.



### Product Details



### System Layout



### Application Scenario





Model							
Inverter Model	R-IFL03-EU01	R-IFL03a-EU01	R-IFL04-EU01	R-IFL04a-EU01	R-IFL05-EU01	R-IFL06-EU01	R-IFL08-EU01
Interface	RS485, Wifi, 4G, CAN, DRM						
Certifications	C10/11, VDE, EMC, EN50549-1, IEC 62109-1/IEC 62109-2, EN62109-1/EN62109-2, CE, G99, G98, CEI 0-21						
PV Input							
Max. Input Power (kW)	4.5	5.4	6	6.9	7.5	9	12
Start-up Voltage (V)	100						
Max. PV Input Voltage(V)	550						
MPPT Range/nominal (V)	80~500/360						
Max.Input Current of Single MPPT(A)	16/16	16/16	16/16	16/16	16/16	16/16	16/32
MPPT Tracker Quantity	2						
MPPT Quantity / The Number of Input Strings Per MPPT	1/1	1/1	1/1	1/1	1/1	1/1	1/2
AC Output							
Rated Power (kW)	3	3.68	4	4.6	5	6	8
Rated Current Output to Grid (A)	13	16	17.4	20	21.7	26	35
Nominal Voltage/Range(V)	230/176~270						
Frequency (Hz)	50/60						
Power Factor	1(0.8 leading-0.8 lagging)						
THDi	<3%						
Grid Type	L+N+PE						
Battery Data							
Battery Voltage Range(V)	40~58						
Max. Charging Voltage(V)	58						
Max. Charge/Discharge Current(A)	60/60	72/72	80/80	92/92	100/100	120/120	160/160
Communication Interface	CAN						
EPS Output							
Rated Power (kW)	3.68	3.6	4	4.6	5	6	8
Rated Voltage(V)	230						
Rated AC Current Output to Grid (A)	13	16	17.4	20	21.7	26	35
Rated Frequency(Hz)	50/60						
Automatic Switchover Time(ms)	<10						
THDu	<2%						
Overload Capacity	100%, 60s/120%, 30s/150%, 10s						
General Parameters							
Scalability	Max. 4 systems in parallel						
Max. Efficiency	98%						
Europe Efficiency	97%						
Mppt Efficiency	99.9%						
IP Rating	IP65						
Operation Temperature	-25~60°C						
Cooling	Natural						
Relative Humidity	0~95% (non-condensing)						
Max. Altitude	4000m / 13123ft						
Dimensions(W*D*H)	454.5*200*467mm 8*7.8*18.3in					467*200*484mm 8.3*7.8*19in	
Weight	18kg / 40lb					20kg / 44lb	
Topology	Non-isolated						
Self-consumption At Night (W)	<20						

# Flex LV-EU 01G

## With Generator Input LV Single-phase Hybrid Inverter

**Optimized Heat Distribution:** Enhanced hardware upgrades optimize heat distribution, effectively minimizing overall heat generation.

**Expanded Power Segments:** New power options ranging from 3 to 6 kW deliver high capacity in a compact, space-saving design.

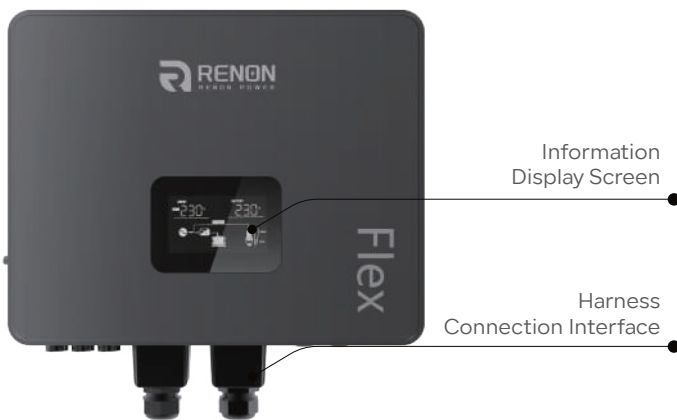
**Advanced PV Input Capacity:** Each PV input supports up to 16A, with the system allowing for PV power oversizing up to 1.5 times the rated model power.

### User-Friendly Display:

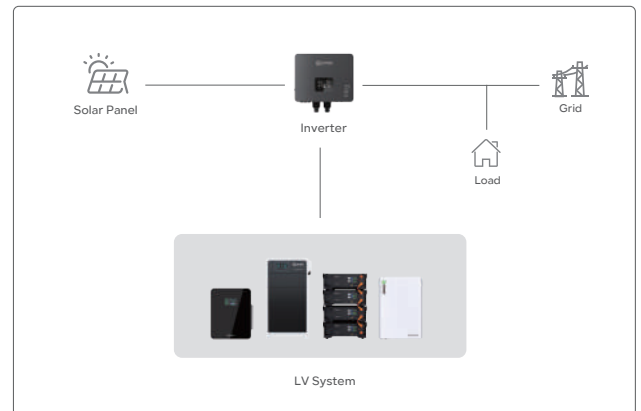
A high-resolution color screen ensures more convenient and intuitive operation.



