

Commercial & Industrial

Energy Storage Solutions



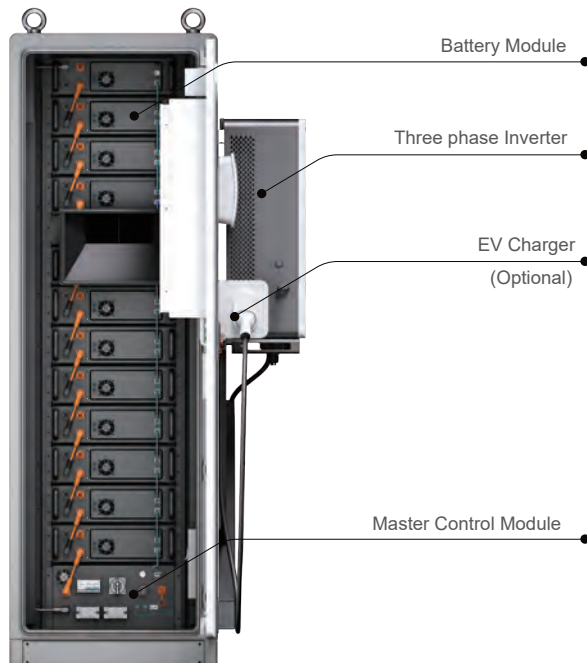
eCube 60AP

30kW/60kW 60kWh Air-Cooled ESS

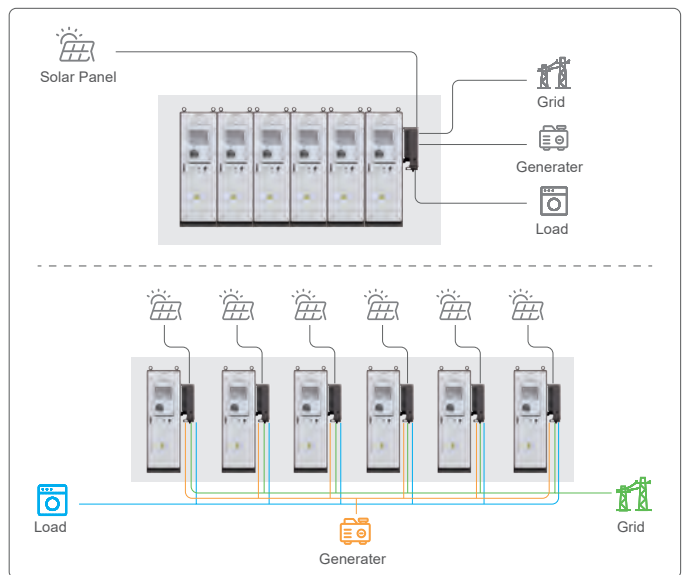
The ultimate commercial and industrial energy storage solution with optimized temperature control, high-rate energy cycling, comprehensive fire and gas safety detection, and advanced integrated power management technologies.



System Demonstration



Parallel/Series System Layout



Application Scenarios



Battery Energy Storage	30/60AP	60/60AP
Cell Chemistry	LiFePO4	LiFePO4
Module Energy (kWh) Module	5.12	5.12
Nominal Voltage (V) Module	51.2	51.2
Capacity (Ah) Battery Module	100	100
Combination System Nominal	6S2P	12S1P
Voltage (V) System Operating	307.2	614.4
Voltage (V) System Energy	281.25~340.8	562.5~681.6
(kWh) Charge/Discharge	61.44	61.44
Current (A)	100	100

PV Input	30/60AP	60/60AP
Max. Power(kW)	45	90
Max. Voltage(V)	550	1100
Start-up Voltage(V) Rated	80	200
Voltage(V) MPPT Voltage	360	730
Range(V) Number of MPP	80-520	200-1000
Trackers Max. PV Input	4	4
Current(A)	40/40/40/40	40/40/40/40

