

"BIGGER & STRONGER"

Commercial & Industrial Solution Supports Your Business

AlphaESS is a world-leading energy storage solution and service provider covering the full power range.

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YOUR
SMART
ENERGY

STORION-LC-H125-EX

LIQUID-COOLING
OUTDOOR CABINET

POWER
125 kW

CAPACITY
52.1 kWh Battery Module
261.2 kWh



KEY FEATURES

- All-in-One Design
- Remote System Monitoring
- Seamless On / Off grid Switching
- 200% PV input oversizing
- Intelligent Fire detection System + Triple Fire Protection
- Various charge / discharge strategies
- Better heat dissipation efficiency with Hybrid Cooling System (Over 20% higher than HVAC)
- Active SOC balancing (cell level) to maximize the energy utilization
- On-grid max. 25 Systems in parallel (with switch)

*Net Promoter Score (Recommendation Rate); Source: EUPD Research 2024 Residential



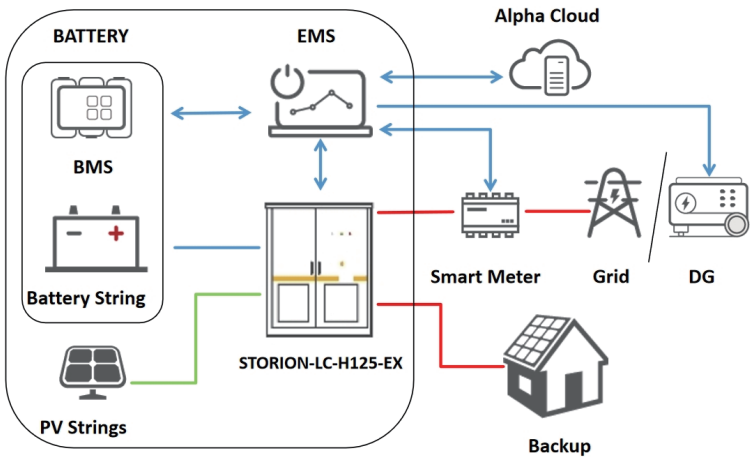
STORION-LC-H125-EX



System Functions

• Backup	• Peak Shaving and Load Shifting
• Active SOC balancing	• TOU (Time of Use) Mode

System Diagram



Model	STORION-LC-H125-EX
System Technical Specifications	
System Capacity	261.2 kWh
Standard Battery Rack	1*
Standard Warranty	5 Years Product Warranty, 10 Years Battery Performance Warranty
PV Side (DC)	
Max. input power	250 kW
Start-up voltage	135 V
MPPT Voltage Range	200 ~ 850 V
Number of MPPT	16
Max. Input Current	200 A
Max. Short-circuit Current	88 A
Grid (AC)	
Rated Output Power	125 kW
Max. Output Apparent Power	137.5 kVA
Rated Grid Voltage	400 V 3L / N / PE
Frequency	50 / 60 Hz
Max. Output Current	157 A
Output THDi	< 3%
Backup/STS (AC)	
Rated Output Power	125 kW
Max Output Apparent Power	137.5 kVA
Nominal Voltage	400 V 3L / N / PE
Frequency	50 / 60 Hz
Max. Output Current	157 A
General Data	
Dimensions (W x D x H)	1,770 x 1,500 x 2,482 mm
Weight	3.7 t
Operating Temperature Range	-20 °C ~ 50 °C (PCS > 45°C derating)
Ingress Protection	IP55
Relative Humidity	0 ~ 95% (No Condensation)
Max. Operating Altitude	3,000 m / 9,842 ft (> 2,000 m derating)
Cooling Method	Hybrid Cooling System
Noise Emission	≤ 75 dB @1m
Communication	RS485, CAN, Modbus, Ethernet
Certifications	IEC 62477, IEC 61000, IEC 62109, EN 50549-1, VDE 4105, VDE4110, G99, G100,

* Max support 2 battery racks, extra battery cabinet is needed.

** The certification process is ongoing.



STORION-LC-H125-EX



Model	STORION-G2-H50-O
Batterie Cluster System	

Parameter	Data

Battery Module	M166314-S (0.5 C)
Battery Type	LiFePO4
Pack technology	1P 260S
Internal Resistance	≤ 10 mΩ
Nominal Capacity	52.2 kWh
Rated Voltage	166.4 V
Operating Voltage	140.4 V ~ 187.2 V
Max. Charging/Discharging Current	186 A ****
Cycle Life	8,000**
Operating Temperature Range	-30 °C ~ 55 °C
Ingress Protection	IP67
Communication	CAN
Dimensions (W x D x H)	810 x 1,125.5 x 237.5 mm
Weight	333 kg
Certifications	IEC 62619, IEC 62477, IEC 61000

Meter (optional)



Model	DTSU666
Rated Voltage	230V AC / 400V AC
Accuracy	± 1 %
Communication	RS485, Modbus RTU
Dimensions (W x D x H)	72 × 80 × 101 mm
CT Model	AKH-0.66, K-30×20
CT Current Ratio	400 / 5 A
CT Perforation Size	32 × 22 mm

Extra Battery Cabinet (optional)



Model	STORION-LC-261-EX
Battery	M166314-S
Rack Capacity	261.2 kWh
Max. Charging / Discharging Current	186 A
Battery Rack Voltage Range	702 V ~ 936 V
Number of Battery Module	5 in series
Fire-Fighting System	Aerosol (Pack & Rack)+ Sprinkler + Smoke / Temperatur Detection
Dimensions (W x D x H)	1,050 x 1,500 x 2,450 mm
Weight	3.2 t

*** Under specific test conditions.

**** Max. charge / discharge current derating may occur with changes in temperature and SoC.



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