## Product Details



## System Layout



## Application Scenario



Model	R-IFL03-EU01G	R-IFL03a-EU01G	R-IFL04-EU01G	R-IFL04a-EU01G	R-IFL05-EU01G	R-IFL06-EU01G
PV Input						
Max. Power (kW)	4.5	5.4	6	6.9	7.5	9
Start-up Voltage (V)				100		
Max.DC Voltage (V)				550		
MPPT Voltage Range/rated Voltage(V)				80~500/360		
PV/(Isc) (A)				24/24		
Max. Input Current of Each Component (A)				16/16		
No. of MPPT				2		
No.of Strings per MPPT Tracker				1/1		
AC output						
Rated Output Power (kVA/kW)	3/3	3.68/3.68	4/4	4.6/4.6	5/5	6/6
Max Output Power (kVA)	3.3	3.68	4.4	4.6	5	6.6
Max. Output Current (A)	14.3	16	19.1	20	21.7	28.7
Grid Voltage/range (Vac)				230/176 ~ 270		
Rate Grid Frequency (Hz)				50/60		
Power Factor				1(0.8leading...0.8lagging)		
THDi				< 3%		
AC Grid Type				L+N+PE		
Battery Data						
Battery Voltage Range (V)				40-58		
Max. Charging Voltage (V)				58		
Max. Charge/discharge Current (A)	60/60	72/72	80/80	92/92	100/100	120/120
Communication Interface				CAN/485		
Emergency Power Output						
Rated Power (kVA/kW)	3/3	3.68/3.68	4/4	4.6/4.6	5/5	6/6
Rated Output Voltage (Vac)				230		
Rated Output Current (A)	13	16	17.4	20	21.7	26
Rated Output Frequency (Hz)				50/60		
Automatic Switchover Time (ms)				≤10		
THDu				<2%		
General Parameters						
Battery Chage/discharge Efficiency				96%		
Max. Efficiency				97.2%		
Europe Efficiency				97%		
MPPT Efficiency				99.9%		
Ingress Protection				IP65		
Noise Emission (dB)				<35		
Operation Temperature (°C)				-25~60		
Cooling				Natural		
Relative Humidity				0 ~95% (Non-condensing)		
Max. Altitude				4000m / 13123ft		
Dimensions (W*D*H)				455*215*385mm		
Net Weight (kg)				20.7		
Standby loss (W)				<15		
Communication interface RS485/Wifi/GPRS/CAN/DRM				Yes/Opt/Opt/Yes/Yes		

# Flex LV-EU 03

## LV Three-phase Hybrid Inverter

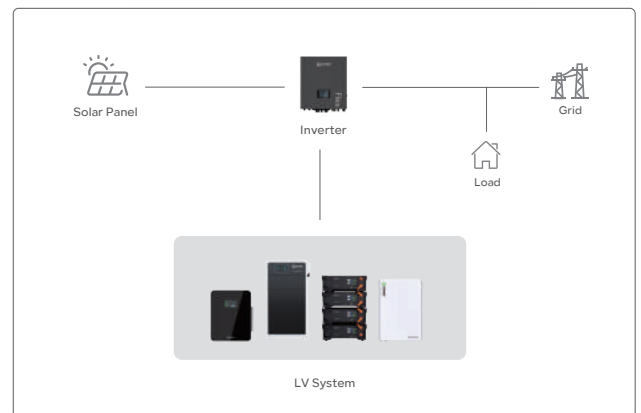
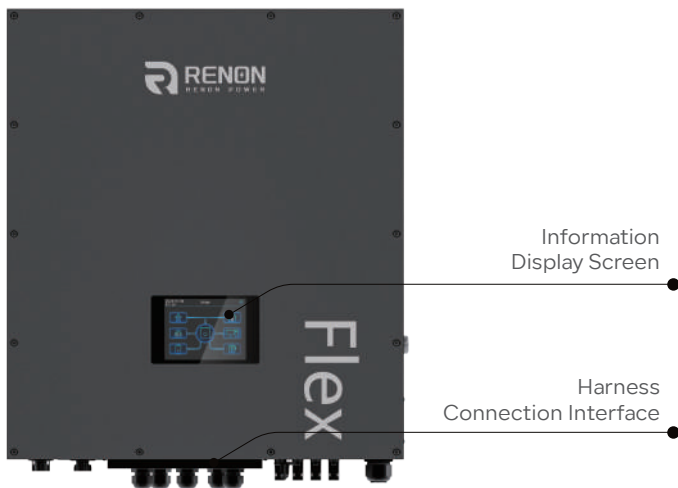
**Robust and Reliable Performance:** The Flex LV-EU 03 is IP65 rated for waterproof and dustproof protection, ensuring stable operation indoors and outdoors. It supports 150% unbalanced load for reliable output under high load. Built-in WiFi allows remote monitoring via an app.

