

8XNFZ38

NICKEL-ZINC BATTERY



Data Center



Railway
Transportation



Financial
Bank



Petroleum &
Petrochemical



Emergency
Power Supply



Communications
Equipment

FEATURES

▼ Ultimate Safety

Pass extreme tests (axe chopping, drilling, heavy crushing, fire exposure) with no explosion or fire risks. UL9540A certified, with no thermal runaway.

▼ Validated Reliability

Maintains conductivity in depleted cells to enable controlled discharge.

▼ High Discharge Rate

10C discharge rate supported, meeting high-power electricity demands within a short timeframe.

▼ Wide Temperature Range

Efficient and stable operation under -20°C to 55°C , reducing the environment requirement.

▼ Eco-Friendly

>90% recyclability, made from non-polluting materials, promoting clean energy use and contributing to carbon footprint reduction.

▼ Smaller and Lighter

Higher power density with 1/2 size reduction and 2/3 weight reduction of lead-acid batteries at same capacity.

SPECIFICATIONS

Technical parameter		8XNFZ38	
Electrical	Nominal voltage	13.2V	
	Number of cells per battery	8Cells	
	Operating voltage range	8.8V to 15.2V	
	Nominal capacity	38Ah (1C discharge to 10.4V at 25°C)	
	Nominal energy	0.5kWh	
	Maximum continuous discharge power	3800W	
	Open circuit voltage	≥14.40V (After 1hour standard discharge)	
	Short circuit current	3200A	
	Charge rate	11.4A to 38A	
	Discharge rate	Minimum 19A, Standard 38A, Maximum 380A	
	Self-discharge performance at 25°C	1 month storage:	< 10%
		3 month storage:	< 20%
		6 month storage:	< 30%
	Cycle life at 25°C	500 cycles (1C 100% DOD), 800 Cycles (1C 50% DOD)	
Internal resistance	≤5mΩ		
Environmental	Operating temperature range	Discharge: -20°C to +55°C, Charge: 0°C to +40°C	
	Storage temperature range	-20°C to 55°C	
	Temperature compensation voltage	TCV=15.2-(0.016×(T-25°C))	
	Designed life at 25°C	15 years	
Mechanical	Terminal	M6×10mm	
	Terminal Torque	9.1±0.9Nm	
	Weight	7.8± 0.2kg	
	Dimensions (L*W*H)	225.5*122.5*140.5 (mm)	
Performance	Volumetric energy density	129.4Wh/L	
	Gravimetric energy density	64.3Wh/kg	
Certification	Case flame rating	UL 94 V-0	
	UL9540A	No thermal runaway at battery-level	
	CE	EU2023/1542, RoHS	
	Other safety tests	Safety tests such as penetration, combustion, short circuit, thermal runaway sensitivity have been conducted and passed by third-party laboratory	

