

8XNFG90

NICKEL-ZINC BATTERY



Data Center



Railway
Transportation



Financial Bank



Oil & Gas



Emergency
Power Supply

FEATURES

▼ Intrinsic safety

Inherently safe aqueous-based chemistry with no risk of thermal runaway, UL 9540A certified.

▼ Extreme-tested

Pass extreme tests (axe chopping, drilling, heavy crushing, fire exposure) with no explosion or fire risk.

▼ High discharge rate

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

▼ Validated reliability

No open circuit during discharge.

▼ Wide temperature adaptability

Efficient and stable operation from -20°C to 55°C , easing environmental requirements.

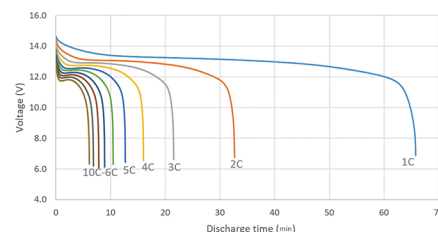
▼ Eco-friendly

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

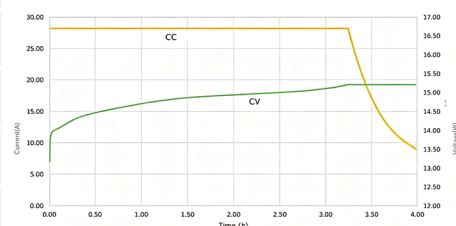
SPECIFICATIONS

Type	8XNFG90	
Electrical	Nominal voltage	13.2V
	Number of cells per battery	8 Cells
	Operating voltage range	8.8V to 15.2V
	Nominal capacity	90Ah (90A discharge to 10.4V at 25°C)
	Nominal energy	1.188kWh
	Maximum continuous discharge power	8000W
	Open circuit voltage	≥14.40V (After 1 hour standard discharge)
	Short circuit current	8000A
	Charge rate	27A to 90A
	Discharge rate	Minimum 45A, Standard 90A, Maximum 900A
	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	≤3mΩ
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	17.3± 0.3kg
	Dimensions (L*W*H)	291.2*176*184 (mm)
Performance	Volumetric energy density	129.4Wh/L
	Gravimetric energy density	68.7Wh/kg
Certification	Case flame rating	UL 94 V-0
	Certification	UL9540A, EU2023/1542, RoHS

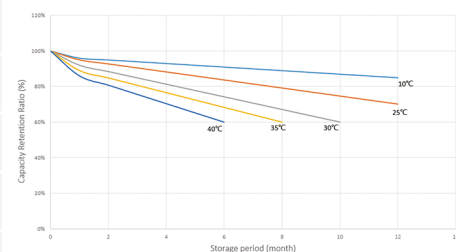
Discharge Characteristics
at Different C-Rate



CC-CV Charge Curve



Self-Discharge Curves
at Different Temperatures



Discharge Capacity
at Different Temperatures