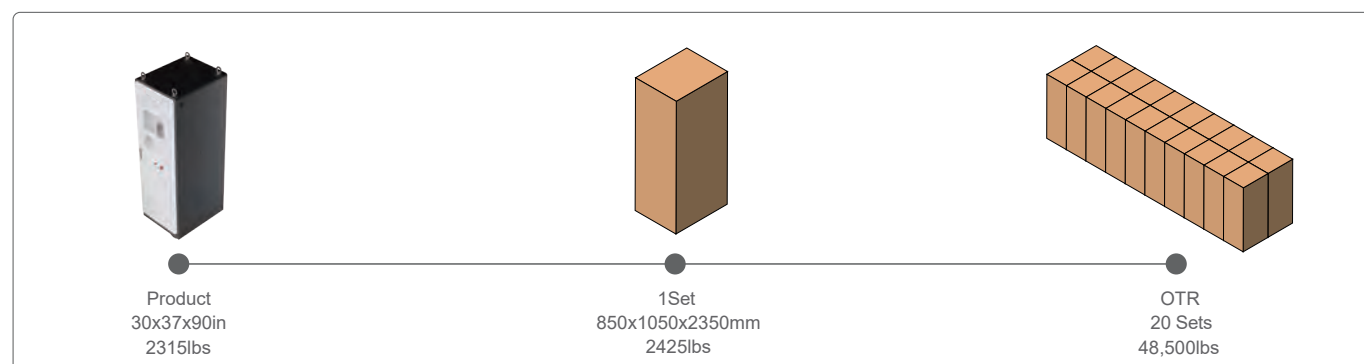
Charging System(Optional)	
Charging Type	Charging Mode 3 Case c, level 2
Outlet options	AC Type 1 (SAEJ1772)
Input/Output Current rating(A)	32 / 48 / 80
Input/Output Power rating(kW)	7.7 / 11.5 / 19.2@240VAC
Input/output voltage(VAC) Input	208~240
Frequency(Hz)	50/60
Cable Length	16 feet, Optional: 25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

AC Output (EPS)	30/60AP	60/60AP
Max. Output Power(kW)	33	66
Peak Output Power, Time(kVA,s)	45, 7s	120, 7s
Rated Voltage(V)	120/208	277/480
THDv(@Rated Power)	<3%	<3%
Switch Time(ms)	<10	<10

AC Output(On-Grid)	30/60AP	60/60AP
Rated Output Power(kW)	30	60
Max. Output Power(kVA)	33	66
Max. Output Current(A)	91.6	79.4
Rated Voltage(V)	120/208	277/480
Rated Frequency(Hz)	50/60	50/60
THDi(@Rated Power)	< 3%	< 3%
Power Factor	0.8 leading~0.8 lagging	

General Parameters	
Dimension (W*D*H)	750*950*2280mm / 29x37x90in
Weight Approximate	1050kg / 2314.8lb
Working Temperature	-20~55°C
Communication Interface	CAN, RS485, Wi-Fi, LTE
Humidity	5%~85%RH
Altitude	≤2000m
IP Rating	IP55
Storage Temperature	-20~35°C
Recommend Depth of Discharge	90%
Cycle Life	>8000 cycles
Warranty	3 years free, paid from the 4th to the 15th year
Certification	UL1973, UL9540A, UN38.3, IEC62619 UL 1741-2021 (incl UL1741SB), CSA C22.2, No 107.1-16 IEEE 1547-2018 & 1547a-2020 & 1547.1-2020 (SRD V2.0), UL1699B

Packaging & Shipping Details



eMPack 233AC

125kW/233kWh Liquid-Cooled BESS

Highly Integrated: Combines an all-in-one design with high power density, requiring minimal space and offering flexible transportation and installation.

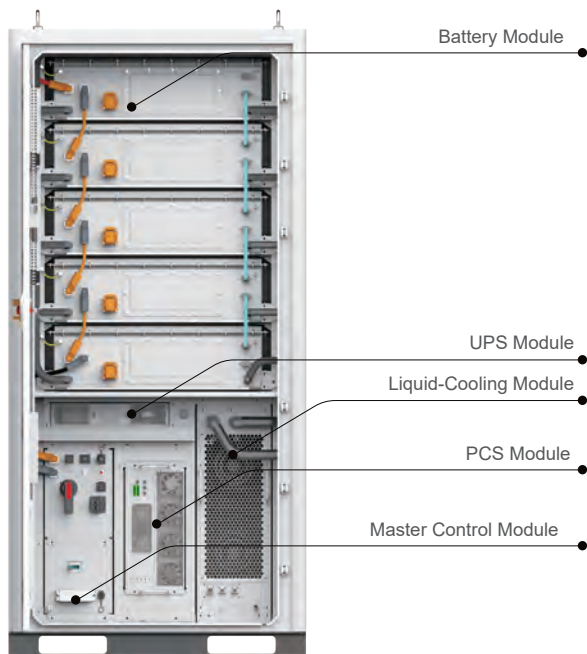
Safety & Reliability: Features comprehensive battery monitoring, multi-level fire prevention, top venting design, and proactive AI management to ensure maximum safety and reliability.

