

of EMTEL Energy USA



# **ENRACK**

# TECHNICAL SPECIFICATION

100KWh ENCAP Storage for UPS Application

5min Backup for **350KW** Load 30min backup at **200KW** Load 1hour backup at **100KW** Load



### **TECHNICAL SPECIFICATION**



#### **Product Overview**

The ENRACK Solution, powered by Enercap's advanced Supercapacitor modules, is an industry leading instantaneous power energy storage system, designed for UPS applications requiring rapid response and minimal footprint. Unlike conventional battery-based backup solutions, ENRACK delivers nanosecond-level response times, ensuring seamless power transition for mission-critical applications.

By leveraging Supercapacitor technology, ENRACK offers higher discharge C-ratings, enabling exceptional power output without compromising lifespan or capacity. Additionally, its chemical free architecture eliminates thermal runaway risks, making it a significantly safer alternative to traditional VRLA and lithium-based storage systems.

#### **Key Features**



# High Power Density

Compact design with maximum energy efficiency.



#### **Robust Safety Mechanisms**

Includes overvoltage, short-circuit, and thermal protections.



#### **Fast Response Time**

Instant power availability for critical loads.



#### Scalable Architecture

Easily expandable for increased capacity.



#### **Advanced Monitoring**

Remote diagnostics and real-time status monitoring via CANBUS / MODBUS/ ENCONNECT.

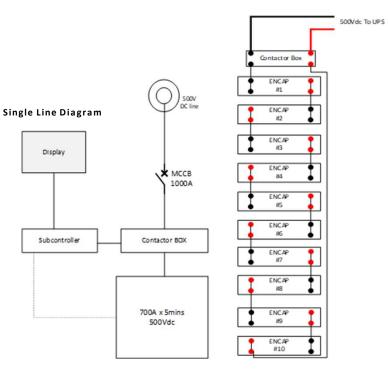
# Backup Duration by Load Capacity Load Capacity Backup Duration This 100KWh storage system is capable to deliver 5min backup at 350KW load without any risk or impact on storage life. 350kW 5minutes 200kW 25minutes



# **TECHNICAL SPECIFICATION**

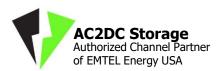


Technical Specifications	
Parameter	Specification
Rated Capacity	100 kWh
Nominal Voltage	500 VDC
Rated Power	350KW in 5mins
Efficiency	≥ 95%
Response Time	In Nano Seconds
Operating Temperature Range	-20°C to 55°C
Cooling System	Not Required
Storage Type	ENCAPSULATED Supercapacitor
Protection Features	Overvoltage, Overcurrent, Short Circuit, Thermal Protection
Monitoring & Communication	CANBUS / Modbus / ENCONNECT
Installation Type	Rack-mounted, Modular Scalable Design





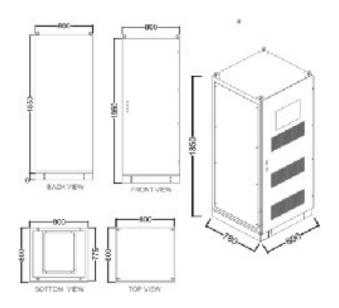
**Module Connection Layout** 



# **TECHNICAL SPECIFICATION**



#### **RACK LAYOUT**



## **Applications**



Data Centers
Ensures uninterrupted
power during transfer
switching.



Industrial Processes
Provides immediate energy
for high-demand
operations.



Grid Stabilization
Supports frequency
regulation and peak
shaving.



UPS Systems
Enhances reliability for mission-critical applications.





