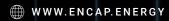


ADVANCED ENERGY STORAGE

TECHNICAL DATA SHEET

10KWH - 48V

EN-10k-48-1C-X-X-X-X-1V0-GEN1 VERSION 1.0









OLED Touch Screen Display

PERFORMANCE SPECIFICATIONS

DC Energy	10kWh
Voltage Range	43.2Vdc to 60.8Vdc
DC Voltage (Nominal)	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 Charge Current	1C maximum (maximum continuous charging current) @25°C
Charging Method	CC/CP/VP

DISCHARGE SPECIFICATIONS

Maximum Discharge Current	1.5C maximum (maximum continuous discharging current) @25°C
Discharging Method	CC/CP/VP

EN-CONNECT SOFTWARE

Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperature, Instantaneous Power, Circuit Breaker Status, SOC and Energy Consumed.
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MECHANICAL SPECIFICATIONS

Dimensions (W x H x D) mm	433 x 335 x 650
Weight (kg)	120 kg
Module Casing Material	Aluminium oxide / GI Powdered
Terminal Type	300A Terminal Post



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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	Hardware Protection, Terminal Cut-off
Dry Contacts Input	Hardware Protection, Terminal Cut-off

ENVIRONMENT SPECIFICATIONS

Cell Operating Temperature ¹	Charging: 0°C ~ 50°C (0°C to 10°C current limit 20A charge)
	Discharging: -20°C ~ +55°C
Operating Humidity	Non-Condensing
Storage Temperature	-10°C ~ +45°C (<3 months, SOC: 20% ~ 60%) -10°C ~ +35°C (<1 year, SOC: 30% ~ 60%)

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 Life 3, 4	500,000 Cycles
Projected Calendar Life ⁵	25 Years
Shelf Life ⁶	10 Years
Warehousing	Can be stored at any SOC without affecting cycle life



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OLED Touch Screen Display

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 an event, do not install and energize the module under any circumstances and contact your re-seller
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
Series Connection	All modules must be at 100% SOC before connecting in series. Up to 1000V DC connection in series or 20 x 10kWh - 48V
Parallel Connection	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 temperature range indicates the range in which the encapsulated cells can operate. The performance of the cells may vary if they are continuously operated outside a temperature range of -20°C to 55°C, and/or at C-rates higher than the maximum charge/discharge rate specified in this spec 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 -20°C to 55°C, and/or at C-rates higher than the maximum charge/discharge rate specified in the spec sheet, please consult Enercap or its Reseller prior to deploying.

Product dimensions are for reference only unless otherwise identified and may change without notice.

For critical applications, please contact your Reseller or After Sales support.

²Warranty conditions will apply. Please consult your, Reseller or Enercap for warranty conditions applicable to your region.

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

⁴Additional terms and conditions, including a limited warranty, will apply at the time of purchase.

⁵Projected Calendar life of encapsulated cells from the date of first operation.

⁶Shelf life is the life of the module (in years) from the date it is manufactured to the time it is first operated