Efficient & Flexible: Boasts a modular structure with high-efficiency liquid cooling, adaptable to extreme environments, maximizing battery life and performance.

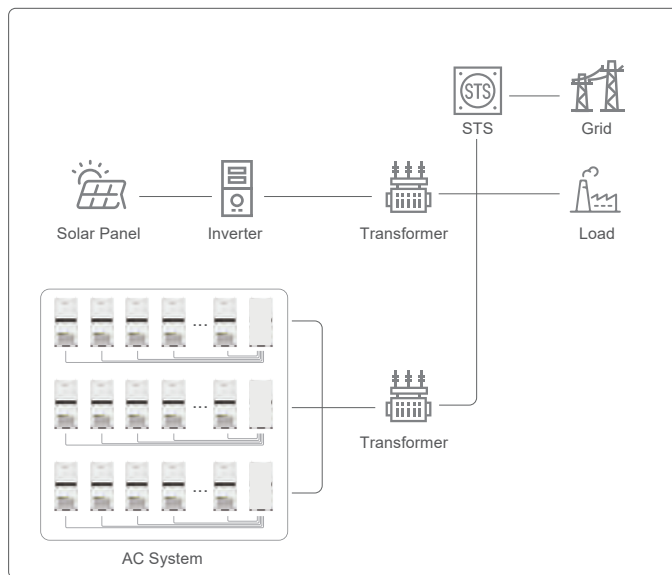
Intelligent Operation & Maintenance: Equipped with a full EMS for easy upgrades, big data-managed inspection, proactive handling, and intelligent SOC calibration for optimal performance without downtime.



System Demonstration



System Layout



Application Scenarios



AGRICULTURAL



DATACENTER



INDUSTRIAL MANUFACTURING

Battery Energy Storage	
Cell Type	LFP 3.2V / 280AH
Module Combination	1P52S
System Combination (Modules)	5 in series
Capacity (kWh)	233
Nominal Voltage (V)	832
Operation Voltage Range (Vdc)	761~923
Discharge Depth	90% DoD
Thermal Management Mode	Liquid Cooled
Thermal Control Management	Aerosol Extinguishing

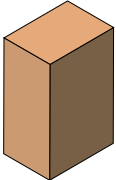
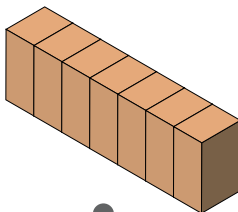
AC Output	
Rated AC Output Power(kW)	125
Max. AC Output Power(kVA)	137.5
Rated Output Voltage(Vac)	480
Output Voltage Range(Vac)	-15%~+10%(settable)
Rated Grid Frequency(Hz)	60(settable)
Max. Output Current(A)	165.4
Adjustable Power Factor	>0.99
THDi	<3%

System Characteristics	
Communication Interface	CAN, RS485, Wi-Fi, LTE
Warranty	10 Year with optional 15 year*
Certifications	IEC 62619, EN 61000-6-1/2/3/4 EN 62019-1/2, UL1973, UL9540A UL9540, UN38.3

System Characteristics	
Dimensions (W*D*H)	1100*1450*2320mm / 43*57*91.3in
Total Weight	2950kg / 6503lb
Operation Altitude	2000m / 6561ft
Noise Level @1m	<75 dB(A)
IP Rating	IP54
Operating Temperature	-20°C to 55°C
Operating Humidity	0 to 95%
(RH) Storage Conditions	-20°C to 30°C Up to 95% RH, non-condensing State of Energy (SoE): 50% initial



Packaging & Shipping Details

 Unit 1100*1450*2320mm 43x57x92in 2950kg/6500lbs	 Packaged Unit 1150*1600*2520mm 46x63x72 3200kg/7055lbs	 OTR Trucking 7 Units 22,400kg/49,500lbs
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eMPack 372B

186~372kWh Liquid-Cooled DC Block

High Security: Utilizes high-safety lithium iron phosphate batteries, with partition safety isolation, built-in module-level and system-level fire protection, and an active safety early warning system to ensure reliable operation.

