

# CMX420M

Rechargeable Lithium Ion  
Smart Battery

**14.4V**  
**5.1Ah**  
**73.4Wh**

## Specifications

Model	CMX420M	
Capacity	0.2C (Typical)	5100mAh <sup>(1)(2)</sup>
	0.2C (Minimum)	5000mAh <sup>(1)(2)</sup>
Charging	Voltage	16.8V <sup>(8)</sup>
	Current (Maximum)	4000mA <sup>(8)</sup>
	Temperature	0°C to +40°C <sup>(6)</sup>
Discharging	Voltage (Average)	14.4V <sup>(2)</sup>
	Cut-Off Voltage	11.0V <sup>(7)</sup>
	Current (Maximum)	20.0A <sup>(8)</sup>
	Power (Maximum)	220W <sup>(8)</sup>
	Temperature	-10°C to +50°C <sup>(4)(6)</sup>
Storage	Temperature	-20°C to +60°C
Cycle Life	>500 (Typ) <sup>(1)(3)(5)(6)</sup>	
Nominal Dimensions	Length	170.5mm
	Width	85.0mm
	Thickness	28.0mm
Weight	530g (Typical)	
Colour	Traffic white	
Fuel Gauge	Smart Battery Specification Rev 1.1 compliant, impedance tracking fuel gauge	
Termination	D-Sub 7W2S mixed power/signal connector	
Certification	Transportation	UN ST/SG/AC.10.11 Rev5 Section 38.3
	Safety	IEC 62133:2012 & UL 62133
	CE Marked	Compliant with applicable directives

## Notes

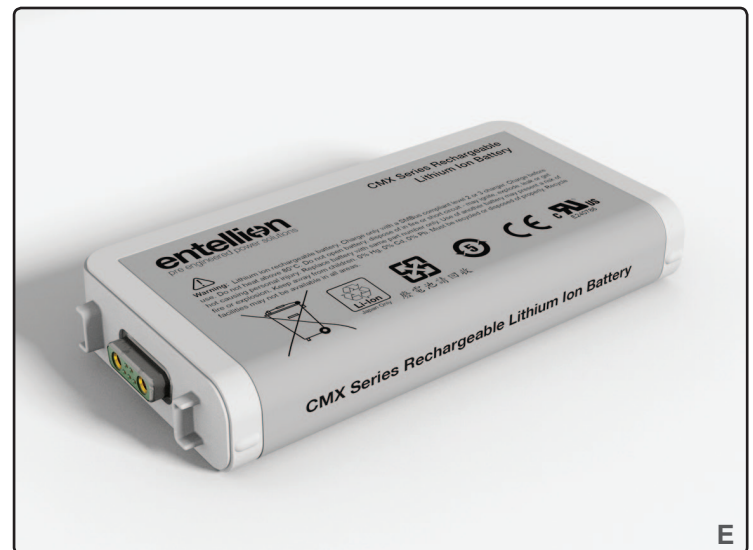
- CVCC 16.8V, 0.5C charge to Terminate Charge Alarm at +20°C.
- 0.2C discharge to Terminate Discharge Alarm at +20°C.
- 0.5C discharge to Terminate Discharge Alarm at +20°C.
- Discharge performance degrades at lower temperatures. Empirical testing in application is suggested to determine suitability. Maximum current capability may not be available at low temperatures.
- To 80% of 0.2C minimum rated capacity
- Cycle life degrades at higher operating temperatures, empirical testing in application suggested to determine suitability.
- Battery will disconnect itself below this level.
- Do not exceed this level.

The CMX420M is available off the shelf and can also be customised for your application, getting you to market quickly and confidently.

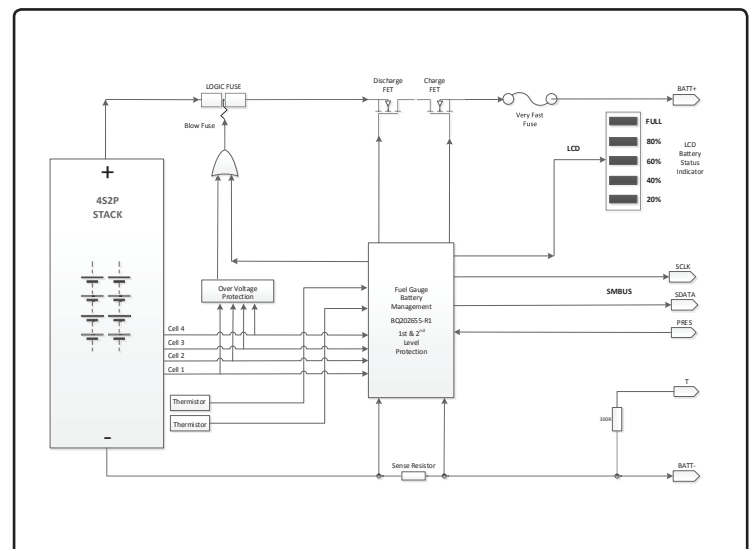
## Features

- Latest Lithium Ion technology
- CMX 'M' series - optimised for capacity and power
- 20A or 220W continuous discharge capability
- SBS Rev1.1 compliant, impedance tracking fuel gauge
- Active protection circuitry (OV, UV, OC, SC + 2nd OV)
- LCD visual state of charge bar graph indicator
- Redundant passive over-current protection
- D-Sub 7W2S mixed power/signal connector
- Tough, easily cleaned plastic casing
- IEC 62133:2012 and UL 62133 (safety) compliant
- UN ST/SG/AC.10/11/Rev5 §38.3 (transportation) compliant
- 2004/108/EC (EMC/ESD) compliant

## Product Image



## Block Diagram



**Mechanical Drawing**

