

NICKEL-ZINC

# BC 2 UPS Battery Cabinets

BC 2

BC 2 - 300X

BC 2 - 500



ZincFive

The Power of Good Chemistry™



## The Power of Good Chemistry™

- ✓ **Superior Power Density** – Approximately twice the power of lithium-ion systems, and half the linear width.
- ✓ **Low Total Cost of Ownership** – Low battery maintenance and small footprint.
- ✓ **Superior Reliability** – Depleted NiZn cells remain conductive, enabling reliable string operation.
- ✓ **Safety** – No thermal runaway or shipping restrictions for NiZn batteries.

## More power, more runtime, more choices, with the BC 2 product line.

The ZincFive BC 2 lineup offers the world's leading NiZn (Nickel-Zinc) battery system with backward and forward compatibility with mission critical UPS systems.



**BC 2**  
High-Rate



**BC 2 - 300X**  
High-Rate Extended  
Runtime



**BC 2 - 500**  
Ultra-High-Rate

*1 MW UPS system design for comparison purposes*



# Specifications

Model	ZincFive BC 2 ZF-38A6SU022KB1-LF000	ZincFive BC 2 - 300X ZF-38B6SU022KB1-LF000	ZincFive BC 2 - 500 ZF-38B6SU021KB1-LF000
<b>Electrical</b>			
Nominal Voltage	494 Vdc		
Charge Voltage Range	567 Vdc to 585 Vdc - Temperature compensated, see operation manual.		
Minimum and Maximum Charge Current	20 A minimum; 160 A maximum		
Standard Charging Current	80 A		
Charge Time	Ranges from 2 hours to 5 hours for 0-100% SOC, dependent on charge current		
Low Voltage Cutoff	380 Vdc		
Battery Option	Z5 13-80 HSF	Z5 13-90 USF	Z5 13-90 USF
Nominal Capacity C/2 at 25°C	>80 Ah	>90 Ah	>90 Ah
Nominal Energy Storage at C/2	38 kWh	46 kWh	46 kWh
Maximum Discharge Current	800 A	800A	1200A
Application	High-Rate discharge Less than 5 minute runtime	High-Rate discharge Greater than 5 minute runtime	Ultra-High-Rate discharge Less than 5 minute runtime
Battery Chemistry	NiZn with starved, KOH aqueous electrolyte (Alkaline, no acid)		
Single String Battery Configuration	38 Battery modules in a single string per cabinet (38S1P)		
<b>System BMS Functions</b>			
Monitoring	BMS manages charge functions and monitors full suite of parameters during discharge and standby including battery voltage, temperature and current.		
Power Supply	120/240VAC 50/60Hz standard. Second 120/240VAC and 600VDC redundant supply options available		
Data Communications	Ethernet, Modbus TCP/RTU, USB, Local Server, and Cloud options		
<b>Safety and Environmental</b>			
Safety	Batteries exhibit no thermal runaway as per UL 9540A		
Breaker Protection	Circuit breaker is accessible with door closed and (manual or upon fault) disconnects batteries from inverter. Various kA rated breakers available depending on configuration.		
Operating Temperature Range <sup>1</sup>	20°C to 35°C		
Storage Temperature Range	-20°C to 50°C		
Storage Period	6 months at 25°C before batteries need charge		
Humidity Range	0-90%, Non-Condensing		
Cooling	Forced Ventilation Standard		
Transport	No Transportation Restrictions		
<b>Certifications</b>			
Cabinet	UL1973, UL1778, CE*, RoHS*, CSA		
Battery	UL 1989; CAN/CSA-C22.2 No. 60896-21:17 EU Batteries Directive (2006/66/EC)		
Seismic	IBC 2021		
<b>Mechanical</b>			
Height	82.5" (2096mm) for Cabinet / 83.5" (2121mm) with High Voltage Box		
Width	21" (533mm)		
Depth	36" (914mm)		
Total Weight	2100 lbs. (952.54 kg)	2200 lbs. (997.9kg)	2200 lbs. (997.9kg)

<sup>1</sup>consult with ZincFive for use outside this temperature range

\* All Specifications Valid at Operating Temperature Range \*All Specifications Subject to Change



**Immediate Power Solution**

A safe, reliable and sustainable high-rate power technology for critical applications.