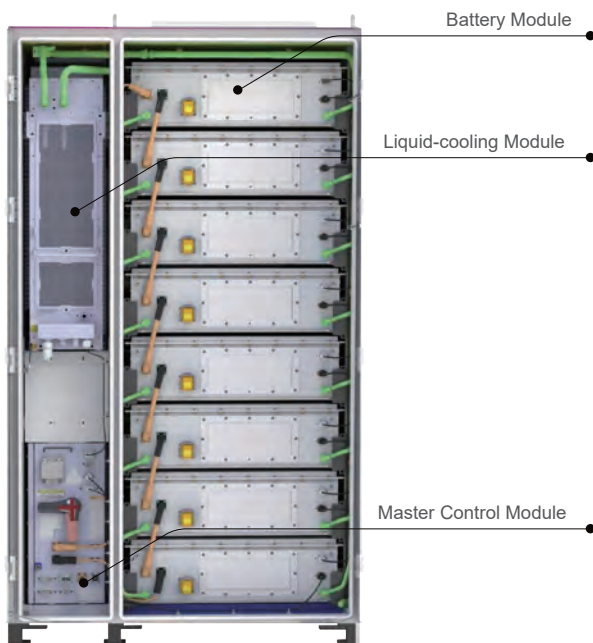
Efficient BMS Technology: Features high-efficiency equalization technology and low power consumption BMS sampling chips, reducing module inconsistencies and eliminating series loss for optimal performance.

Long Life Cycle & Thermal Management: Offers over 8000 cycle times with a lifespan exceeding 15 years, supported by laser welding and a high-efficiency liquid cooling and heating system maintaining cell temperature consistency.

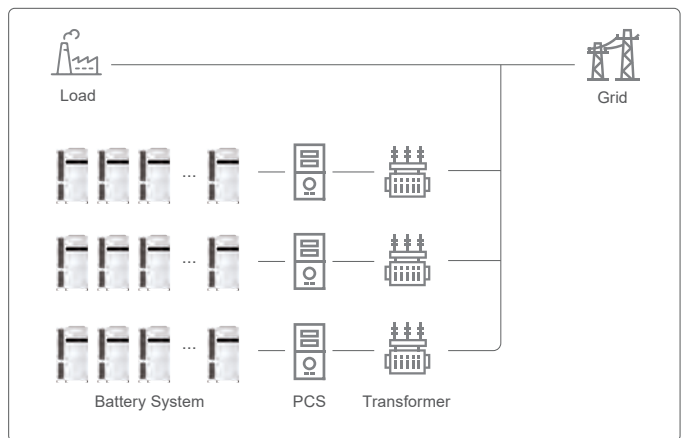
Easy Installation & Maintenance: Standardized design for simplified installation and user deployment, with a fully modular setup for convenient operation and maintenance, both locally and via cloud systems.



System Demonstration



System Layout



Application Scenarios



Battery Energy Storage	186kWh	233kWh	280kWh	326kWh	372kWh
Single Cell Type	LFP 3.2V/280AH				
Module Combination System	1P52S				
Combination Capacity (kWh)	4 modules	5 modules	6 modules	7 modules	8 modules
Nominal Voltage (Vdc) Voltage	186.39	232.96	279.55	326.14	372.7
Range (Vdc)* Charge/Discharge	665.6	832	998.4	1164.8	1331.2
Current Discharge Depth	582.4~748.8	728~936	873.6~1123.2	1019.2~1310.4	1164.8~1497.6
Service Life	0.5C				
Thermal Management Mode	100% DoD				
Thermal runaway management	>8000 cycles@80%DoD				
	Liquid cooling technology				
	Aerosol Extinguishing or PFH				
	*For Cell 2.8~3.6V				

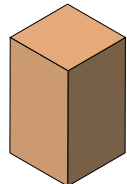
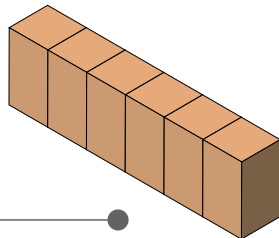
System Characteristic

Communication Interface	CAN
Warranty	10 year with optional 15 year
Certifications(Cell)	UN38.3, IEC62619
Certifications(System)	IEC62477-1, IEC 62619, UL1973, UL9540A, IEC61000-6-4

