

Energy Rack™

The ideal building block for energy infrastructure.



3 / 30 / 30,000

The Energy Rack's AMCs are engineered to deliver up to 3 cycles per day over a 30-year design life, equivalent to approximately 30,000 cycles.

Zero risk of fire from thermal runaway. EnerVenue's Aqueous Metal Cell (AMC) chemistry uses a water-based electrolyte and therefore, under abnormal operating conditions, the cell's integrated pressure-relief mechanism safely releases water vapor, leaving zero risk for fire ignition and propagation.

BUILT FOR INFRASTRUCTURE TIMELINES

Energy infrastructure is deployed on 20 and 30 year timelines. The Energy Rack is the DC block solution designed to match.

- No augmentation requirements
- No need for auxiliary heating and cooling or additional fire suppression systems
- Higher throughput over lifetime with 30,000 cycles

PLUG-AND-PLAY DC BLOCK

The Energy Rack™ is a plug-and-play, configurable, 150 kWh unit at 1500 Vdc. The DC block ships pre-integrated with Aqueous Metal Cells (AMC), a Battery Management System, and all connections and wiring. It deploys in indoor structures or outdoor IP rated enclosures. Stackable for maximum density, it is the right choice for projects that require a flexible, scalable configuration.

SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Dimension (W × D × H)	1,456 × 2,190 × 2,466
Weight	5,000 kg ± 3%
Rated Energy	150 kWh
Nominal Voltage	1,190 Vdc
System Voltage	1,075 – 1,500 Vdc
Maximum Charge/Discharge Rate	1C *
Operating Temperature	-10 to 45 °C
Auxiliary Input Voltage	200–240 Vac, 50/60 Hz
Maximum Auxiliary Load	1,300 W
IP Ratings	IP20
Altitude	≤2,000 m
Seismic Rating	Seismic design intensity ≥ 8 per GB 50011 (SDS ≥ 0.24 g, SD1 ≥ 0.16 g per ASCE 7)
Cooling Type	Forced Air
Certifications **	UL 9540, UL 9540A, UL 1973, IEC 62933-5-2, IEC 63115-2, IEC 61000-6-2/4, IEC 62477-1
Cycles/day	Up to 3 cycles without resting
Communication Protocol	Modbus TCP/IP
Rack RTE	≥85%

* Charge and discharge rates above 1C are supported for certain applications; contact EnerVenue for application-specific ratings.

** Some certifications are pending. Contact EnerVenue for the latest certification status.

Technical data subject to change based on application usage and conditions. Consult EnerVenue for details.