

CC2300

Rechargeable Lithium ion Credit Card Battery

Technical Datasheet

ULTRALIFE®

WE. ARE. CRITICAL. POWER.™



Overview

The CC2300 is part of the Entellion range. Entellion products are smart, innovative portable power products, designed to meet the emerging needs of feature-laden devices in professional markets. Created and manufactured by Ultralife UK, Entellion combines our expertise in custom OEM requirements and market trends. Entellion products are available off the shelf and can be customised for your application, getting you to market quickly and confidently.

Features

- 3.7V high energy density Lithium ion technology
- Credit card footprint (54.0mm x 85.6mm)
- Impedance tracking fuel gauge with I²C communication
- Active protection circuitry (OV, UV, OC, SC)
- Redundant passive over-current protection
- 7 position Tyco connector interface
- Tough plastic enclosure
- IEC 62133-2:2017+AMD1:2021 & UN 38.3 compliant
- CE marked (EMC/ESD compliance)
- Customisation to labelling, case colour and firmware possible

Technical Specifications

Part No.	CC2300	
Capacity	0.2C (Typical)	2300mAh ⁽¹⁾⁽²⁾
	0.2C (Minimum)	2185mAh ⁽¹⁾⁽²⁾
Charging	Voltage	4.20V ⁽⁸⁾
	Current (Typical)	1150mA (0.5C)
	Current (Maximum)	2000mA ⁽⁸⁾
	Temperature	0°C to +45°C
Discharging	Voltage (Average)	3.7V ⁽²⁾
	Cut-Off Voltage	3.0V ⁽⁷⁾
	Current (Maximum)	2.0A ⁽⁸⁾
	Temperature	-10°C to +50°C ⁽⁴⁾⁽⁶⁾
Storage	Temperature	-20°C to +60°C
Cycle Life	>300 (Typ) ⁽¹⁾⁽³⁾⁽⁵⁾⁽⁶⁾	
Dimensions	Length	85.6mm ± 0.20mm
	Width	54.0mm ± 0.20mm
	Thickness	9.1mm ± 0.20mm
Weight	<65g	
Fuel Gauge	Texas Instruments BQ27541-G1 Impedance Tracking fuel gauge with I ² C communication	
Termination	7 way Tyco connector 1827684-1 (mates with Tyco 1827654-1 or -2)	
Certification	Transportation	ST/SG/AC.10.11 Rev 5 (UN 38.3 T1-T8 Tests)
	Safety	IEC 62133-2:2017 +AMD1:2021
	CE / UKCA Marking	EMC Directive 2014/30/EU

Notes

1. CVCC 4.20V, 0.5C charge to 0.05C current taper at +20°C.
2. 0.2C discharge to 3.0V within 1 hour of charge at +20°C.
3. 0.5C discharge to 3.0V within 1 hour of charge at +20°C.
4. Discharge performance degrades at lower temperatures, empirical testing in application is suggested to determine suitability.
5. To 80% of 0.2C minimum rated capacity.
6. Cycle life degrades at higher operating temperatures, empirical testing in application suggested to determine suitability.
7. Application should terminate discharge below this level.
8. Do not exceed this level.

CC2300

Ultralife UK | +44 1782 566622

©2026, Ultralife UK is a trading name of Accutronics Ltd. • www.accutronics.co.uk • All information is subject to change without notice.
*The information contained herein is for reference only and does not constitute a warranty of performance. • 1653B_TDS V7 (01-Oct-2026)

CC2300

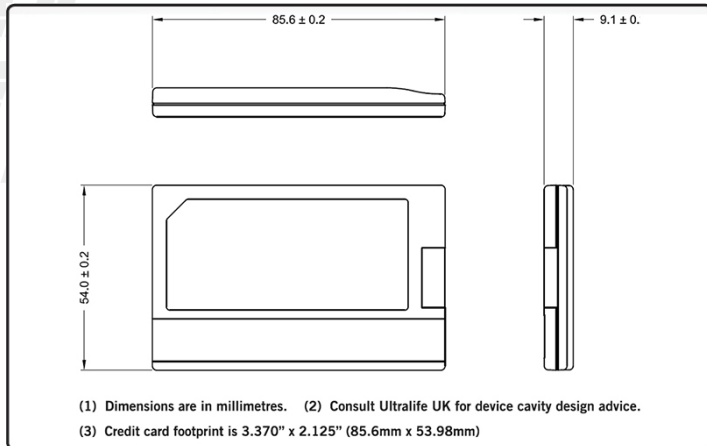
Rechargeable Lithium ion Credit Card Battery

