

TECHNICAL DATA SHEET

ENCAP

BEYOND BATTERIES

7.1KWH-48V Module

Gen5



EM-7.1K-48-1.7C-2PA-x-x-x-4V0-Gen5

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 Characteristics

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

Discharge Specifications

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

Module Environmental Specifications

Operating Temperature Range¹	-30°C ~ +70°C
Operating Humidity	Non-Condensing

Safety Performance

Circuit Breaker Protection	125A 2P Breaker
Fuse Protection	300A
Short Circuit Protection	Instant Electronic Switching, Terminal Cut-off
Over/Under Voltage	Electronic Switching, Terminal Cut-off
Over Current	Electronic Switching, 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	Monitor Module
Communication	WIFI
Dry Contacts Output	Programmable Dry Contacts
Service Life	
Cells Projected Cycle Life³	500,000 Cycles
Cells Projected Calendar Life⁴	25 Years
Module Projected Shelf Life⁵	10 Years
Warehousing	Can be stored at any SOC without affecting cycle life
EN-Connect Software	
Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperatures, SOC and Energy Consumed

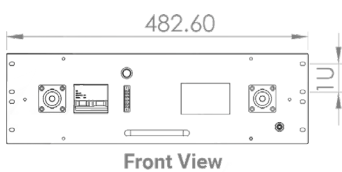


Isometric View

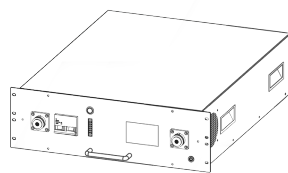
Front View

Mechanical Specifications

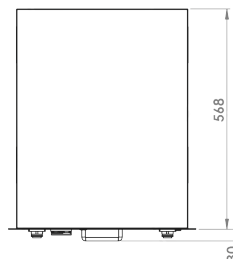
Dimensions² (W x H x D) mm	482.60 x 143.4 x 568
Weight (kg)	43
Module Casing Material	GI Powdered
Terminal Type	300A Terminal Post



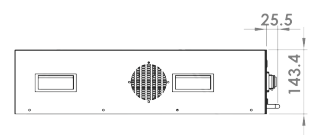
Front View



Isometric View



Top View



Side View

Front View

Isometric View

Precautions

Alarm	In case of alarm, immediately rectify/attend to the cause of the alarm.
Physical Damage	In case the Module is physically damaged due to any event, do not install and energize the Module under any circumstances and contact your Reseller or After Sales Support.
Short Circuit	Ensure precautions to prevent short-circuit under all circumstances.
Galvanic isolation	When connecting to external devices ensure that galvanic isolation of the external device(s) does not exceed 1000V.
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.

¹The Module should not be operated outside the indicated temperature range or at currents higher than specified limits.

²Product Dimensions are for reference only and may change without notice.

³Projected Life of encapsulated cells.

⁴Projected Calendar Life of encapsulated cells from the date of first operation.

⁵Shelf Life is the Life of the Module (in years) from the date it is manufactured to the time it is first operated.

- Additional terms and conditions, including a limited warranty, will apply at the time of purchase.
- For critical applications, please contact your Reseller or After Sales Support.

