

Product Overview

The ENRACK system, powered by Enercap's advanced supercapacitor modules, is a compact, high-power energy storage solution optimized for UPS applications. It delivers ultra-fast, nanosecond-level response times, ensuring uninterrupted transitions for critical systems. Unlike conventional battery backups, ENRACK offers high power output with enhanced safety and longevity.

Technical Specifications

Performance

Voltage (Nominal)	500 Vdc
Maximum Charge Voltage	540 Vdc (Adjustable)
Discharge Cut-Off Voltage	440 Vdc (Adjustable)

CENTAURI View Software

Module Monitoring	Current, Voltage, Temperatures, CAN ID, Graphs, Daily Energy Consumed
System Monitoring	Instant Generator Solar Power, Daily Generated Solar Energy, Daily Consumption Solar Energy, Total Generated Solar Energy from the start, Daily Energy Consumption

Environmental Specifications

Cell Operating Temperature	-30°C to 70°C
Maximum Charge Voltage	Non-Condensing

Safety Performance

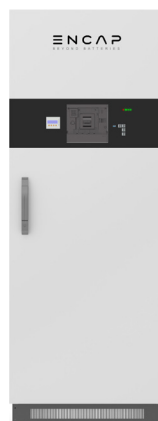
Over/Under Voltage	Hardware protection, DC line will be disconnected
Overcurrent	Hardware protection, DC line will be disconnected
Overtemperature	Hardware protection, DC line will be disconnected
Alarm	Audible alarms in the event of Over/under-Voltage, Over-Current, Over Temperature

Rack Dimensions

Dimensions W x D x H (mm)	800 x 900 x 2134
---------------------------	------------------

ENRACK Overview

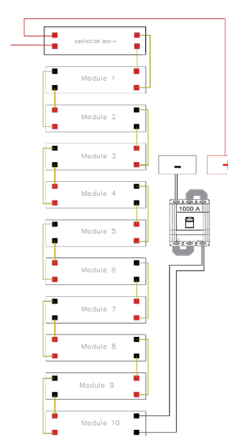
S/N	Items	Description	Quantity
1	Modules Rack	Racks	1 Unit
		Storage Capacity	ENCAP 48 V\700A
		Contactor Box	1 Units
		Subcontroller	1 Units
2	MCCB 3P/1000A		2 Units



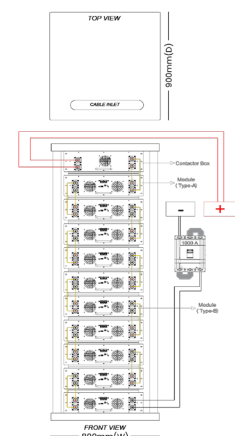
Module ENRACK



Inside View



ENRACK Layout

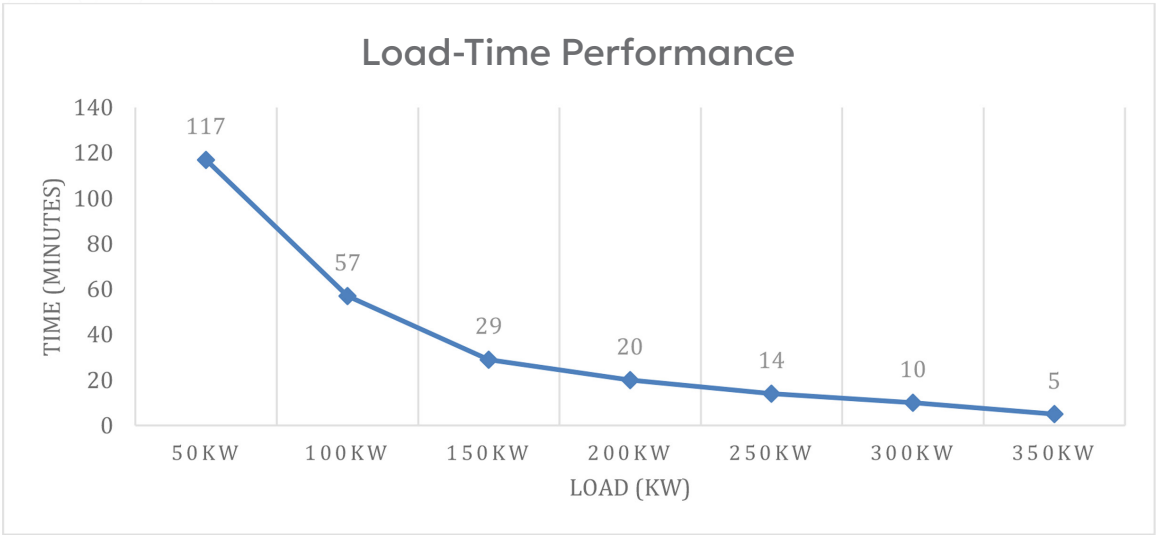


Physical Dimensions








Load-Time Performance


The ENRACK Power Storage System underwent a comprehensive discharge test using a load bank configured for 50kW to 350kW in 50kW increments. Prior to testing, the system was fully charged, and each load level was applied sequentially to evaluate performance. The discharge process was closely monitored, with all key operational parameters continuously logged. This test established a comparative relationship between the applied load and discharge time, validating the system’s operational efficiency under varying load conditions.




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.

Applications



Data Centers
Ensures uninterrupted power during transfer switching.



UPS Systems
Enhances reliability for mission-critical applications.

Compliance Information

EN55032:2015, EN55024:2010, EN61000-4-2:2009, EN61000, EN61000-4-2:2009, EN61000, EN61000:2008+A2:2010