Technical Datasheet

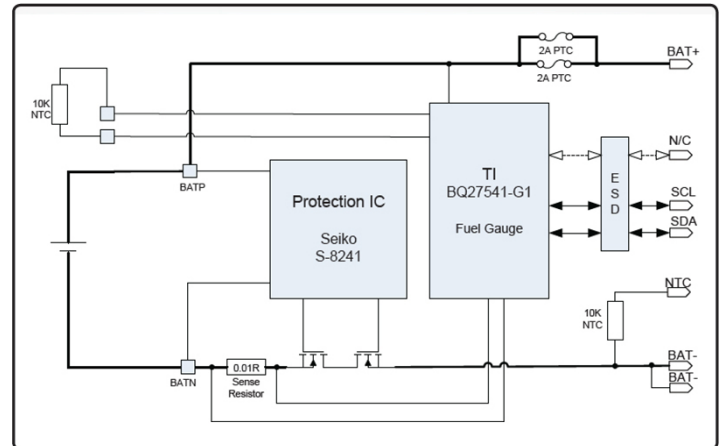
ULTRALIFE®

WE. ARE. CRITICAL. POWER.™

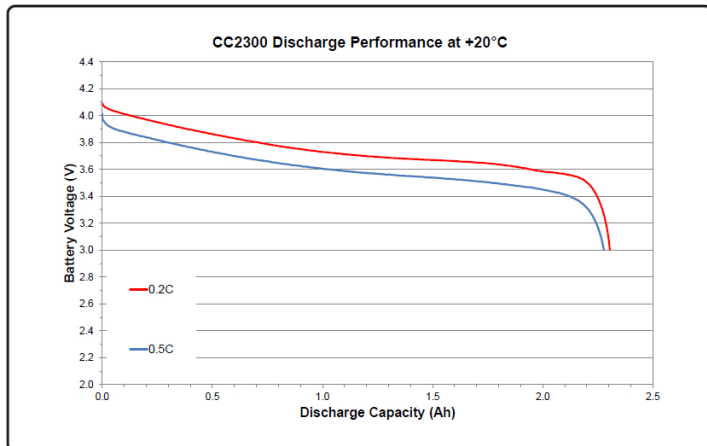
Mechanical Drawing



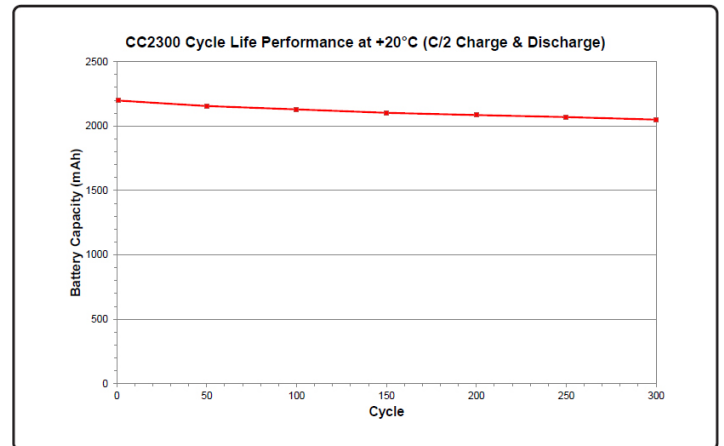
Block Diagram



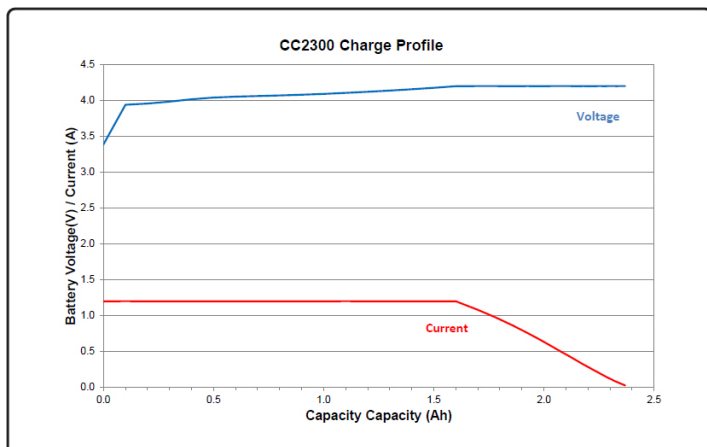
Typical Discharge Performance at +20°C



Typical Cycle Life Performance



Typical Charge Performance



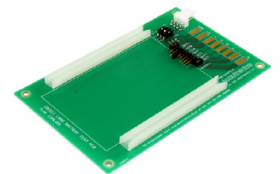
Accessories

Connectors



The CC2300 mates with the Tyco 1827654-1 or 1827654-2

Development PCB



The EVAL001 PCBA allows easy hook up during development