**High Efficiency and Intelligent Management:** With a maximum PV input current of 26A, the Flex LV-EU 03 optimizes solar resource use and system efficiency. Dual outputs enable smart load management, and user-adjustable charging current allows for performance optimization.

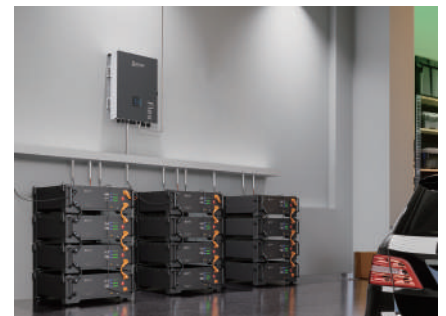
**Advanced Connectivity and Expandability:** The Flex LV-EU 03 features an RS485 port for seamless integration with battery management systems (BMS). It supports parallel operation of up to six units for scalable expansion. Robust construction and easy maintenance enhance reliability and reduce costs.



### Product Details



### Application Scenario





Model			
Inverter Model	<b>IFL12:</b> R-IFL12-EU03	<b>IFL15:</b> R-IFL15-EU03	
Max. PV Input Power(kW)	<b>IFL12:</b> 16	<b>IFL15:</b> 22.5	
Rated Output Power(kW)	<b>IFL12:</b> 12	<b>IFL15:</b> 15	
Max. Charging Power(kW)	<b>IFL12:</b> 12	<b>IFL15:</b> 15	

#### Grid-tie Operation - PV Input (DC)

Nominal DC Voltage / Max. DC Voltage(Vdc)	720 / 1000
Start-up Voltage / Initial Feeding Voltage(Vdc)	320 / 350
MPP Voltage Range(Vdc)	350 ~ 950
Number of MPP Trackers / Max. Input Current(A)	2 / A: 26, B: 26
Number of Strings Per MPP Tracker	A: 2, B: 2

#### Grid-tie Operation - Grid Output (AC)

Nominal Output Voltage(Vac)	230 (P-N) / 400 (P-P)
Output Voltage Range(Vac)	184 ~ 265(per phase)
Nominal Output Current(A)	<b>IFL12:</b> 21.7 / <b>IFL15:</b> 17.4(per phase)
Power Factor Range	0.9 lag ~ 0.9 lead

#### Grid-tie Operation - Efficiency

Max. Conversion Efficiency (DC/AC)	>96%
European Efficiency@ Vnominal	>95%

#### Off-grid Operation - AC Input

AC Start-up Voltage / Auto Restart Voltage(Vac)	120 ~ 140 / 180
Acceptable Input Voltage Range(Vac)	170 ~ 290 (per phase)
Max. AC Input Current(A)	40

#### Off-grid Operation - PV Input (DC)

Max. DC Power(kW)	<b>IFL12:</b> 16 <b>IFL15:</b> 22.5
Max. DC Voltage(Vdc)	1000
MPP Voltage Range(Vdc)	350 ~ 950
Number of MPP Trackers / Max. Input Current(A)	2 / A: 26, B: 26
Number of Strings Per MPP Tracker	A: 2, B: 2

#### Off-grid Operation - Battery Mode Output (AC)

Nominal Output Voltage(Vac)	230 (P-N) / 400 (P-P)
Output Waveform	Pure sine wave
Efficiency (DC to AC)	91%

#### Hybrid Operation - PV Input (DC)

Max. DC Voltage(Vdc)	1000
Start-up Voltage / Initial Feeding Voltage(Vdc)	320 / 350
MPP Voltage Range(Vdc)	350 ~ 950
Number of MPP Trackers / Max. Input Current(A)	2 / A: 26, B: 26
Number of Strings Per MPP Tracker	A: 2, B: 2

#### Hybrid Operation - Grid Output (AC)

Nominal Output Voltage(Vac)	230(P-N) / 400(P-P)
Output Voltage Range(Vac)	184 ~ 265 (per phase)
Nominal Output Current(A)	<b>IFL12:</b> 17.4 / <b>IFL15:</b> 21.7 (per phase)

#### Hybrid Operation - AC Input

AC Start-up Voltage / Auto Restart Voltage(Vac)	120 ~ 140 / 180
Acceptable Input Voltage Range(Vac)	170 ~ 290 (per phase)
Max. AC Input Current(A)	40