General Parameters

Dimensions (W*D*H) Total	1300*1300*2316mm / 51x51x91in				
Weight Operation Altitude	2000kg/4409lb	2330kg/5137lb	2660kg/5864lb	2990kg/6592lb	3500kg/7716lb
Noise Level @1m	2000m / 6561ft				
IP Rating	<75 dB(A)				
Operating Temperature	IP54				
Operating Humidity (RH)	-30°C ~ 55°C				
Storage Conditions	0 ~ 95%				
	-20°C ~ 30°C, Up to 95% RH, non-condensing, State of Energy (SoE): 50% initial				

Packaging & Shipping Details

 Unit 1300*1300*2316mm 52x52x90in 3500kg/7720lbs	 Packaged Unit 1450*1450*2750mm 57x 57x108in 3700kg/8150lbs	 OTR Trucking 6 Systems 22,000kg/48,500lbs
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e-Pump M260

e-Pump M520

Mobile Battery-Buffered
EV Charging System



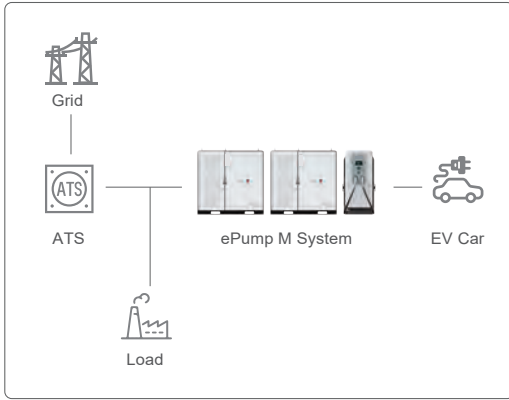
*Vehicle Not Included



■ System Demonstration



System Layout ■



■ Application Scenario



CONSTRUCTION SITE



MINING



EV FLEET MOBILITY

Energy Storage System	
Battery Capacity(kWh)	261
Battery Charging Rate	≤0.5C
Battery Discharge Rate	≤0.8C
Battery Efficiency	≥97%
Battery Module IP Rating	IP65
Battery Cooling System	Liquid-cooling
Thermal Control Management	Aerosol Extinguishing
Dimensions (W*D*H)	1800*1500*1750mm / 70.8*59*68.9in
Weight	2850kg / 6283lb

AC Input

Rated AC Output Power(kW)	250
Max. AC Output Power(kVA)	266
Rated Output Voltage(Vac)	480
Output Voltage Range	-15%~+10%(settable)
Grid Frequency Range(Hz)	60Hz(settable)
Max. Output Current(A)	330.8
Power Factor	1 (leading)~1(lagging)
Adjustable Power Factor	> 0.99
THDi	< 3%
Overloading Capability	110%

Standard

Battery	UL9540A
EV Charger	UL2202, FCC, EN 61851-1, EN 61851-23, EN 61000-2/-4
System Level	UL 1973, UL9540A, UL9540 FCC, IEC 62619, EN62109-1/2 EN61000-6-2/4, UN38.3

