LISINER®

ENERGY STORAGE SYSTEM
– LV SERIES

Industrial Parks · Buildings · Data Centers · Charging Stations

Ultimate Safety

- Incorporating a three-tier fire protection system at the cell, pack, and system levels to ensuring safety.
- Utilizing heat-resistant materials between cells to effectively mitigate thermal runaway risks.

High-Level Integration

- Featuring an "all-in-one" design, with a single cabinet occupying approximately ≈1.35m², reducing space requirements by 26% .
- PCS is downward compatible with PDU , featuring integrated control, protection, and detection, enhancing unit installed capacity by 10%.
- Integrating EMS with BMS, enabling unified aggregation and utilization of energy storage data.

High Energy Efficiency

- Maintaining a temperature difference within 5℃ at the product level,reducing energy consumption of liquid cooling units by 15%.
- Sustaining energy conversion efficiency above 88% throughout the year.
- Ensuring a cell temperature difference below 2.8℃, a max.temperature rise below 4.5℃, and a max. cell temperature below 35℃, boosting cycle life by 20%.
- Employing AI algorithms for real-time operational strategy adjustments, enhancing system efficiency by approximately ≈1%.

KEY FEATURES

High Reliability

- Automotive-grade pack production line that guarantees stringent quality control.
- Wide operating temperature range from –25℃ to 55℃.
- Resistant to hurricanes of 15 mph and above.
- High corrosion resistance of above C4.

Intelligent Operations Control

- Enabling local energy management functions, such as dynamic demand tracking and control, peak load shifting.
- Facilitating various operational strategies for temperature regulation, fire protection, and PCS.
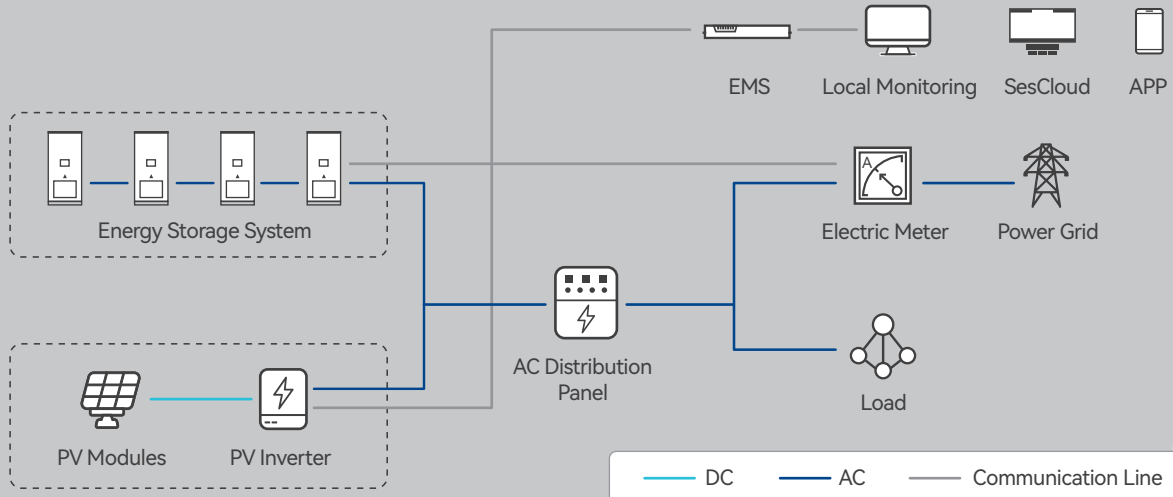- Allowing for over-the-air (OTA) upgrades.

Cost Efficiency

- Incorporating a multi–fusion system design to decrease individual cabinet cost by 8% and shorten the ROI payback period.
- Utilizing lithium iron phosphate battery cells to boost installed energy per unit by 12%.

◆ ENERGY STORAGE SOLUTION

EMS — Local Monitoring — SesCloud — APP

Energy Storage System

Electric Meter — Power Grid

AC Distribution Panel

Load

PV Modules — PV Inverter

—— DC —— AC —— Communication Line

APPLICATION SCENARIOS

▶ Industrial parks

▶ Commercial buildings (office buildings, shopping malls, hotels, hospitals, etc.)

▶ Intelligent solar-storage supercharging stations

▶ Data centers

▶ Transformer substation (TS) service area expansion

APPLICATION MODES

▶ Peak load shifting

▶ Dynamic capacity expansion

▶ Emergency backup provision

▶ Demand response aggregation

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PRODUCT SPECIFICATIONS

Model	R232L1	R232L2	R261L1
BATTERY			
Nominal capacity	232.96kWh		261.24kWh
Usable capacity	221.31kWh		248.18kWh
Single Cell	3.2V 280Ah		3.2V 314Ah
Battery Pack	1P260S		
Battery technology	LFP		
Charge/discharge rate	≤0.5P （constant power）		
Cooling method	Liquid Cooling		
BMS (Battery Management System)	Integrated		
Rated DC voltage	832V		
DC voltage range	728Vdc ~ 936Vdc		
Battery life cycle	8000 CYC @25℃, 95% DOD, ≥70% EOL		
AC/DC INVERTER			
Operating voltage range (DC connection)	580V – 1000V		
Rated AC power	115kW		125kW
Max AC power	125kW (Allow 30s)		150kW (Allow 30s)
Rated AC current	166A		180A
AC line voltage	400±15%		
Rated AC line frequency	50Hz/60Hz		
Rated AC line voltage	400V		
ENERGY MANAGMENT SYSTEM			
EMS	Integrated		
COMMUNICATION			
Communication protocol	RS485/CAN/TCP		
Touch panel	10.1 ” industrial standard		
Cloud	SUPPORT		
App	YES		
OPERATION			
Relative operating humidity	0 - 95%, no-condensation		
Operating temperature range	–25℃ ~ 55℃		
Operating altitude	≤2000m		
System Efficiency	87%	89%	88%
Max. Efficiency	88%	90%	89%
DIMENSIONS (TOTAL)			
Dimensions (W x D x H)	1350x1310x2110mm	1007x1350x2250mm	
Weight	Aprox. 2600kg	Aprox. 2350kg	Aprox. 2380kg
SAFETY/STANDARDS			
Protection	IP54		
Safety features	a. Smoke detection b. Temperature detection c. Aerosol fire extinguish d. Siren and strobe alarm e. Emergency stop button		
Certification	IEC 62619, EN61000-6-1/-2/-3/-4, IEC 60730-1, IEC 62477-1, UN38.3, UN3480, EN50549-1, EN50549-10, VDE-AR-N-4105, VDE-AR-N-4110, VDE-AR-N-4120, G99, UNE217001, UNE217002, NTS631, TOR Erzeuger, NRS097-2-1, AS 4777.2,CEI-016, CEI-021.		GB/T36276-2023
WARRANTY			
Warranty	5 years (Option: 10 years)		

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