#### Hybrid Operation - Battery Mode Output (AC)

Nominal Output Voltage(Vac)	230 (P-N) / 400 (P-P)
Efficiency (DC to AC)	91%

#### Hybrid Operation - Battery & Charger

Battery Voltage Range(Vdc)	40 ~ 62
Max. Charging Current(A)	<b>IFL12:</b> 250 <b>IFL15:</b> 300

#### General Parameters

Scalability	Max. 6 systems in parallel
Dimension(W*D*H)	660*255*750mm / 26*10*30in
Net Weight	<b>IFL12:</b> 75kg / 165lb <b>IFL15:</b> 78kg / 172lb
Communication Port	RS-232, RS-485, USB, CAN, Wi-Fi
Intelligent Slot	Optional for SNMP and Modbus cards
Humidity	0 ~ 100% RH (Non-condensing)
Operating Temperature	-25 to 60°C (> 45°C power derating)
Max. Altitude	4000m / 13123ft
IP Rating	IP65
Safety	IEC 62109, IEC 62116, IEC 61727, IEC 61683
Grid Connection Standard	NRS097-2-1:2017, VDE-AR-N4105

# Flex HV-EU 03

## HV Three-phase Hybrid Inverter

**Integrated Design:** The Flex HV-EU 03 series includes a built-in Renon Flex inverter, eliminating the need for third-party inverters. Users can monitor and control the system via the Renon Smart app, simplifying the user experience.

**High Efficiency and Scalability:** The series offers high efficiency with reduced transmission losses and supports up to 10 units in parallel, allowing easy expansion. The integrated management system provides insights and predictive maintenance.

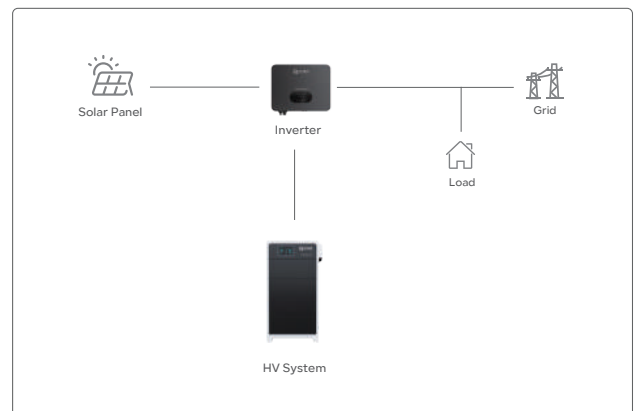
**Easy Installation and Advanced Control:** Designed for simple installation, the Flex HV-EU 03 series supports stackable modules. It features remote firmware upgrades, customizable charging profiles, and supports VPP and FFR functions.



