

YOUR
SMART
ENERGY



STORION-LC-TB150

Liquid-cooling C&I ESS

SYSTEM POWER

150 kW

SYSTEM CAPACITY

313 kWh



KEY FEATURES

- **Ultra-Low Noise Design (<60 dB(A) @ 1 m)**

Fully liquid cooling architecture, ideal for noise-sensitive commercial and urban applications.

- **Up to 12,000 Battery Cycles**

Long service life with reduced lifecycle costs.

- **Integrated UPS & Black-Start Capability**

Built-in UPS (optional) secures control and communication functions during power loss.

- **Multi-Layer Fire Protection System**

Temperature, smoke and combustible gas detection, explosion ventilation, dual-level aerosol suppression, water firefighting integration, and validated through UL9540A large-scale fire testing.

- **C5 Anti-corrosion Protection(Optional)**

STORION-LC-TB150



Model	STORION-LC-TB150 (Standard)		STORION-LC-TB150 (Ultra)	
System Specifications				
Nominal Capacity	313.0 kWh			
Max. Cycle Rate	0.5 P			
Cycle Life	≥ 8,000 *		≥ 12000 *	
Round-trip Efficiency	90%			
Nominal Output Power	150 kW			
Max. Output Power	165 kVA			
Max. Allowed Phase Imbalance	100%			
Nominal AC Current	237 A			
Nominal AC Voltage	400 V (±15%, on-grid) / 400 V (off-grid), 3L/N/PE			
Nominal Frequency	50 Hz / 60 Hz (± 5 Hz)			
Backup Switching Time	≤ 20 ms **			
AC current harmonics THDi (rated output power @on-grid)	< 3 %			
AC Voltage harmonics THDu (linear load @off-grid)	<3%			
Communication Interface	Ethernet			
Communication Protocol	Modbus TCP, API			
Fire Suppression System	Aerosol, Sprinkler, Flammable Gas Detector, Smoke Detector, Heat Detector, Alarm Sounder, Pressure Relief Panel / Explosion-proof Fan ***			
Battery Specifications				
Battery Chemistry	LFP (LiFePO ₄)			
Rated Capacity of Cell	314 Ah			
Operating Voltage Range	842.4 V ~ 1123.2V			
Rated DC Current	157 A			
System Battery Configuration	1P312S			
Number of Battery Packs	6			
Depth of Charge and Discharge	95% (on-grid mode) / 90% (off-grid mode)			
Environmental Specifications				
Operating Ambient Temperature Range	-30 °C ~ 50 °C (>45 °C Derating)			
Storage Temperature	0 °C ~ 35 °C			
Operating Humidity Range	0 ~ 95% RH			
Cooling Method	Liquid Cooling			
Max Operating Altitude	3,000 m (> 2,000 m Derating)			
Enclosure Ingress Protection	IP55			
Ingress Rating	IP67 (Battery Pack) IP55 (PCS)			
Corrosion Protection Class	C4 / C5 (Optional)			
Noise	≤ 60 dB(A)			
Mechanical Specifications				
Dimensions (W x D x H)	1,340 x 1,542 x 2,413 mm			
Weight	≤ 3.2 t		≤ 3.3 t	
Installation Method	Floor-standing			
Compliance Information				
Certifications	UN38.3, IEC 62619, IEC 62477, IEC 61000, IEC 61727, IEC 62116			
Grid Connection	EN 50549, VDE-ARN 4110, G99, C10/11, CEI 0-21, CEI 0-16			
Fire Testing	Meets the module & unit level performance criteria of UL 9540A			

* Cycle Life is tested at laboratory conditions with cycle rating at 0.5 P and with ambient temperature 25°C.

** Additional STS cabinet is required and can be added separately.

*** Explosion-proof fan is only available for the Ultra version and pressure relief panel is only available for the Standard version of STORION-LC-TB150.



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