

Lithium-Ion Dry Cell Product Specification

Product Model: CU-PO-L1-8SS101

Version No.: V2.0

Release Date: 20260420

1. Basic Product Information

Item	Specification Parameters	
Cell Model	425868	
Nominal Voltage	3.7V	
Nominal Capacity	≥1000mAh (0.2C)	
Dimensions (L x W)	130mm*75mm	
Electrochemical System	811/SiC	
Active Material Content	811 94.5%	15%SiC 95.0%
Single-Side Coating Areal Density (mg/cm²)	811 15.10	15%SiC 5.92
Electrode Compaction Density (g/cc)	811 3.35	15%SiC 1.50
Cell Structure	Stacked (7 Cathode / 8 Anode Sheets)	
Recommended Electrolyte Filling Amount	4.0g	
Recommended Electrolyte	KLD-H3026	

2. Charge/Discharge Parameters

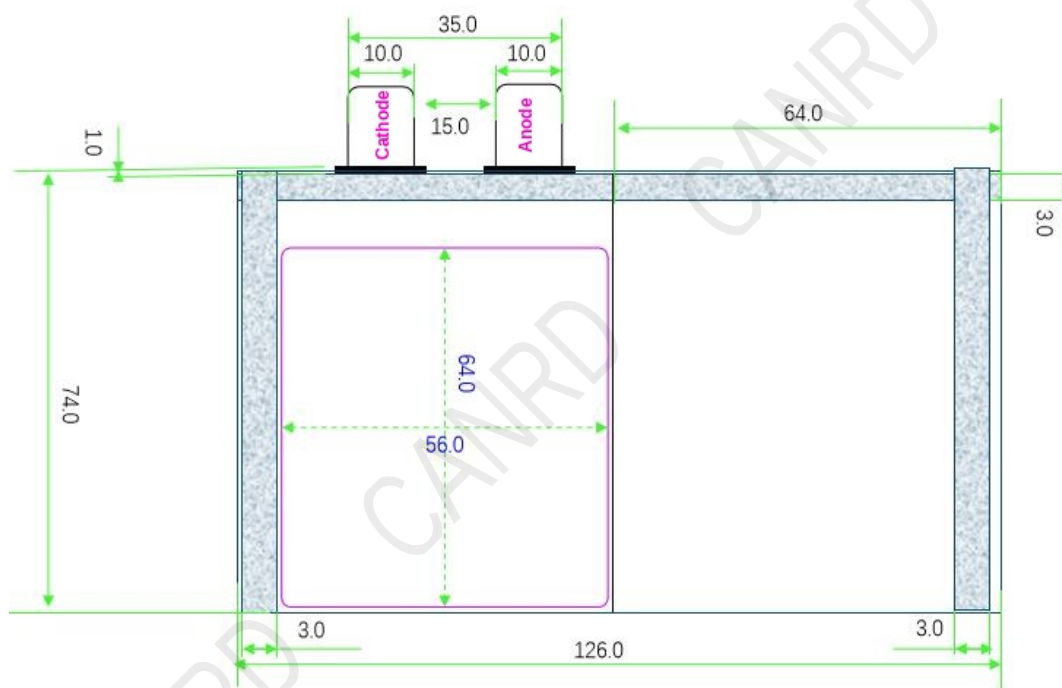
Charge Voltage: 4.2V	Standard Charge Current: 0.5C
Discharge Cut-off Voltage: 2.75V	Standard Discharge Current: 1.0C

3. Environmental Adaptability

Item	Parameter Range
Charging Operating Temperature	10°C ~ 60°C
Discharging Operating Temperature	0°C ~ 45°C
Storage Temperature	25°C (Recommended)
Relative Humidity	≤85% RH (Non-condensing)

4. Figure

Dimension Diagram:

