

Salt Vault 480VDC High Power

Sodium Ion Battery Backup

Safer, scalable energy storage

Built for High Voltage & High Power

- Data Centers
- BESS and Grid Storage
- Commercial and Industrial ESS
- Renewable Energy Integration
- Microgrids and Backup Power

10,000

Cycles

73kWh

Energy

333kW

Power

480VDC

Voltage

-20-40°C

Op. Temp



WHY SODIUM ION

The battery chemistry the world has been waiting for is **finally deployable.**

Sodium-ion has promised safer, more cost-effective, longer-lasting power. The problem was never the chemistry, it was integration. Proper Voltage's bOS unlocks sodium-ion for real-world critical infrastructure.



Salt Vault 480VDC Cabinet

SYSTEM SPECIFICATION

CHEMISTRY	UNIGRID 70Ah Na-Ion
VOLTAGE	Nominal: 522VDC Range: 360 to 612VDC
CAPACITY	73.08 kWh
DISCHARGE CURRENT	700A (Full Rack) 350A (Half Rack)
CHARGE CURRENT	140A (Full Rack) 70A (Half Rack)
RACK HEIGHT	48U
DIMENSIONS	36 × 38 × 90.5 in (LWH)
	914 mm × 965 mm × 2299 mm
WEIGHT	1261 kg (2,774 lbs) Full Rack 715 kg (1,574 lbs) Half Rack
CYCLE LIFE	10k Cycles @ standard charge/discharge currents
COOLING METHOD	Air Cooled
ELECTRICAL TERMINATIONS	M8 Crimped Ring Terminal (minimum: 120mm ² stranded cable)
COMMUNICATION (TGM REQUIRED)	Modbus TCP/IP, Modbus RTU
OPTIMAL OPERATING TEMPERATURE	23 ±5 °C
CHARGE TEMPERATURE RANGE	0 to 40 °C
DISCHARGE TEMPERATURE RANGE	-20 to 40 °C
STORAGE TEMPERATURE RANGE	-40 to 60 °C
HUMIDITY (OPERATING & STORAGE)	5 to 95% (non-condensing)
CERTIFICATIONS PROVIDED	UL9540, UL9540A, UL1973
	UN38.3





Salt Vault 480VDC Cabinet

RUN TIME VS LOAD (HR : MIN)

LOAD	QTY OF CABINETS IN PARALLEL									
KW	0.5	1.0	1.5	2	3	4	5	6	7	8
50	0 : 40	1 : 28	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
100	0 : 19	0 : 38	1 : 03	1 : 16	1 : 54	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
125	0 : 14	0 : 30	0 : 49	1 : 01	1 : 31	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
150	0 : 12	0 : 25	0 : 40	0 : 50	1 : 16	1 : 41	>2 hr	>2 hr	>2 hr	>2 hr
200	-	0 : 19	0 : 30	0 : 38	0 : 57	1 : 16	1 : 35	1 : 54	>2 hr	>2 hr
300	-	0 : 12	0 : 19	0 : 25	0 : 38	0 : 50	1 : 03	1 : 16	1 : 41	>2 hr
500	-	-	0 : 08	0 : 15	0 : 23	0 : 30	0 : 38	0 : 45	1 : 01	1 : 16
750	-	-	-	-	0 : 15	0 : 20	0 : 25	0 : 30	0 : 40	0 : 50
900	-	-	-	-	0 : 12	0 : 17	0 : 21	0 : 25	0 : 34	0 : 42
1,000	-	-	-	-	0 : 09	0 : 15	0 : 19	0 : 23	0 : 30	0 : 38
1,200	-	-	-	-	-	0 : 12	0 : 16	0 : 19	0 : 25	0 : 32
1,500	-	-	-	-	-	-	0 : 12	0 : 15	0 : 20	0 : 25
1,600	-	-	-	-	-	-	0 : 11	0 : 14	0 : 19	0 : 24
2,000	-	-	-	-	-	-	-	0 : 09	0 : 15	0 : 19

*Preliminary run time data based on cell performance.