### Product Details



### System Layout



### Application Scenario



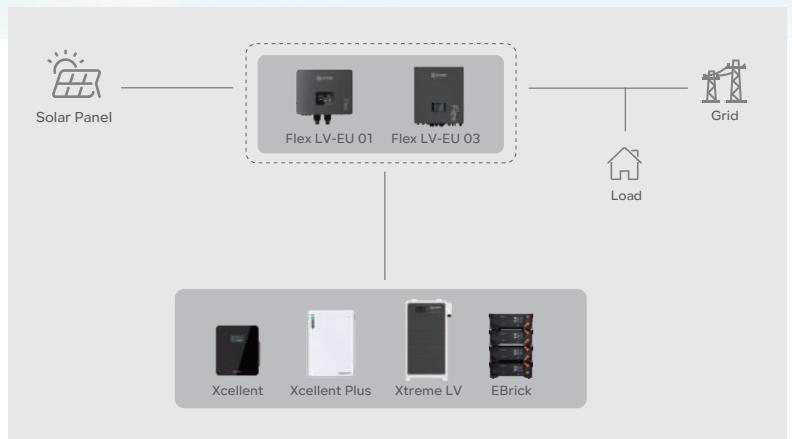
Model					
Inverter Model	R-IFH05-EU03	R-IFH06-EU03	R-IFH08-EU03	R-IFH10-EU03	R-IFH10-A-EU03
Recommended Max.PV Power (kWp)	7.5	9	12	15	15
Max. PV Input Voltage (V)			1000		
MPPT Voltage Range (V)			160 ~ 950		
Rated PV Input voltage (V)			600		
Start-up Voltage (V)			160		
No. of MPP Trackers			2		
No. of Input Strings per Tracker			1		
Max. Input Current per MPPT (A)			36(18/18)		
Max. Short-circuit Current per MPPT(A)			46(23/23)		
AC Output					
Max. Apparent Power (kVA)	5.5	6.6	8.8	10	11
Rated Power(kW)	5	6	8	10	10
Max. Current (A)	7.6	9.1	12.2	14.4	15.2
Rated Current (A)	7.2	8.7	11.5	14.4	14.4
Rated Voltage / Range (V)			3/ N / PE,220 / 380, 230 / 400;20%		
Grid Frequency / Range (Hz)			50 / 60;±5		
Adjustable Power Factor			0.8 leading ~ 0.8 lagging		
Output THDi(@Rated Output)			<3%		
AC Input					
Max. apparent Power (kVA)	10	12	16	20	20
Max. Current (A)	15.2	18.2	24.3	28.8	30.4
Rated Voltage / Range (V)			3 / N / PE, 220 / 380, 230 / 400; ± 20%		
Grid Frequency / Range (Hz)			50 / 60; ± 5		
Battery Data					
Battery Voltage Range (V)			160 ~ 700		
Max. Charging / Discharging Current (A)			30 / 30		
Communication Interface			CAN		
EPS Output Data (With Battery)					
Rated Power (kW)	5	6	8	10	10
Rated Voltage (V)			3 / N / PE, 220 / 380, 230 / 400		
Rated Frequency (Hz)			50 / 60		
Rated Current (A)	7.6	9.1	12.2	14.4	15.2
Output THDi (@Rated Output)			<3%		
Automatic Switch Time (ms)			<10		
Peak Apparent Power, Duration (kVA, s)	7.5, 60	9, 60	12,60	15, 60	15, 60
Efficiency					
Max. Efficiency			98.00%		
Euro Efficiency			97.70%		
Max. Battery Charge / Discharge Efficiency			97.60%		
General Parameters					
Scalability			Max. 5 systems in parallel		
Dimensions(W*D*H)			520*188 *412mm / 20.5*7.4*16in		
Weight			27kg / 59.5lb		
User Interface			LED + OLED		
Communication			RS485, USB, Wifi, 4G (Optional)		
Operating Temperature Range			-25~60°C		
Relative Humidity			0~100%		
Max. Altitude			4000m / 13123ft		
Standby Self Consumption (W)			<15		
Topology			Transformerless		
IP Rating			IP65		
Warranty			5 years		
Certifications	VDE 4105, EN 50549-1, VDE 0126, CEI 0-21, EN 50549-GR, EN 50549-PL, TOR Erzeuger, EN50549-CZ, AS4777, C10/11, IEC 62109-1, IEC 62109-2, EN/IEC 61000-6-1, EN/IEC 61000-6-3				

# Solution

## LV Solution

### Low Voltage Energy Storage for Everyday Needs

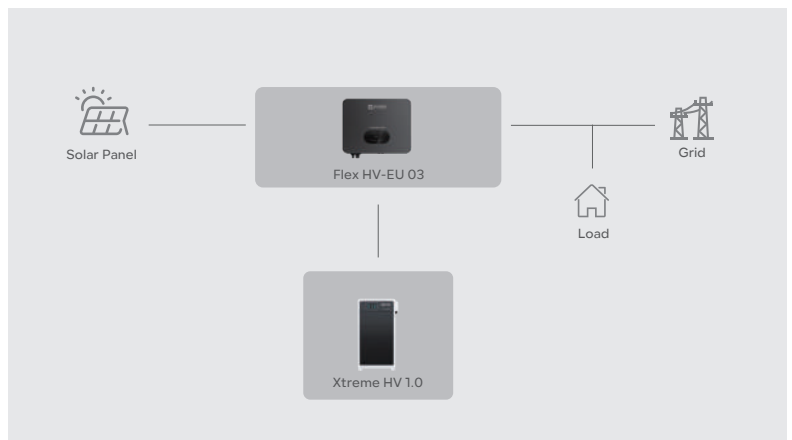
Residential LV solutions offer dependable and affordable energy storage for everyday household needs. Ideal for small to medium-sized homes, these low voltage systems provide continuous power supply, enhancing energy independence and reducing electricity costs.



## HV Solution

### High Voltage Energy Storage for Modern Homes

Residential HV solutions deliver robust and reliable energy storage, designed for larger homes with higher energy demands. These high voltage systems provide efficient power management, ensuring your home remains powered through peak usage times and outages.





