

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 in normal running conditions.

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 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, stackable for maximum density, it is the right choice for projects that require a flexible, scalable configuration.

SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Dimension (W × D × H)	1460 × 2166 × 2466 mm
Total Designed Weight	5,000 kg ± 5%
Rated Energy	150 kWh
Nominal Voltage	1190 Vdc
System Voltage	1,075 – 1,500 Vdc
Maximum Charge/Discharge Rate	C/24 ~ 0.55C
Temperature	-10°C ~ +45°C ; max. temp up to 60°C
IP Ratings	IP20
Altitude	≤2000 m
Cooling Type	Forced Air
Communication Protocol	Modbus TCP/IP
Rack RTE @ 25 °C	>87%
BMS	Integrated
Certifications	UL 1973, IEC 63115-2, IEC 62477-1, IEC 61000-6-2/4