ENCAP

BEYOND BATTERIES

TECHNICAL DATA SHEET

10KWH-48V Module

EN-10k-48-1C-X-X-X-X-1V0-GEN1

SMART MANAGEMENT

- Feature-rich online monitoring via App or OLED display
- Automatic Firmware Updates
- Warning Alarms

EFFICIENT

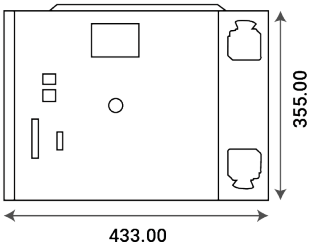
- Highly Efficient: > 95% RTE (Round Trip Efficiency)
- 100% DOD (Depth of Discharge)
- 500,000 Cell Life Cycles

SAFE & RELIABLE

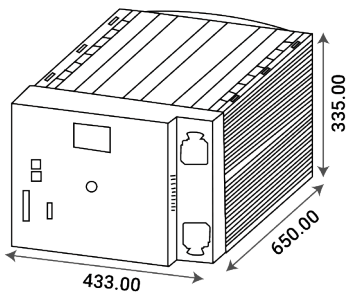
- Wider operating ambient temperature range
- Suitable for various installation environments including high altitudes
- No thermal runaway risk

TECHNICAL DATA SHEET

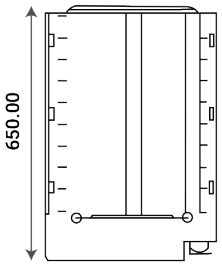
Performance Specifications	
Useable Energy Capacity	10kWh
DC Voltage Range	43.2Vdc to 60.8Vdc
Nominal DC Voltage	48Vdc
Internal Resistance	<4 mΩ
Cell Specifications	
Technology	Encapsulated Cell
Nominal Cell Voltage	6.4 ~ 6.6Vdc / Cell (Encapsulated) 1/2 + 0.12V Envelope
Charge Characteristics	
Maximum Continuous Charging Current	1C (200A)
Charging Method	CC/CP/VP
Discharge Specifications	
Maximum Continuous Discharging Current	1.5C (300A)
Discharging Method	CC/CP/VP
ENConnect Software	
Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperature, Instantaneous Power, Circuit Breaker Status, SOC, Energy Consumed
Mechanical Specifications	
Dimensions (W x H x D) mm	433 x 335 x 650
Weight (kg)	120
Module Casing Material	GI Powdered
Terminal Type	300A Terminal Post



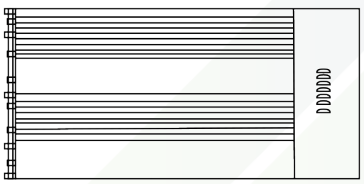
Front View[4]



Isometric View[4]



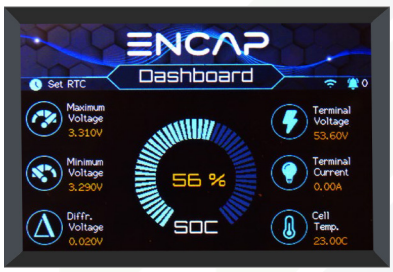
Top View[4]



Side View[4]

TECHNICAL DATA SHEET

Smart Features	
OLED Display	Monitor & Configure Module
Communication	WIFI / CANBUS / Bluetooth
Alarm	Buzzer Alarm in the event of Over/Under-Voltage, Over-Current, Over-Temperature
Dry Contacts Output	Four programmable Dry Contacts
Dry Contacts Input	24Vdc three digital input with Isolated ground
Module Service Life	
Projected Cycle Life[1]	500,000 cycles
Projected Calendar Life[2]	25 years
Shelf Life[3]	10 years
Warehousing	Can be stored at any SOC without affecting cycle life
Safety Performance	
Short Circuit Protection	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
Module Specifications	
Cell Operating Temperature[5]	-20°C ~ +55°C
Operating Humidity	Non-Condensing
Storage Temperature	-10 ~ +45°C (<3 months, SOC:20% ~ 60%) -10 ~ +35°C (<1 year, SOC:30% ~ 60%)



Precautions	
Alarm	In case of alarm, immediately rectify/attend to the cause of the alarm.
Physical Damage	In case the Module is physically damaged for any reason, 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 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 or series-parallel combination under any circumstances. If a series configuration is required, a different model is available.

Notes:

[1]Projected Life of Encapsulated Cells. Cycle Life will vary if cycled more than 4 times a day.

[2]Projected Calendar Life of Encapsulated Cells from the date of first operation.

[3]Shelf Life is the life of the Module (in years) from the date it is manufactured to the time it is first operated.

[4]Product Dimensions are for reference only and may change without notice.

[5]The temperature range indicates the range within which the Encapsulated Cells can operate. The performance of the cells may vary if they are continuouslyoperated outside the temperature range of and/or at C-rates higher than the maximum charge/discharge rates specified in this data sheet. The operating temperature range of the Module varies based on the application. If the Module is to be operated continuously outside a temperature range of and/or at C-rates higher than the maximum charge/discharge rates specified in this data sheet, please consult your Reseller or After Sales Support prior to deploying.

- 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.