Charging System

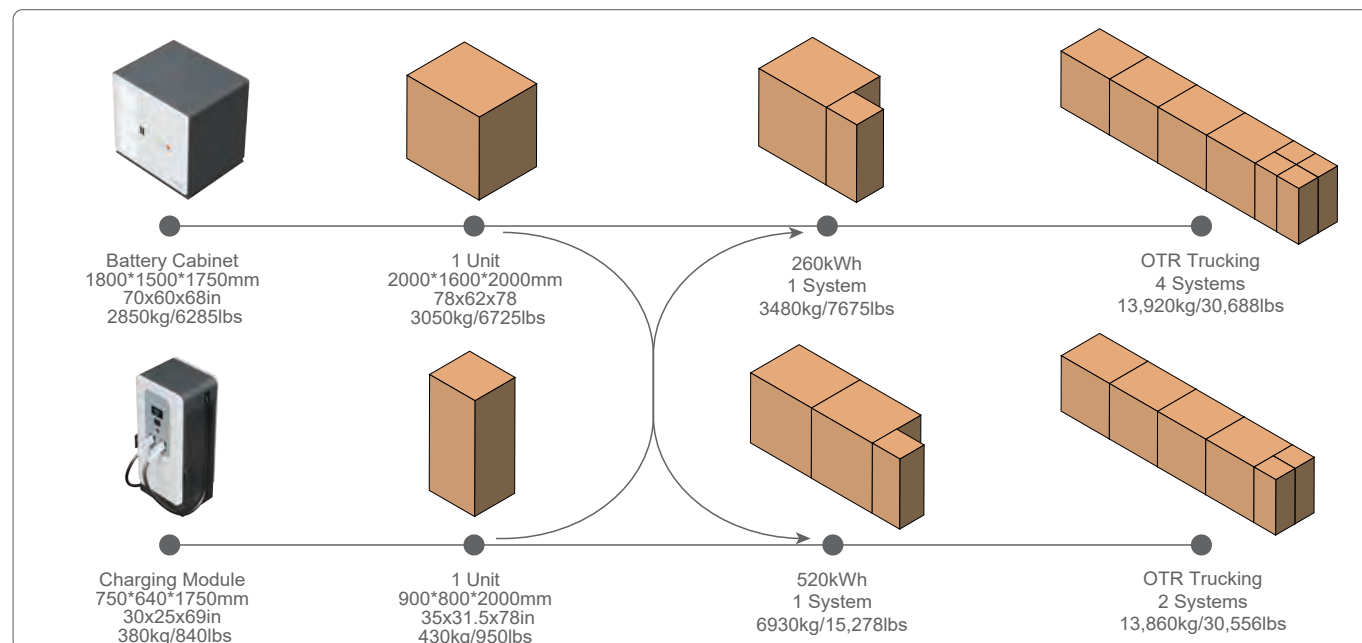
Charging Type	DC fast charging
DC Output Power(kW)	240
DC Output Voltage(Vdc)	200~1000*
Maximum Current(A)	250
Distribution Systems	TN-S,TN-C, TT (required external RCD)
Connector Type	3P +N + PE
Protection	Overcurrent, overvoltage, undervoltage, integrated surge protection,ground fault including DC leakage protection, door opening protection
Power Factor (Full Load)	≥0.99
THDi	<5%
Efficiency	≥ 94% (peak)
Dimensions (W*D*H)	750*640*1750mm / 29.5*25*68.9in
Weight	380kg / 837.7lb

*Constant power from 300~1000

General Parameters

Ambient Temperature	-25°C-50°C(over 45°C derating)
Humidity	≤95%, No condensation
Storage Conditions	-20°C to 30°C, Up to 95% RH, non-condensing, State of Energy (SoE): 50% initial
Altitude	2000m / 6561ft
Noise Level @1m	<80 dB(A)
EMC Emission	Type A
Medium	Non explosive hazardous, No toxic & harmful gases Without strong vibration and shock, no strong electromagnetic interference
Interference	
System IP Rating	IP54

Packaging & Shipping Details



ePump S240

ePump S480

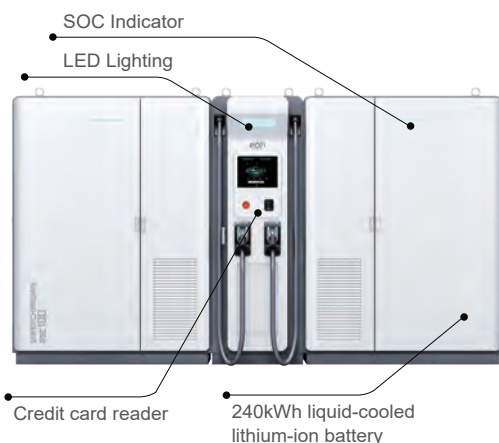
Stationary Battery-Buffered Ev Charging Systems

Scalable to 480kWh

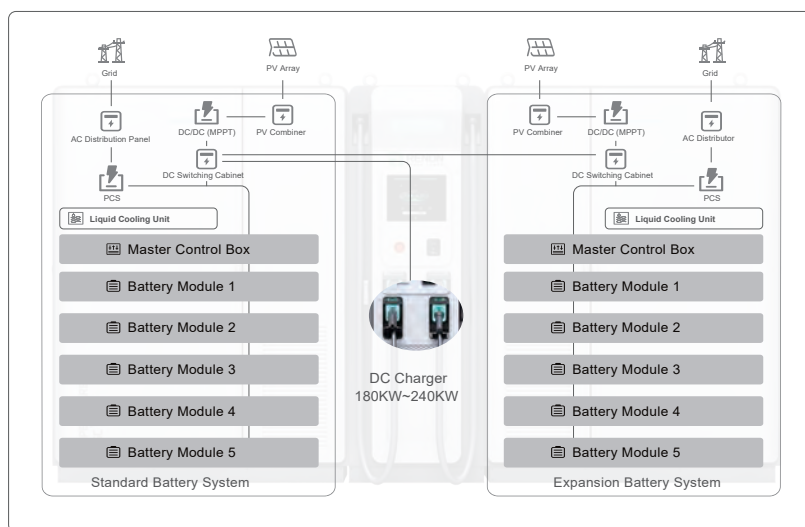
2*240kWh liquid-cooled lithium-ion batteries



