HV INTEGRATED

STORAGE & CHARGING ENERGY SYSTEM-US

SmartPile

- Integrated battery, inverter, PV controller, EV charging cables, and system controller, more compact structure, higher power density, easy product installation.
- Three-layer energy management system, strong protection, high reliability and long cycle life.
- IP65 protection level, integrated liquid cooling control system, and smart controlling of operating temperature so that can adapt to the harsh environment.
- Complete application modes, including self-powered, time-based power control, and backup power mode.

Renon Smart Pile Series is an integrated energy storage charger, consisting of a PCS(power control system), battery storage system and EV charging pile. Through the energy storage system, it gives full play to the function of storing energy and optimizing allocation to significantly reduce the cost of electricity consumption. By intelligently switching charging and discharging modes to achieve valley charging and peak discharging, it can also be used in off-grid operation mode for emergency charging of electrical vehicles or reverse-phase power supply for household appliances during grid failure outages.

SmartPile

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BESS Specification

Nominal Energy	28kWh
Nominal Voltage	281.6V
Nominal Current	75A
Operating Voltage Range	257.84V~312.4V
Cycle Life	8000times

Hybrid Inverter Specification

Max PV Power Delivered to Battery & AC Outputs	13KW&15KW
PV Maximum Input Voltage(Vdc)	600
PV DC MPPT Voltage Range(Vdc)	120~550
Nominal Voltage(Vdc)	380
Starting Voltage(Vdc)	150
Number of MPPT	4（2 Strings per MPPT)
Max DC Current per MPPT (Self Limiting)	26*4
Max AC Coupled Input (Micro/String Inverters)	22KVA
Solar Generation CEC Efficiency	97.5% at 208 V 98.0% at 240 V
Nominal Grid Voltage (Input/Output)	120/240VAC
Grid Voltage Range	204~264VAC
Frequency	50Hz/60Hz
Phase	240VAC : L1\L2\N\PE
Continuous Power On-Grid/Off-Grid	15KW
Peak Off-Grid Power (10s)	30kVA
Max. Continuous Current On-Grid/Off-Grid	68.2A /65.6A
Continuous AC Power with Grid or Generator	48kW 200A L-L (240V) 24kW 200A L-N (120V)
Power Factor	+/- 0.9 - 1.0

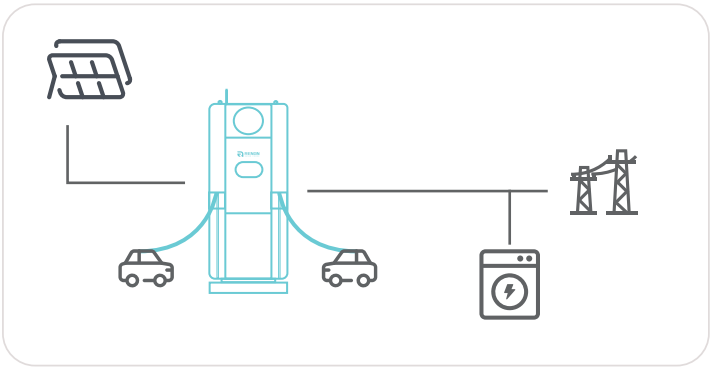
EV Charger Specifications

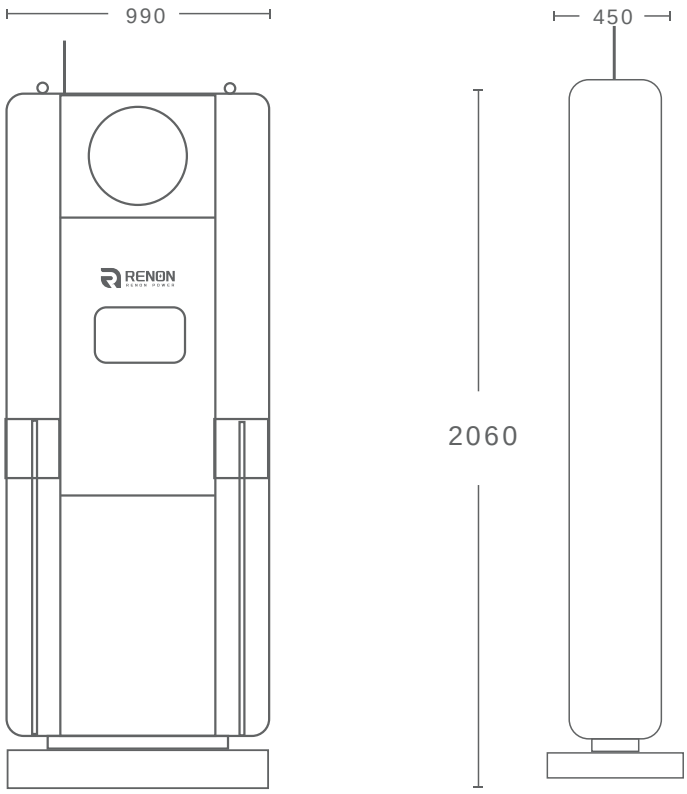
Type of EV Charger	AC EV Charger
Current of EV Charge	32A
Number of EV Charge	2
Protocol Standard	US Standard

System Characteristic

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





General Parameters

Dimensions (W*T*H)	990mm*450mm*2060mm
Total Weight	TBD
Enclosure	IP65 / NEMA 3R
Operating Temperature	–20°C to 50°C
Recommended Temperature	0°C to 30°C
Operating Humidity (RH)	Up to 100%, non-condensing
Storage Conditions	–20°C to 30°C Up to 95% RH, non-condensing State of Energy (SoE): 50% initial
Maximum Elevation	3000 m (9843 ft)
Environment	Outdoor
Noise Level @1m	< 40 db(A) optimal, < 50 db(A) maximum

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