

UP Range

FZSoNick
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GREEN & SAFE SALT BATTERY

FZSoNick Batteries

Sodium Metal Chloride batteries are the latest generation of the secondary batteries developed specifically to the constraints of the heavy industrial applications. They use metal-based cathode and molten Sodium anode to provide exceptionally safe and reliable power backup that is enclosed in the industrial-grade steel case and equipped with integrated Battery Monitoring. Stable chemical reaction, zero maintenance and insensitivity to temperature and storage aging makes them one of the best choices for Oil & Gas, Power Generation, Transmission and Distribution, Communications, Rail and other industrial use.



**Eco
Friendly**



**Extreme
Temperature**



**Space
Reduction**



Recyclable



**Weight
Reduction**



Smart



**Maintenance
Free**



Safe



Availability

- > Zero self-discharge when stored, at any state of charge
- > Zero ageing in floating or storage condition
- > Integrated system (BMS) for monitoring, diagnostics and data logging
- > Module level redundancy

Operational

- > Up to 80% reduction in footprint and 3 times in weight than conventional batteries
- > Status LED on front panel
- > Low total cost of ownership (TCO)
- > Scalable modules in parallel
- > Expandable without limitation on battery age
- > Parallel operation with other batteries
- > Hot swappable
- > Boost charging not required
- > No memory effect
- > Compatible with most industrial AC and DC UPS

Environment

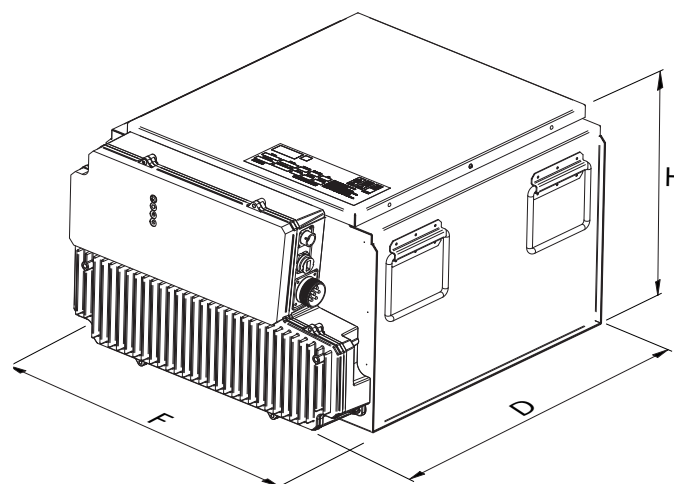
- > No active cooling required.
Constant performance and 20 years design life at:
-20°C to +60°C / -4°F to +140°F continuous operation
-40°C to +75°C / -40°F to +167°F peak
- > Suitable for outdoor installation and marine environment
- > Module ingress protection of IP55 and up to IP65
- > Free of toxic material and 100% recyclable

Safety

- > No gassing or emission
- > No risk of explosion even in presence of external fire
- > Safest among existing high energy density batteries in all conditions: transport, storage and operation
- > Embedded DC protection for load disconnection and short circuit protection
- > Ready for remote monitoring
- > Double stainless steel case

General Characteristics

Operating Temperature Range	-20°C / +60°C -4°F / +140°F continuous -40°C / +75°C -40°F / +167°F peak*
Storage duration	Indefinite (-40° / +60°C)
Recharge time (0-90% SOC)	<7 h
(0-100% SOC)	< 12h
Design life	20 years
Ingress protection	IP55 (IP65 as optional)
Max charging current	Self limited up to 0.2C
Short circuit current	6C limited to 100ms
Power connector**	MS3102 to MIL-DTL 5015 Series I
Data connector**	MS3110 to MIL-C-26482 Series I
Cycles	> 4500 Cycles at 80% DoD



*Tested up to 16 hours continuously

**48UP200: M8 power terminals - RJ45 data connector

Dimensions and Weights

Model	Front	Depth	Height	Weight
48UP200	500 mm / 19.7 in.	558 mm / 22.0 in.	322 mm / 12.7 in.	104 kg / 229 lb
110UP80	500 mm / 19.7 in.	522 mm / 20.6 in.	322 mm / 12.7 in.	114 kg / 251 lb
125UP80	500 mm / 19.7 in.	560 mm / 22.0 in.	322 mm / 12.7 in.	120 kg / 264 lb
130UP80	500 mm / 19.7 in.	598 mm / 23.6 in.	322 mm / 12.7 in.	125 kg / 275 lb
220UP40	500 mm / 19.7 in.	522 mm / 20.6 in.	322 mm / 12.7 in.	114 kg / 251 lb
250UP40	500 mm / 19.7 in.	560 mm / 22.0 in.	322 mm / 12.7 in.	120 kg / 264 lb

Specific Characteristics per Model

Model	Nominal Voltage	Charge Voltage range	Nominal Capacity at 4 hour rate	Max Continuous Discharge Current	Max Charging current	Interface
48UP200	48 VDC	54-59 VDC	200 Ah / 9600 Wh to 42VDC	200 Amps	40 Amps	RS485 /USB
110UP80	110 VDC	122-160 VDC	80Ah / 8600 Wh to 94VDC	120 Amps	16 Amps	RS485 /Canbus /USB
125UP80	125 VDC	135-160 VDC	80 Ah / 9600 Wh to 105VDC	120 Amps	16 Amps	RS485 /Canbus /USB
130UP80	130 VDC	141-160 VDC	80 Ah / 9900 Wh to 109VDC	120 Amps	16 Amps	RS485 /Canbus /USB
220UP40	220 VDC	243-300 VDC	40Ah / 8600 Wh to 189VDC	60 Amps	8 Amps	RS485 /Canbus /USB
250UP40	250 VDC	270-300 VDC	40 Ah / 9600 Wh to 210VDC	60 Amps	8 Amps	RS485 /Canbus /USB

FZSONICK Manufacturing

- > More than 1 GWh deployed in 50 countries
- > Made in Switzerland
- > ISO 9001 - Quality Management System
- > ISO 14001 - Environmental Management System

Applicable Standards

- > EN 61000-6-2 / EN 61000-6-4
- > CE
- > UL9540A (Safety)
- > Design to comply with UL1973 ed.2
- > IEC62984 / IEC60529