

Energy Storage Vessel™



ENERVENUE



The industry's most durable, safe, and versatile building block for grid-scale and C&I energy storage applications



3/30/30,000

Energy Storage Vessels can cycle up to 3 times per day without rest and boast an expected lifetime of 30 years / 30,000 cycles – enabling unique applications and business models for developers, integrators, and owners.



NO FIRE RISK

Unlike Li-ion chemistries, EnerVenue batteries exhibit no risk of thermal runaway or fire propagation. Energy Storage Vessels have completed UL9540A testing.



LONG-TERM SECURITY

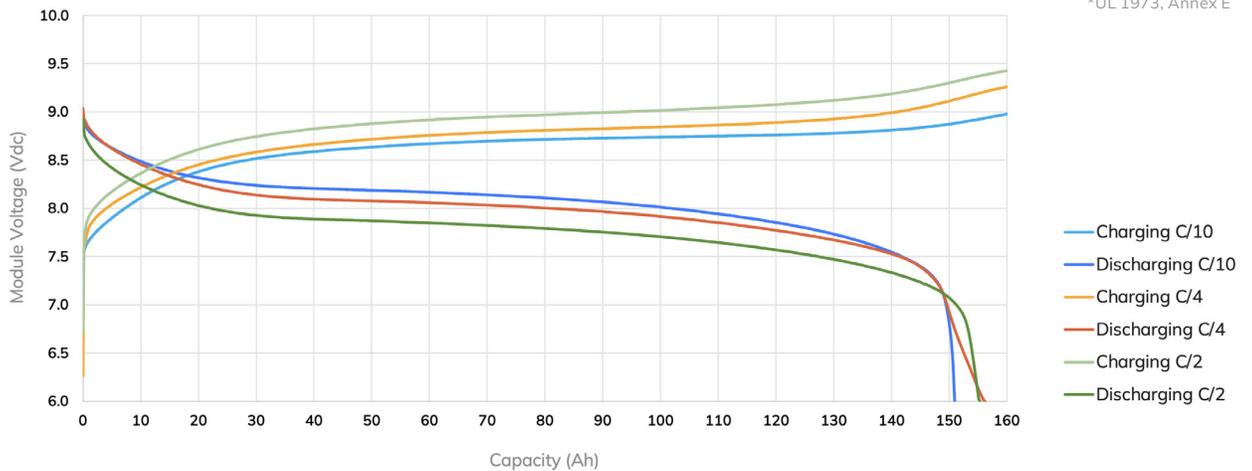
With the battery market's longest and simplest extended warranty available – Capacity Assurance™ – system owners are guaranteed at least 88% capacity after 20 years/20,000 cycles. The warranty safeguards a project's most critical years and helps ensure expected returns are achieved.

Based on proven technology used by NASA for more than 30 years, EnerVenue Energy Storage Vessels feature an exceptionally long lifespan, eliminating the need for augmentation or oversizing. Energy Storage Vessels can be easily mounted in racks, containers or stacked in custom warehousing. Its unique chemistry eliminates the need for preventative fire suppression. It 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.

Model: Energy Storage Vessel ESV-E

TYPE	DESCRIPTION	SPECIFICATION
Mechanical	Dimensions (Diameter x Length)	142 mm x 1806 mm
	Format	Tubular
	Type	Large Format Battery
	Weight	40 kg / 88 lb
	Operating Temperature	-15 °C to +55 °C
	Cooling Type	Convection
Electrical	Nominal Amp-hour Charge/Discharge	160 Ah/152 Ah @ 25 °C
	Nominal Energy Capacity	1200 Wh @ 25 °C
	Voltage Range	6.6 Vdc - 9.6 Vdc across full range of SOC (0 - 100%) @ 25 °C
	Nominal Power	560 W
	C-Rates	C/2 - C/12
	Peak RTE	90% @ 25 °C
	Expected Capacity Retention	86% after 30,000 cycles
	Chemistry	Ni-H ₂
	Modes	Constant Current, Constant Power
	BMS	EnerVenue BMS
Performance	Warranty	3-years standard, extendable to 20 years
Regulatory	Certifications	UL 1973*
	Tests Completed	UL 9540A
	Product Name	ESV-E

Module Level Charge and Discharge Curves @ 25 °C



67-00025 Rev B. All products 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