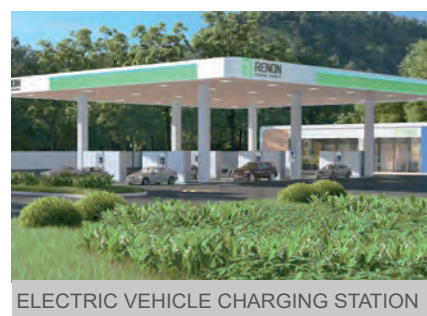
System Overview



System Layout



Application Scenario



Product Specification		S240	S480
Type	DC Charging Station With ESS		
Installation	Ground Mount		
Applicable Site	Outdoors or Underground Parking		
Material	Industrial Grade Alloy		
Color	White Weather-Resistant Coating		
Dimensions (W*D*H)	2557*700*2350mm / 100x27.5x92.5in	4314*700*2350mm / 201.4x27.5x92.5in	
Weight	3850kg / 8487.8lb	7350kg / 16,204lb	
Energy Storage System			
Battery Capacity(kWh)	240	480	
Battery Charging Rate	≤0.5C		
Battery Discharge Rate	≤0.8C		
Battery Efficiency	≥97%		
Battery Module IP Rating	IP65		
Battery Cooling System	Liquid-Cooling		
Thermal Control Management	Aerosol Extinguishing		
AC Output			
Rated AC Output Power(kW)	125	250	
Max. AC Output Power(kVA)	137.5	275	
Rated Output Voltage(Vac)	480	480	
Output Voltage Range(Vac)	-15%~+10%(settable)		
Rated Grid Frequency(Hz)	60Hz(settable)		
Max. Output Current(A)	165.4	330.8	
Adjustable Power Factor	> 0.99		
THDi	< 3%		
PV Input			
DC Input Voltage(Vdc)	300~825(Start up Voltage:375)		
Max Input current(Adc)	100	200	
Rated Power(kW)	60	120	
Number of MPPT	2	4	
Cooling System	Air-cooled		
Standard			
Battery	UL9540A		
EV Charger	UL2202, FCC, EN 61851-1, EN 61851-23, EN 61000-2/-4		
System Level	UL 1973, UL9540A, UL9540, FCC, IEC 62619, EN62109-1/2, EN61000-6-2/4, UN38.3		
Safety			
Input Protection	Under voltage protection,over voltage protection,over current protection, over temperature protection,leakage protection, lightning protection, short circuit protection		
Output Protection	Short circuit protection,over-temperature protection,communication fault protection,leakage protection,over-current protection		
Emergency Protection	Set emergency stop button,leakage protection function,high-precision output insulation monitoring function		
Environmental Protection	IP54 protection level, anti-salt damage		

Charging System	
Charging Voltage(Vdc)	150~1000(Constant power from 300-1000)
Charging Efficiency	95% (peak)
Connctors	2
Power Distribution	2 connectors intelligent distribution
Charging Power	180kW/240kW
Cable	400A, 5m, CCS
Cooling System	Air-cooling
User Interface	7" LCD high-contrast touchscreen, optional 15.6" or 32" LCD display
User Authentication	RFID, QR code
RFID Reader	ISO/IEC 14443 A Mifare RFID reader
Connectivity	4G/3G/Ethernet (RJ45)
Communication	Proprietary and OCPP 1.6J
Emergency Button	Yes

Meter	
AC Side	AC meter
DC Side	Dual access DC meter

General Parameters	
Ambient Temperature	-25°C ~ 50°C(over 45°C derating)
Humidity	≤95%, No condensation
Storage Conditions	-20°C ~ 30°C, Up to 95% RH, non-condensing, State of Energy (SoE): 50% initial
Altitude	2000m / 6561ft
Noise Level @1m	<80 dB(A)
EMC Emission	Type A
Medium	Non-explosive non-hazardous, non-toxic gases
Interference	Without strong vibration and shock,no strong electromagnetic interference
System IP Rating	IP54

Packaging & Shipping Details

