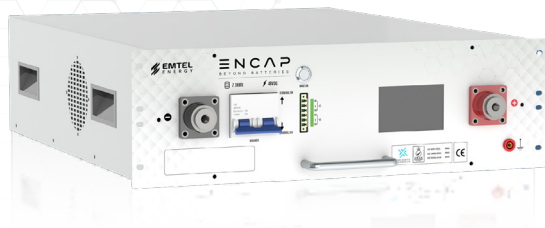


Emtel Part Number:
EN-71k-48-1.7-1C-X-EMTEL



A rugged, long-life Electrostatic Energy Storage ENCAP Module based upon Hybrid Supercapacitor technology and engineered for Telecom, Residential, industrial, and off-grid power applications. It offers exceptional performance, fire safety, thermal stability, fast charge/discharge, and long 25-year calendar life.

Performance Specifications

DC Energy	7100Wh
Voltage Range	44Vdc to 55Vdc
DC Voltage (Nominal)	48Vdc
Internal Resistance	<4 mΩ

Cell Specifications

Technology	Hybrid Cell
Nominal Cell Voltage	6.75 ~8.4Vdc, Equalizer 3.8Vdc

Charge & Discharge Characteristics

Maximum Continuous Charge Current	250A (~1.7C)
Maximum Continuous Discharge Current	250A (~1.7C)
Charge/Discharge Method	CC/CP/VP

Safety Performance

Circuit Breaker Protection	125A 2P Breaker
Fuse Protection	300A
Short Circuit Protection	Instant Electronic Switching, Terminal Cut-off
Over/Under Voltage, Over Current	Bi-Directional Solid State Relay, Seitching/Terminal Cut-off
Over Temperature	Electronic Switching, Terminal Cut-off

Smart Features

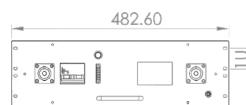
Alarm	Buzzer alarm in the event of Over/under-Voltage, Over-Current, Over Temperature
OLED Display	Monitoring with touch panel
Communication	WIFI/UDP
Dry Contacts Output	2 x Programmable Dry Contacts

EN-Connect Software

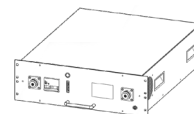
Module Monitoring	Total Voltage Individual Cell Voltages Current Temperatures SOC and Energy Consumed
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Mechanical Specifications

Dimensions (W x H x D) mm	482.60 x 143.4 x 568
Weight (kg)	43
Module Casing Material	GI Powdered
Terminal Type	300A Terminal Post



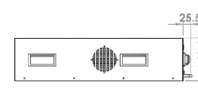
Front View



Isometric View



Top View



Side View

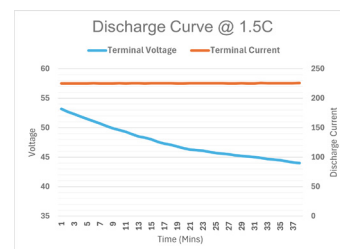
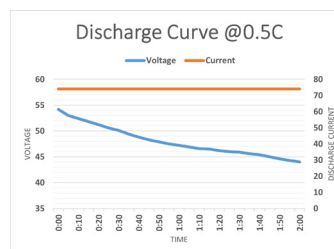
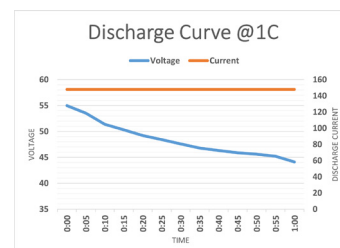
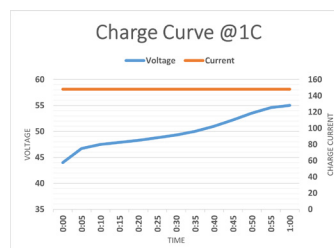
Module Environmental Specifications

Operating Temperature Range	-30°C ~ +70°C
Operating Humidity	Non-Condensing

Service Life

Cells Projected Cycle Life	500,000 Cycles
Cells Projected Calendar Life	25 Years
Module Projected Shelf Life	10 Years
Warehousing	Can be stored at any SOC without affecting cycle life

Charge & Discharge Curves



Disclaimer: The capacity test shown in the graph is indicative only and may vary from module to module.

Parallel Connection: All Modules must be at 100% SOC before connecting in parallel. There is no limit on the number of Modules that can be connected in parallel.

Series-Parallel Connection: Modules cannot be connected in series-parallel combination under any circumstance.