



Salt Vault Adaptive 12 - 150VDC

Sodium Ion Battery Backup

Safer, scalable energy storage

Built for High Power Versatility

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

10,000

Cycles

6.1kWh

Energy (4U)

12kW

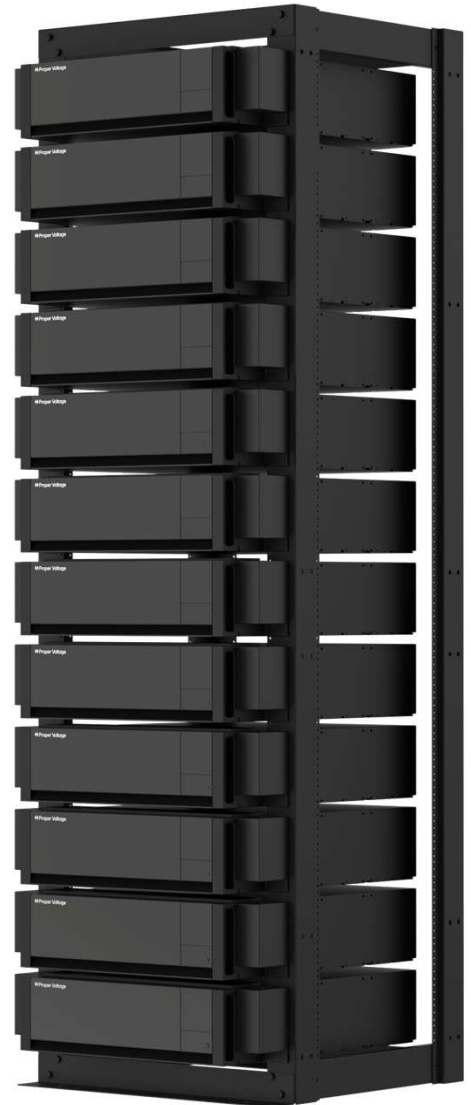
Power

-20 - 40°C

Op. Temp

12 - 150VDC

Voltage



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.



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ELECTRICAL CHARACTERISTICS – PER MODULE

ADJUSTABLE VOLTAGE RANGE	12 to 150VDC
PROGRAMMABLE VOLTAGE STEPS	0.1V
NOMINAL CAPACITY	70Ah, 6.09kWh
REGULATION ACCURACY	±2.0%
MAX DISCHARGE POWER	12,000W
MAX CHARGE POWER	2,800W
CHARGE VOLTAGE RANGE	12–150VDC
MAX CONTINUOUS CHARGE CURRENT @ 48V	58A
MAX CONTINUOUS CHARGE CURRENT @ 125V	22A
MAX CONTINUOUS DISCHARGE CURRENT @ 48V	140A
MAX CONTINUOUS DISCHARGE CURRENT @ 125V	114A
VOLTAGE WINDOW / OPERATING VOLTAGE RANGE	Adjustable Voltage Range
CYCLE LIFE (AT SPECIFIED DOD AND TEMPERATURE)	10k Cycles @ standard charge/discharge currents

MECHANICAL & PHYSICAL DATA

DIMENSIONS	611 x 543 x 158 mm (24 x 21.3 x 6.2 in)
WEIGHT	86.2 kg (190 lbs)
RACK COMPATIBILITY	23" (4U)
INGRESS PROTECTION RATING	IP20

ENVIRONMENTAL RATINGS

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)

INTERFACES & COMMUNICATIONS

ELECTRICAL TERMINATIONS	M6 Crimped Ring Terminal (minimum: 50mm ² stranded cable)
COMMUNICATIONS (TGM Required)	Modbus TCP/IP, Modbus RTU

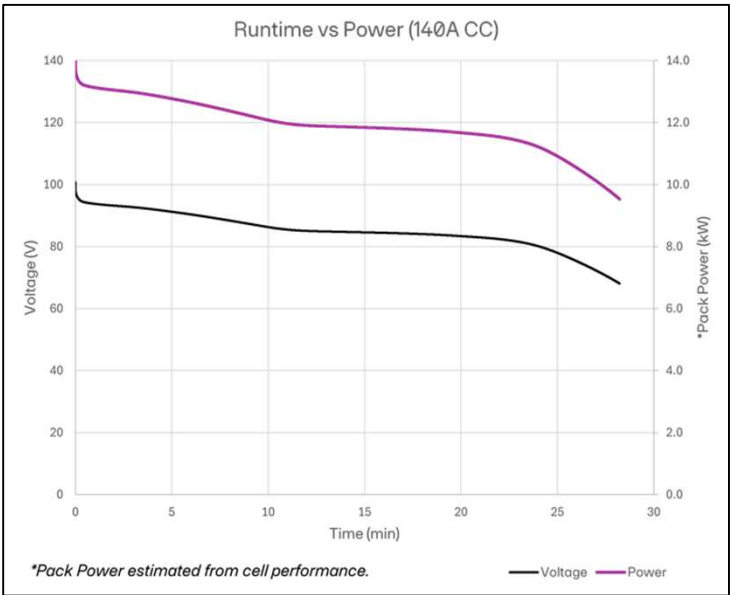
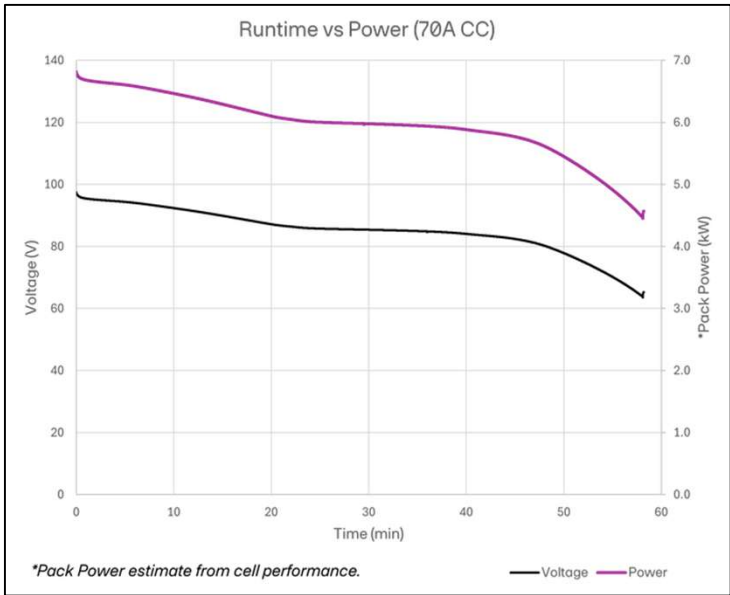