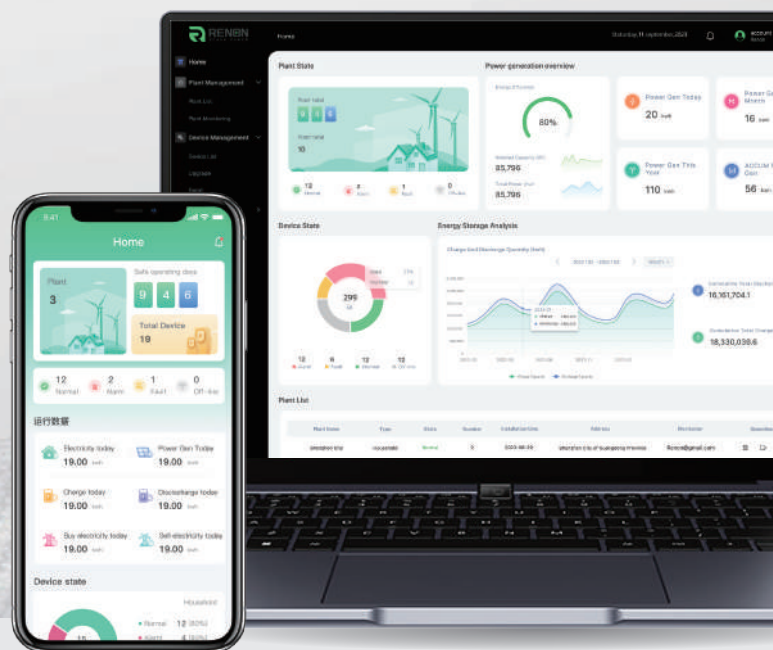
# Renon Smart

## Cloud Energy Management

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

Renon Smart is a comprehensive device management and monitoring solution for distributors, installers, and end users.

Our software and app are ideal for managing large-scale-power station and commercial and industrial energy storage systems.



#### Features



##### Instant Clarity with Remote Data Monitoring and Analytics

Remote data monitoring, automatic curve generation, and big data analytics 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.



##### Boost Customer Satisfaction with Remote Firmware Upgrades

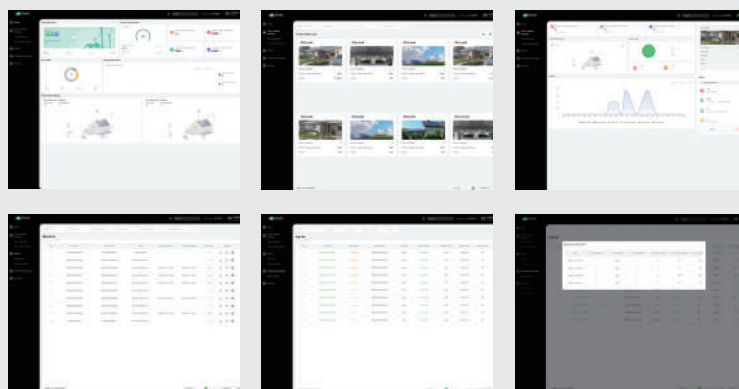
Remote firmware upgrading and intelligent operation and maintenance report generation effectively improve customer satisfaction.



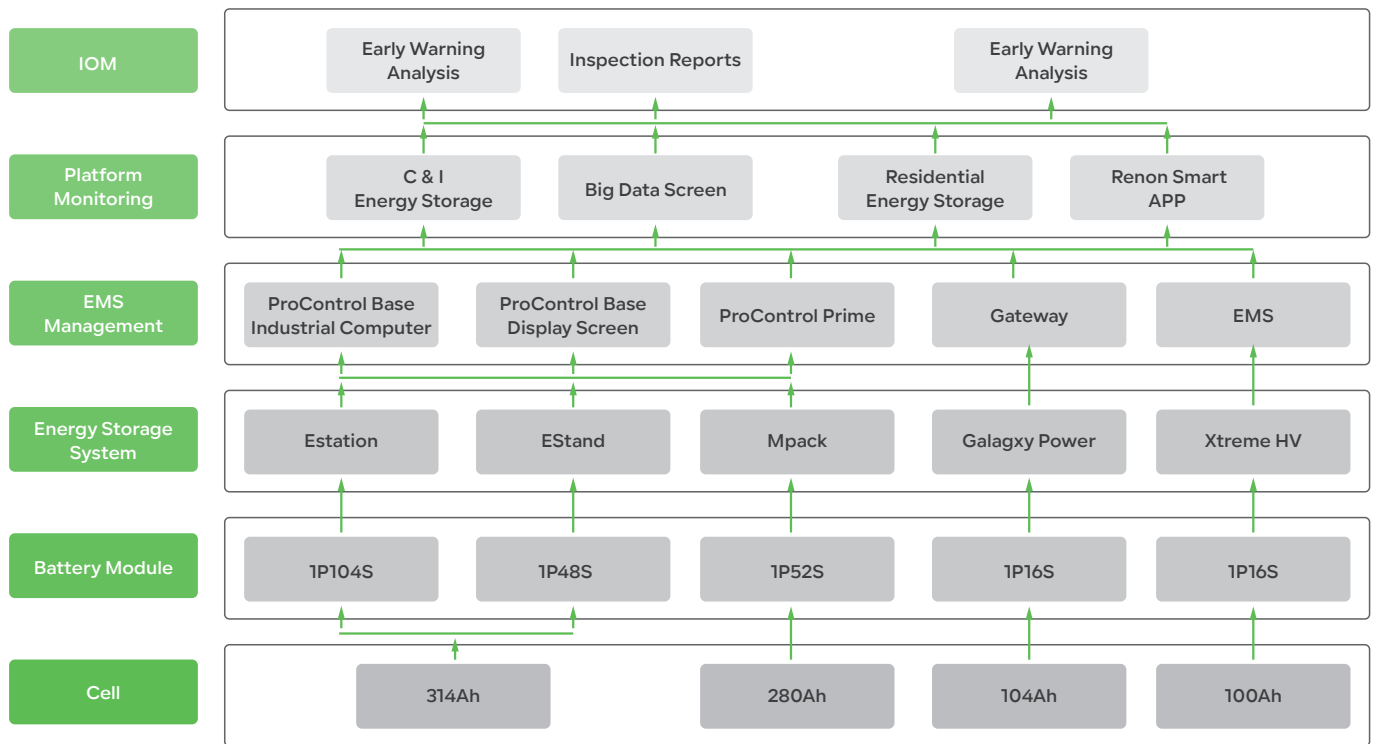
##### Optimized Channel Construction with a Six-Level Distribution System

