

ENCAP

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

STREETLIGHT MODULE
TECHNICAL DATA SHEET
1KWH-12V

ELL-1k-12-0.5C-X-X-X-X-1V0-GEN1

VERSION 1.0 | REVISION 0 | RELEASE DATE: 7th May 24

STREETLIGHT MODULE



EFFICIENT

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



SAFE & RELIABLE

- Wide Operating Temperature Range
- Deployable in Various Environments including High Altitudes
- No Thermal Runaway Risk

PERFORMANCE SPECIFICATIONS

DC Energy	1kWh
Voltage Range	10.8Vdc to 15Vdc
DC Voltage (Nominal)	12Vdc
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	40A (~0.5C)
Charging Method	CC/CP/VP

DISCHARGE SPECIFICATIONS

Maximum Continuous Discharge Current	40A (~0.5C)
Discharging Method	CC/CP/VP

MODULE ENVIRONMENTAL SPECIFICATIONS

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



ENLIGHT MODULE

MECHANICAL SPECIFICATIONS

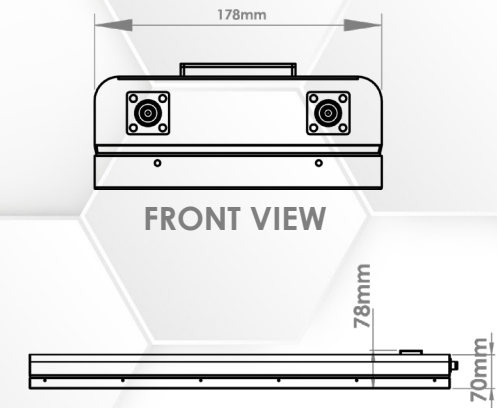
Dimensions ¹ (W x H x D) mm	178 x 78 x 863
Weight (kg)	15
Module Casing Material	GI Powdered
Terminal Type	160A Terminal Post

SMART FEATURES (WITH ENCONTROL²)

Alarm ²	Warning alarm in the event of Over/under-Voltage, Over-Current, Over Temperature
OLED Display ²	Monitoring Total Voltage, Individual Cell Voltages, Current, Temperatures, SOC and Energy Consumed
Communication ²	WIFI / Bluetooth

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

SIDE VIEW



TOP VIEW



ISOMETRIC VIEW

SERVICE LIFE

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

PRECAUTIONS

Alarm ²	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

¹Product Dimensions are for reference only and may change without notice.

²The ENCONTROL tool is an OLED display designed for Module monitoring. Please note SMART FEATURES are not part of the standard Streetlight Module and require separate purchase of ENCONTROL tool.

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.