



POWER, NOT JUST ENERGY

Fully modular and scalable: add modules to increase both power and storage as needed.

	Power ¹	Energy ²	Time ($12\mathrm{C}$) 3
MEGACELL-2	2 MW	167 kWh	5mins
MEGACELL-10	10 MW	835 kWh	5mins
MEGACELL-50	50.1 MW	4,174 kWh	5mins

¹ Maximum Continuous Power

- Provides full nominal power continuously, or longer supply durations at reduced output if required.
- The system supports sustained peak power up to 24C rate.
- · Nominal energy values are specified at 25°C (77°F).

ELECTRICAL SPECS

Nominal DC Voltage 480 V Nominal AC Voltage: 480 V, 3-phase

Nominal Frequency 50 / 60 Hz

Inverter Power per Megacell MEGACELL-2: 2,500 kVA MEGACELL-10: 12.500 kVA

MEGACELL-50: 62,500 kVA

Scalable from 400 kVA minimum in increments of 50 kVA.

Round-Trip Efficiency 5-Minute 93.0%

 \cdot Full-depth efficiency (0–100% charge/discharge), including conversion and thermal losses, at 5 min cycle and 25°C (77°F).

WARRANTY

Coverage All-inclusive, equipment and energy retention

Term 15 years standard, extendable to 20 years

MEGACELL 2 / 10 / 50 DATASHEET

Redefining power and grid stability

- Unmatched sustained nominal power output engineered for the world's most demanding grid applications.
- Ideal for frequency regulation, backup power, and continuous grid balancing. Enables grid-forming, blackout prevention, and real-time network stabilization.
- Over 30,000 cycles with minimal degradation—industryleading lifetime and efficiency.
- Non-flammable, lithium-free, and fully recyclable for maximum safety and sustainability.
- Plug-and-play integration with any grid or renewables platform—loT and future-ready.
- Factory-assembled, modular units for rapid deployment and flexible scaling.
- Rigorously tested by leading experts to ensure reliability in any environment.
- Lowest operational cost and maintenance in its class, maximizing long-term value.

PHYSICAL SETUP

Ingress Ratings	IP66 / NEMA 3R (Main Enclosure) IP20 (Thermal System)	
Enclosure Dimensions (Megacell-2)	Width: 5600 mm (220 ½ in) Depth: 1650 mm (65 in) Height: 2200 mm (86 ½ in)	
Maximum Weight	19,100 kg (42,194 lbs.)	

Operating Ambient -30°C to 50°C (-22°F to 122°F) Temperature

REGULATORY

System is compliant to grid codes and safety standards of all major markets.

System	UL 1973, UL 9540, IEC 62933, IEC 62619
Cells	IEC 62619, UL 1973

MONITOR, CONTROL & COMMUNICATIONS

OpenEMS	Free cloud monitoring system
Protocols	Modbus, MQTT, WEBSOCKETS, REST API
Core Control Modes	Direct Real Power Control Ramp Rate Control Frequency Support Voltage Control Remote & Automated Control Power Factor Control Virtual Inertia Island/Grid-Forming Mode

Black Start Capability

² Total Energy Storage

³ Full Charge / Discharge Duration at Max. Power: < 5 minutes.