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

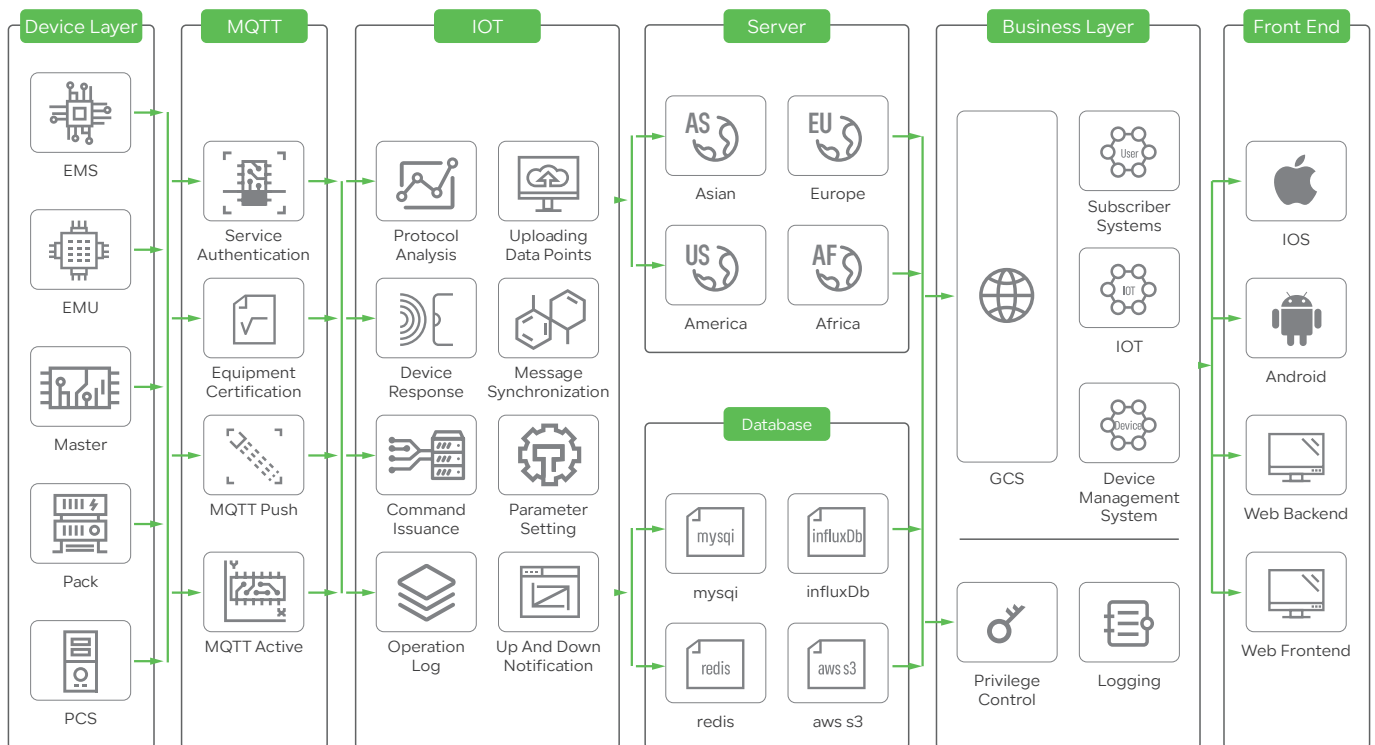
#### Interface Showcase



## Physical Link



## Platform Architecture



# Installation Cases

"As an installer, I appreciate the reliability and efficiency of Renon Power's solutions. Their technical support team is always available to assist with any questions or challenges, ensuring a smooth installation process from start to finish."

