

Liquid-Cooled ESS 10ft Container



The ESS 10ft Container is a highly integrated, standard 10-ft containerized energy storage system designed for commercial and industrial applications, with a rated AC output voltage of 400V. The system integrates STS system, providing strong off-grid load capability and supporting seamless on/off-grid switching within 20ms. It is equipped with dedicated interfaces for diesel generator connection and PV inverter connection, enabling multiple power sources to supply the system. This flexible design allows the system to adapt to various application scenarios and diverse user requirements.

500KW 1044KWh

Features



All-in-One 10-ft Container

Highly integrated 3S system, cooling system, and fire protection system, delivering greater capacity within a smaller footprint.



Seamless On/off-grid Switching

The system is equipped with an integrated STS, enabling seamless on-grid and off-grid switching within 20ms.



String-Based Solution

Each battery cluster is independently managed, enhancing system reliability and stability.



Multiple Power Source Options

Equipped with reserved interfaces for diesel generator and PV inverter, the system supports multiple power sources, making it suitable for a wide range of application scenarios.

Liquid-Cooled Ess

PRODUCT DESCRIPTION

Battery Side	
Cell Type	LFP / 314 Ah
Pack Configuration	52.2 kWh / 1P52S
System Configuration	1044 kWh / 4P260S
Rated DC Voltage	832 V
DC Voltage Range	728 ~ 936 V
Max. Charge/Discharge Rate	0.5 P
Max. Depth of Discharge	100% (25 ± 2 °C)
Grid Side	
Rated Output Power	500 kW
Max. Apparent Power	550 kVA
Rated AC Voltage	400 V
AC Voltage Range	±15%
Grid Type	3W+N+PE
Rated Frequency	50 Hz / 60 Hz
On/off-grid Switching Time	<20 ms
Power Factor	0.99/ -1 ~ +1
THDi	≤3%
DC Ratio	<0.5% pn
Backup Side	
Max. PV Inverter Input Current	800 A
Max. Diesel Generator Input Current	800 A
Max. Backup Load Port Current	800 A
Recommended Max. Backup Load Power*	350 kW (70% of Rated Output Power)
General	
Cycle Life	≥ 8,000 cycles
Communication	Modbus TCP/IP
Fire Suppression System	Aerosol system(pack level and container level), water spray system
Ingress Rating	IP54
Cooling	Liquid cooling+Forced air cooling
Operating Temperature	-25°C~55°C (Derating after 45°C)
Anticorrosion Rating	C4 (C5 optional)
Humidity	5~95% RH (non-condensing)
Noise	≤ 80 dB
Altitude	3000m (Derating above 2000m)
Dimensions (W*D*H)	2991*2438*2591 mm
Weight	14 t
Certification	UN38.3, IEC62477-1, CE/EMC, IEC62619, IEC63056, UL9540A, EN50549

*Note: The value indicated herein is a recommended reference based on PF=0.7. When the load involves motors or other types of impact loads, it is recommended to equip the system with a soft starter. Please contact Elecnova for further technical support prior to order placement.

