

ENRACK

TECHNICAL SPECIFICATION

100KWh ENCAP Storage for UPS Application

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



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

This 100KWh storage system is capable to deliver 5min backup at 350KW load without any risk or impact on storage life.

Load Capacity

Backup Duration

350kW

5minutes

200kW

25minutes

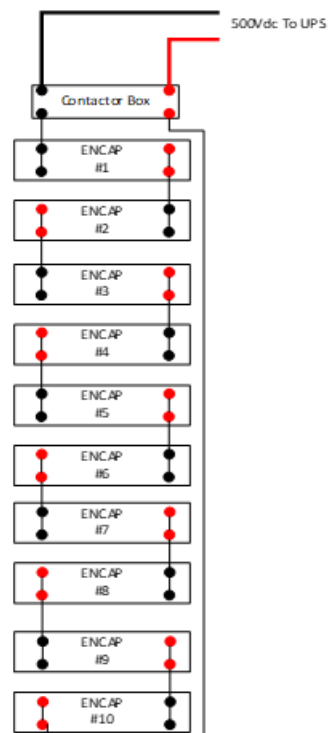
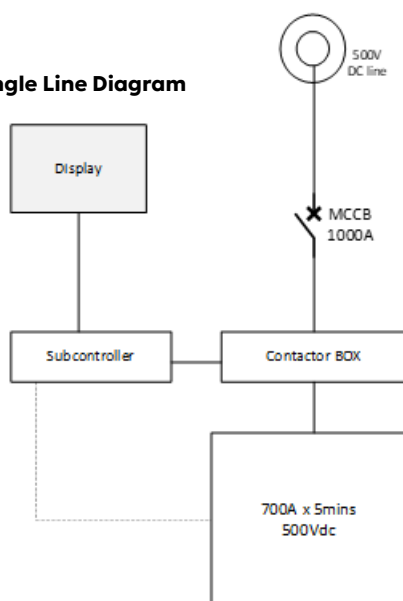
100kW

60minutes

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

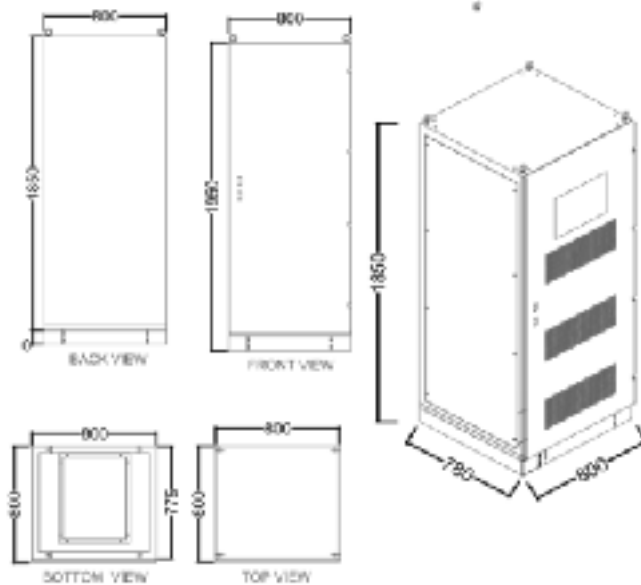
Single Line Diagram



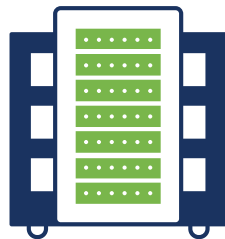
Module Connection Layout



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.



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