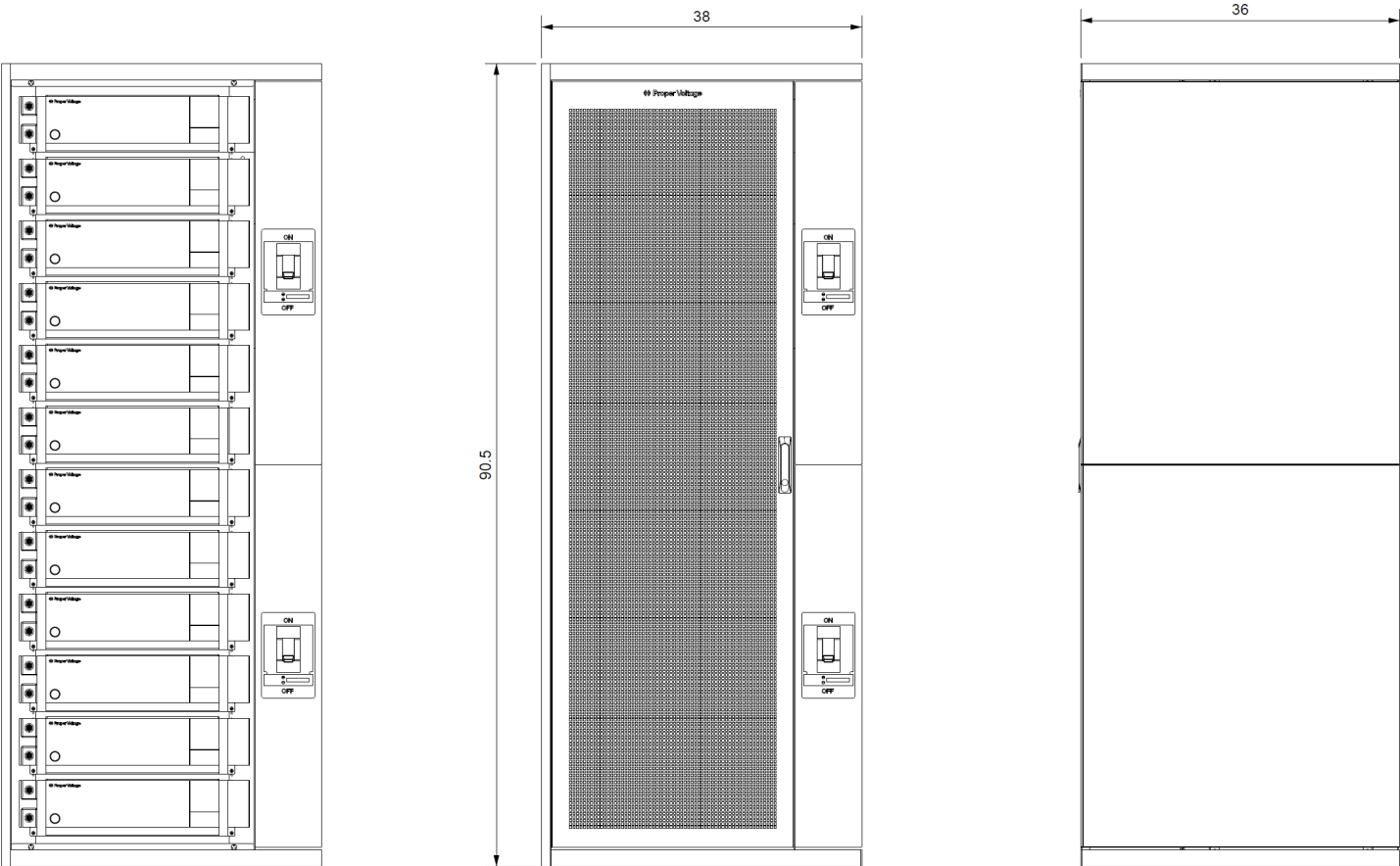




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MECHANICAL & PHYSICAL DATA

DIMENSIONS	914 × 965 × 2299 mm (36 × 38 × 90.5 in)
WEIGHT	1261 kg (2,774 lbs) Full Rack 715 kg (1,574 lbs) Half Rack
CONFIGURABILITY	12 Packs (Full Rack) 6 Packs (Half Rack)
CERTIFICATIONS PROVIDED	UL9540, UL9540A, UL1973, UN38.3





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