

ENCAP

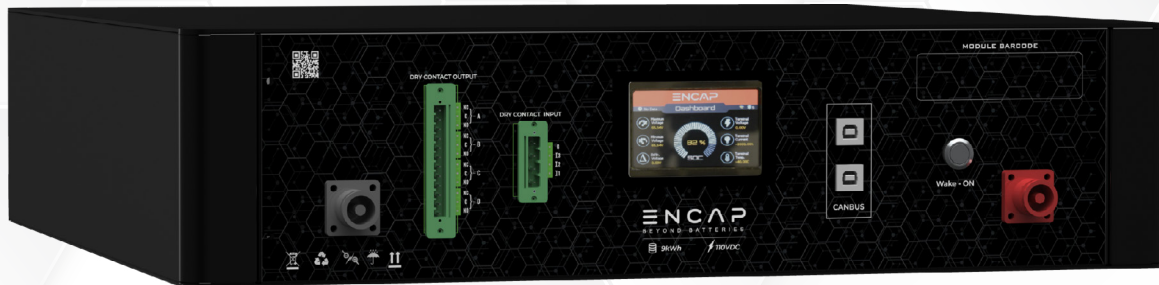
B E Y O N D B A T T E R I E S

TECHNICAL DATA SHEET

9KWH-110V

EN-9k-110-1C-X-X-X-X-1V0-GEN1

VERSION 1 | REVISION 0 | RELEASE DATE: 29th Aug 23



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 Life Cycles



SAFE & RELIABLE

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

PERFORMANCE SPECIFICATIONS

DC Energy	9kWh
Voltage Range	87Vdc to 118Vdc
DC Voltage (Nominal)	110Vdc
Internal Resistance	< 4 mili Ohms

CELL SPECIFICATIONS

Technology	Encapsulated Cell
Nominal Cell Voltage	6.4 ~6.6Vdc / Cell (Encapsulated) 1/2 + 0.12V Envelope

CHARGE CHARACTERISTICS

Maximum Continuous Charge Current ¹	82A (~1C)
Charging Method	CC/CP/VP

DISCHARGE SPECIFICATIONS

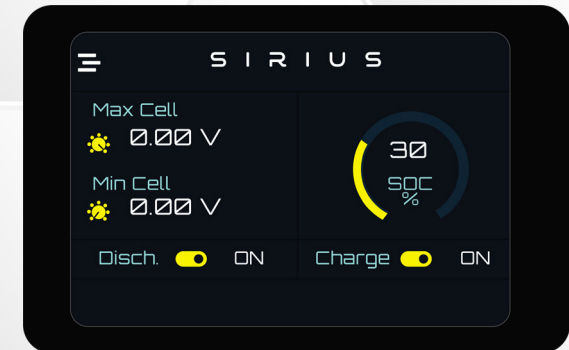
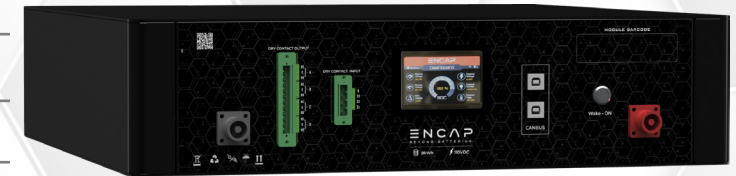
Maximum Continuous Discharge Current ¹	82A (~1C)
Discharging Method	CC/CP/VP

EN-CONNECT SOFTWARE

Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperatures, SOC and Energy Consumed
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MODULE ENVIRONMENTAL SPECIFICATIONS

Operating Temperature Range ¹	-10°C~ +55°C (For continuous operation outside this range, please consult Resellers or Enercap)
Operating Humidity	Non-Condensing



LCD View

MECHANICAL SPECIFICATIONS

Dimensions² (W x H x D) mm 583 x 141 x 581.73

Weight (kg) 65

Module Casing Material GI Powdered

Terminal Type 300A Terminal Post

SMART FEATURES

OLED Display Monitor 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

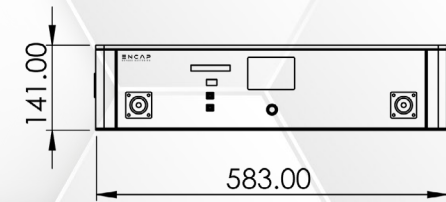
SAFETY PERFORMANCE

Short Circuit Protection Electronic Switching, Terminal Cut-off

Over/under voltage Electronic Switching, Terminal Cut-off

Over Current Electronic Switching, Terminal Cut-off

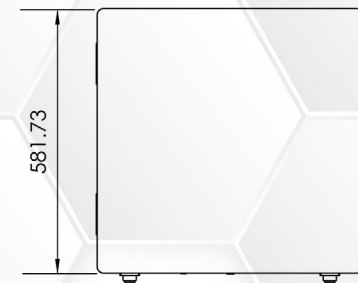
Over temperature Electronic Switching, Terminal Cut-off



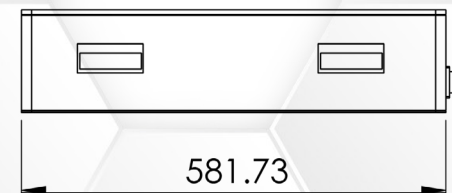
FRONT VIEW



ISOMETRIC VIEW



TOP VIEW



SIDE VIEW

MODULE SERVICE LIFE

Projected Cycle Life ³	500,000 cycles
Projected Calendar Life ⁴	25 years
Shelf Life ⁵	10 years
Warehousing	Can be stored at any SOC without affecting cycle life

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.

NOTES

¹The temperature range indicates the range within which the Module can operate. The performance of the Module may vary if operated continuously outside the temperature range and/or at C-rates higher than the maximum charge/discharge rates specified in this data sheet. If the Module is to be operated continuously outside the temperature range 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.

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

³ Projected life of encapsulated cells. Cycle life will vary if cycled more than 4 times a day.

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

⁵ Shelf 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.