- Samantha J., Electrical Contractor



Lithuanian Xtreme LV



Germany EBrick



South Africa Xcellent



Italy Xcellent



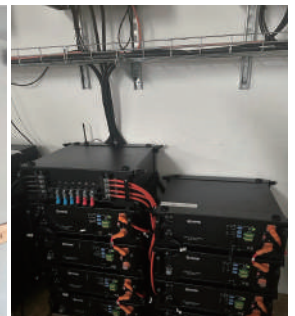
Italy Xcellent



Italy Xcellent



Italy Xcellent



Portugal Ebrick



South Africa



Xcellent South Africa Xtreme LV



Netherlands Xcellent



South Africa Xtreme LV



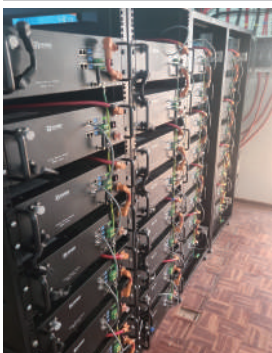
South Africa Xtreme LV



South Africa Xtreme LV



South Africa Xcellent



South Africa Ebrick



USA Xtreme LV



USA Xtreme LV



USA Xtreme LV



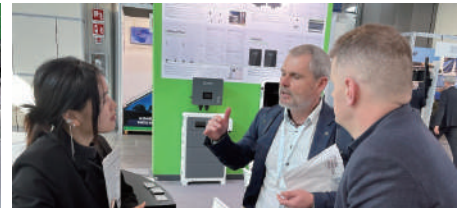
# Renon Exhibition

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.

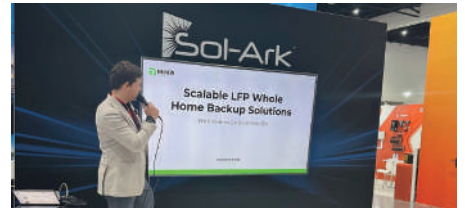
## RIMINI Expo

Italy



## Intersolar 2025 San Diego

The United States



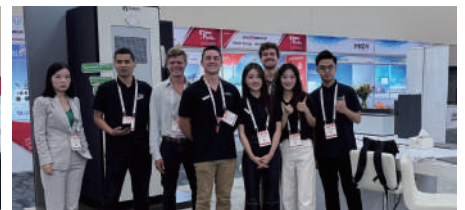
## PV EXPO 2025 Tokyo

Japan



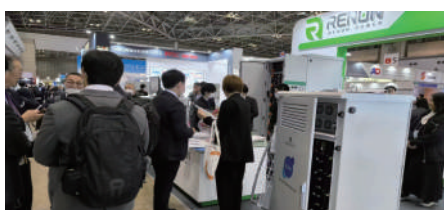
## RE+ 2024

The United States



## The Smarter E 2024

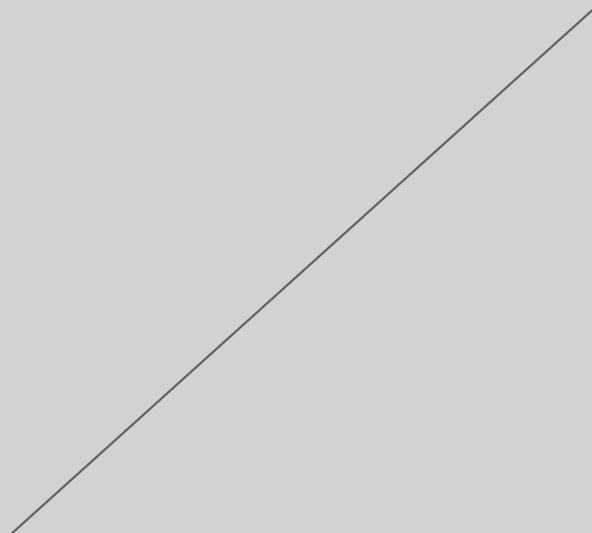
Germany



# Note Book

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





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## **Renon Power Technology Inc.**

5900 Balcones Drive Suite 100, Austin, TX 78731 USA

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## **Renon Power Solutions Sp.z o.o.**

ul. ELBLĄSKA 1, 93-459, ŁÓDŹ, POLAND

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## **Renon Power Technology B.V.**

Rietbaan 10, 2908 LP Capelle aan den IJssel

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## **Renon Power 株式会社**

東京都中央区日本橋箱崎町20-5 VORT箱崎5F

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## **瑞智新能源(惠州)有限公司**

广东省惠州市惠阳区三和街道下桥背康易工业园



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Website