

# Energy Storage Vessel™



## Now with:

- **100% increase in energy density**
- **150% greater capacity**
- **150% more power**

PRELIMINARY



### 30,000 CYCLES

Energy Storage Vessels can cycle up to 3 times per day without rest and boast a design life of 30,000 cycles – enabling unique applications and business models for developers, integrators, and owners.



### IMPROVED FIRE SAFETY

Unlike Li-ion chemistries, EnerVenue batteries do not exhibit the same thermal runaway or fire propagation risks.



### HIGH EFFICIENCY LDES

Address the growing market for long duration energy storage (LDES) with a flexible discharge and superior round trip efficiency versus other LDES technologies.

Based on proven technology used by NASA for more than 30 years, EnerVenue Energy Storage Vessels feature an exceptionally long design life, eliminating the need for augmentation. Energy Storage Vessels can be easily mounted in racks, containers or stacked in custom warehousing. They can also reliably operate in a wide ambient temperature range without supplementary HVAC. Energy Storage Vessels dramatically reduce OPEX and feature a much lower cost-per-cycle compared to lithium-ion chemistries.

# Product: Energy Storage Vessel ESV-4

# P R E L I M I N A R Y

TYPE	DESCRIPTION	SPECIFICATION
<b>Mechanical</b>	Dimensions (Diameter x Length)	183mm x 2078mm
	Format	Tubular
	Type	Large Format Battery
	Weight	62 Kg / 136 lbs
	Operating Temperature	-10C to 45C
	Storage Temperature	-15 to 60 C
	Cooling Type (Pending)	Convection, Forced Air
<b>Electrical</b>	Nominal Amp-hour Charge/Discharge	137 Ah
	Nominal Energy Capacity	3.0 kWh @ 25 °C
	Voltage Range	23-30 Vdc across full range of SOC (0-100%) @ 25 °C
	Nominal Power	1500 W
	C-Rates	C/2 - C/12
	Peak RTE	>90% @ 25 °C
	Anticipated Capacity Retention	86% after 30,000 cycles
	Chemistry	Ni-H2
	Modes	Constant Current, Constant Power
	BMS	EnerVenue BMS 1000 V / 1500 V
<b>Performance</b>	Warranty	3-years standard, extendable to 20 years
<b>Regulatory</b>	Certifications Pending	UL1973* and applicable CE standards
	Tests Pending	UL 9540A
	Model	ESV-4.2

\*UL 1973, Annex E

2024-V3. All product claims and technical data are subject to change at any time without notice. The customer is responsible for verifying all applicable information at the time an order is placed. All information represented is believed to be accurate, but it is presented without guarantee, warranty, or responsibility of any kind, expressed or implied.

## CONTACT INFORMATION