




CP4435-2

Custom Power Li-ion 14.4V/13.8Ah

Advanced Lithium-ion technology for maximum performance, run-time and safety in electronic devices. Custom Power Ltd Lithium-ion batteries offer simplified access to the latest battery technology for electronic product design, prototyping and manufacturing. Powered by high-performance rechargeable cells from Molicel.

MOLICEL Powered by Molicel.

 Manufactured in the USA & UK.

Nominal Ratings	14.4V / 13.8Ah / 200.0Wh	Chemistry	Li-ion INR
-----------------	--------------------------	-----------	------------

Electrical Details	
Charge Profile	CC/CV
Charge Management	JEITA
Max Charge Voltage	16.8V
Max Charge Current	3.8A
Charge Termination	0.4A
Charge Temperature Range (Current Limited)	0°C to 60°C
Charging Time	5.0 Hours

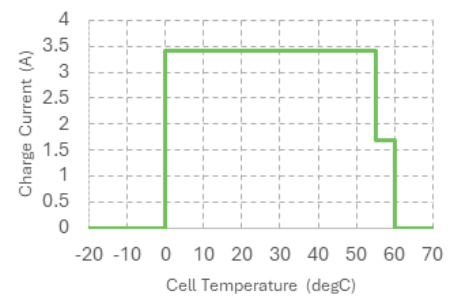
Discharge	
Min Discharge Voltage	10.0V
Max Discharge Current	5.0A
Discharge Temperature Range	-40°C to 60°C

Electrical Interface	
Power Connection	Molex Mini-Fit Jr 39012045
Fuel Gauge Output	JST B5B-PH-K-S(LF) (SN)

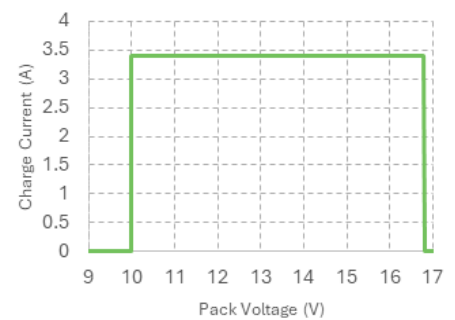
Mechanical	
Nominal Dimensions	70 x 180 x 45 mm
Enclosure	Soft Pack (Shrink Sleeve)
Nominal Mass	868g
Ingress Protection	N/A

System	
Communications	SBS SMBus v1.1 interface
Security	SHA-1 Authentication Available
Fuel Gauge Display	6 LED SOC Output
Protection	CUV/COV/OCD/OCC/OTD/ OTC/UTD/UTC/SCD/SCC
Compliance	UN38.3, Pre-compliance IEC 62133-2 & UL 62133-2

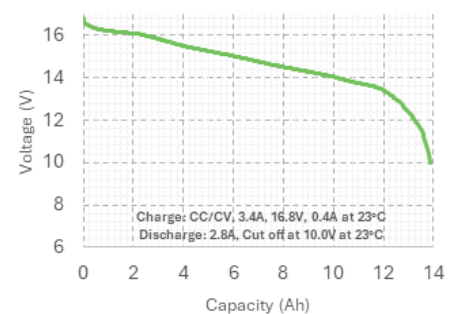
Max Charge Current/Cell Temperature:



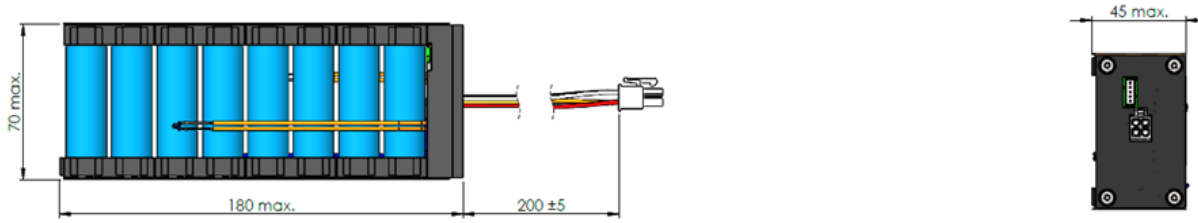
Max Charge Current/Battery Voltage:



Discharge Characteristics:



Package Dimensions:



1. All dimensions are in millimetres ($\pm 0.5\text{mm}$).
2. Packs are shown without external sleeving for clarity.

3. This drawing is subject to change without notice.



Outline safety warning: Use only within the allowed parameters.

Do not short circuit or overload the battery. Use only an approved charger. Avoid heat and operation outside the specified temperature range. Never crush, puncture, or dismantle the pack or disable protective circuits. Built-in protections are a last resort - host equipment must ensure safe operation.



You should also consult the following documents:

1. NCR-18650-M35A Cell Datasheet.
2. Material Safety Datasheet.



Do not use the battery if you suspect it may be faulty or damaged.

Storage	Unit	Nominal	Minimum	Maximum ⁹
Temperature	°C	+20	-20	+35
Duration	Months			12
Store at 50% state of charge for optimum life. Do NOT store in a discharged condition.				

Transport Regulations: All lithium, lithium-ion, and lithium polymer cells and batteries must pass UN tests before they can be transported by road, rail, sea, or air. Cells and batteries exceeding certain lithium content or "lithium equivalence" limits must be shipped as Class 9 hazardous goods under UN3480. Batteries below these limits may be transported as non-hazardous, subject to specific exemptions.

Disclaimer: We do not claim to be experts in regard to transport regulations, shipping, packing etc. Users and prospective users of lithium, lithium-ion and/or lithium polymer cells and/or battery packs should consult a qualified person for definitive information, e.g. a Dangerous Goods Safety Advisor. Custom Power, its owners, directors, employees and servants cannot accept any responsibility for the accuracy of the above information.

1 4.1V is recommended to prolong life, at the cost of not charging to 100% capacity.

4 The battery capacity may need to be de-rated at high and low temperatures. In particular, low temperatures will increase internal resistance and reduce the capacity. High temperatures will increase self discharge and reduce battery life. See our website for more information.

2 This is the voltage at which the pack is considered discharged. If your equipment continues to discharge the battery below the minimum figure indicated, the battery may be damaged and/or its life reduced. If your equipment ceases to function at a voltage above the maximum figure, you may not recover the full battery capacity.

5 Batteries are supplied as 'soft packs' and must be designed into host equipment where they are strictly not user replaceable.

3 Batteries fitted with electronic protection circuits cannot normally deliver current pulses above the maximum figure, since the circuit has short response times.

6 Storage at up to 50°C permissible within guidelines. Prolonged storage at high temperatures will dramatically shorten life. See our website for more information.



At Custom Power, we are committed to following the best practices in Environmental, Social, and Governance (ESG). We continually strive to integrate ESG principles into our core strategies, contributing to a sustainable and equitable future for all stakeholders. Find out more about what we are doing on our website



Custom Power Li-ion 7.2V-6.9Ah (CP4235-2) Datasheet V1.0.pdf
Technical specifications are subject to change without notice.
E & OE Issue A.

