

ENCAP

BEYOND BATTERIES

TECHNICAL DATA SHEET

1.2KWH-24V Module



EN-1.2k-24-1C-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

Performance Specifications

DC Energy	1.2kWh
Voltage Range	22Vdc to 29Vdc
DC Voltage (Nominal)	24Vdc
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 ¹	50A (1C)
Charging Method	CC/CP/VP

Discharge Specifications

Maximum Continuous Discharging Current	50A (1C)
Discharging Method	CC/CP/VP

ENConnect Software

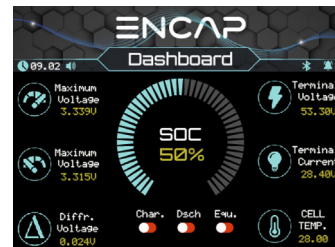
Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperature, SOC and Energy Consumed
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Module Environmental Specifications

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



Front View



LCD View

Mechanical Specifications

Dimensions² (W x H x D) mm	359.73 x 140 x 348
Weight (kg)	22
Module Casing Material	GI Powdered
Terminal Type	300A Terminal Post

Smart Features

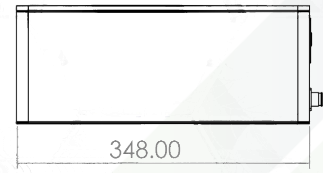
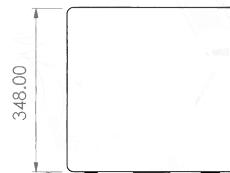
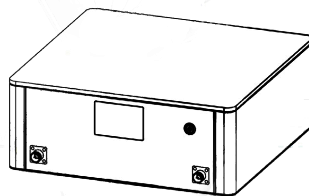
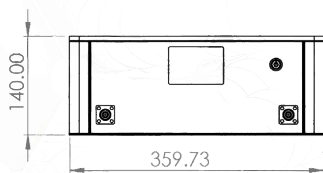
OLED Display	Monitor Module
Communication	WIFI / Bluetooth
Alarm	Buzzer Alarm in the event of Over/Under-Voltage, Over-Current, Over-Temperature

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 Service Life

Projected Cycle Life³	500,000 cycles
Projected Calendar Life⁴	25 years
Shelf Life⁵	10 years
Warehousing	Can be stored at any SOC without affecting cycle life



Front View

Isometric View

Top View

Side 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 for 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 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.

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.