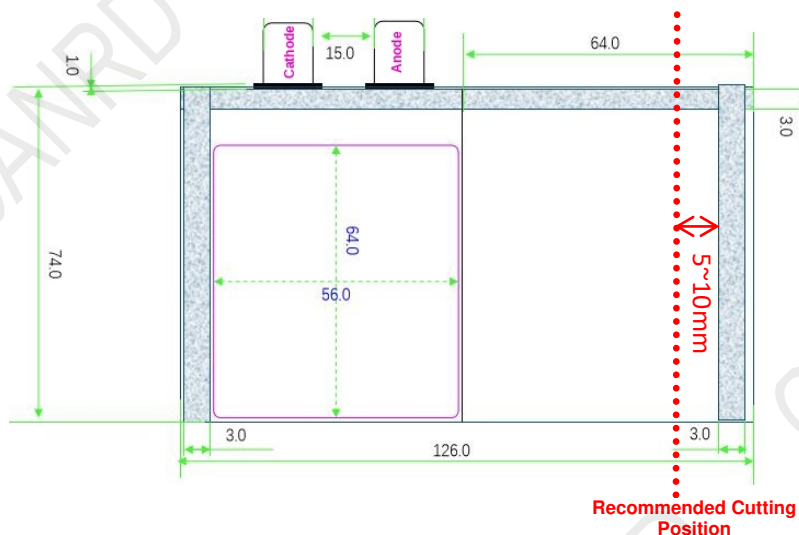


5. Dry Cell Post-Processing

The following procedure uses manual electrolyte filling as an example and **must be performed in a dry room or glovebox**. The cell orientation shown below is defined as the front side of the cell.

1) **Inspection:** Before operation, inspect the entire cell for abnormalities, such as: (1) broken tabs; (2) gas leakage; (3) damage to the aluminum-plastic pouch, etc.

2) **Create Electrolyte Filling Port:** Cut an electrolyte filling port 5-10 mm from the edge of the gas pocket. **PS: It is strongly recommended to retain part of the gas pocket during the first filling!**



3) **Electrolyte Filling:** Rotate the cell 90° counterclockwise from the orientation shown on the right and place it vertically with the cut gas-pocket opening facing upward (a cell holder may be used). Then place it on a balance and **tare to zero**. Use a pipette / disposable dropper to inject an appropriate amount of electrolyte through the filling port.

4) **Vacuum Soaking:** Place in a vacuum soaking chamber, evacuate to ≤ -85 kPa, and rest for 3 min.

5) **Vacuum Pre-Sealing:** Vacuum seal at ≤ -85 kPa.

6) **Measure OCV After Electrolyte Filling:** Before charge/discharge, the OCV is approximately 0 V (depending on the chemistry, the voltage may be positive or negative).

7) **Resting:** Recommended: 48 h at room temperature or 24 h at 45°C. Depending on cell size, electrolyte wetting, and filling amount, temperature and time may be adjusted appropriately to actual requirements.

8) **Formation and Capacity Grading After Resting (Initial Charge/Discharge / Activation):** See the recommended procedure below.

6. Recommended Formation and Capacity Grading Procedure:

6.1 Conditions with Hot-Press Formation and Capacity Grading:

Formation Step: 75°C, 0.9 MPa,

- 1) Rest for 60 min (allow cell body to reach 75°C);
- 2) 0.2C CC charge, cut off after 14 min;
- 2) Rest for 3 min;
- 3) 0.5C CC charge, cut off after 74 min;

After the cell body cools to 25°C, degas and perform secondary sealing.

Capacity Grading Step: 25°C, ambient pressure (if the gas pocket is retained after degassing, apply 0.2 MPa pressure during capacity grading)

- 1) Rest for 3 min;
- 2) Charge at 0.5C CC-CV to 4.20 V, cut-off current 0.02C;
- 2) Rest for 3 min;
- 3) Discharge at 0.2C CC to 2.75 V;

(Complete the first charge/discharge cycle and calculate the initial coulombic efficiency)

6.2 Conditions without Hot-Press Formation and Capacity Grading:

NEWARE Test System: 25°C, 0.2 MPa;

- 1) Rest for 3 min;
- 2) Charge at 0.05C CC to 4.20 V;
- 3) Rest for 3 min;
- 4) Discharge at 0.05C CC to 2.75 V;

(Complete the first charge/discharge cycle and calculate the initial coulombic efficiency)

6.3 Note: If the cell will remain in a **test-ready state** for an extended period after capacity grading, it is recommended to perform one additional **half-charge** after capacity grading.

Charge-Discharge Curve:

Cycling Performance:

