

Energy Core

Compact, naturally cooled energy storage for footprint-constrained sites.



3 / 30 / 30,000

The Energy Core’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 Core is the DC block solution designed to match.

- Reduced augmentation risk
- Natural air cooling - no auxiliary heating, cooling, or additional fire suppression systems
- Higher throughput over lifetime with 30,000 cycles

COMPACT DC BLOCK

The Energy Core is a 30 kWh cabinet operating at 48V DC, pre-integrated with EnerVenue’s Aqueous Metal Cell (AMC), Battery Management System, internal wiring and connections.

Natural air cooling eliminates the need for an active battery thermal-management system, reducing auxiliary equipment and operational complexity. Modbus TCP/IP provides straightforward integration with the site controller.



SPECIFICATIONS

DESCRIPTION	SPECIFICATION
Dimension (W × D × H)	550 x 2360 x 1400
Total Designed Weight	1000kg ±5%
System Voltage Range	43V - 58V
Working Altitude	≤ 2000 m
Rated Voltage	48V DC
Protection Class	IP21
Rate	C/24 - 0.55C
Rated Capacity	30kWh @ 0.5P
Cooling Method	Natural Air cooling
Working Humidity	≤ 95%
Battery Topology	2S5P
Communication Method	TCP/Modbus
Temperature	-10°C ~ +45°C ; max. temp up to 60°C

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