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RUN TIME VS LOAD @ 48VDC (HR : MIN)

LOAD	QTY OF SALT VAULT ADAPTIVE MODULES IN PARALLEL									
KW	1	2	3	4	5	6	7	8	9	10
4	1:31	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
5	1:12	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
6	1:00	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
8	-	1:31	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
10	-	1:12	1:49	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
15	-	-	1:12	1:37	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr	>2 hr
20	-	-	54:37	1:12	1:31	1:49	>2 hr	>2 hr	>2 hr	>2 hr
25	-	-	-	58:16	1:12	1:27	1:41	1:56	>2 hr	>2 hr
30	-	-	-	-	1:00	1:12	1:24	1:37	1:49	>2 hr
40	-	-	-	-	-	54:37	1:03	1:12	1:21	1:31
50	-	-	-	-	-	-	-	58:16	1:05	1:12
60	-	-	-	-	-	-	-	-	54:37	1:00

*Preliminary run time data based on cell performance.

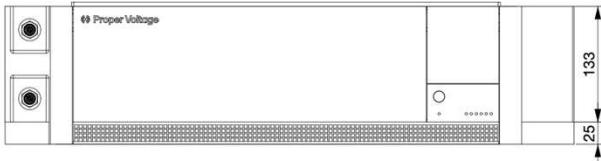
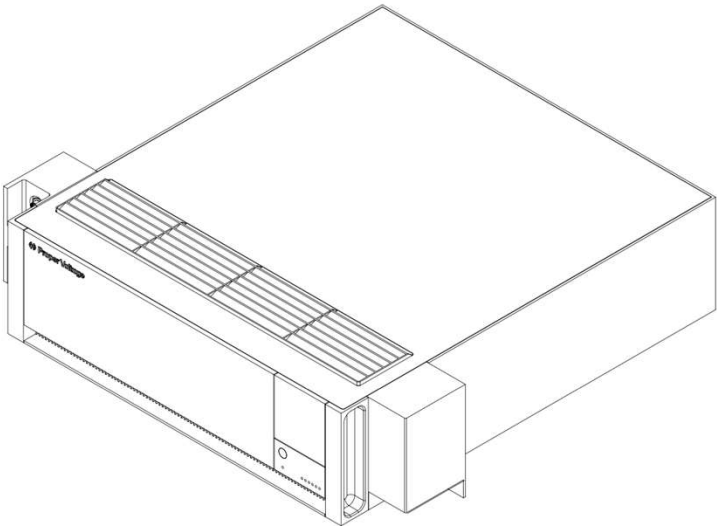
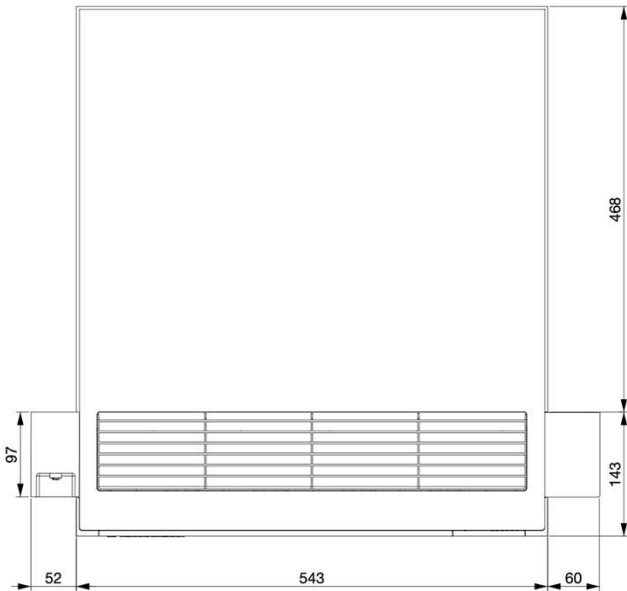




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MECHANICAL & PHYSICAL DATA

DIMENSIONS	611 x 543 x 158 mm (24 x 21.3 x 6.2 in)
WEIGHT	86.2 kg (190 lbs)
CONFIGURABILITY	Parallel up to 10+
CERTIFICATIONS PROVIDED	UL9540, UL9540A, UL1973, UN38.3





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