

UHP 341440 NCA

7.5 Ah/ 27 Wh

Lithium Ion Cell



Physical and mechanical characteristics

Diameter	34 mm
Height	174 mm (144 mm without terminals)
Terminals	Positive terminal Al M8 L: 10 mm Negative terminal Cu M8 L: 10 mm
Weight	approx. 320 g
Volume without terminals	0.13 l
Case material	Stainless Steel

Chemical characteristics

Positive electrode	Lithium nickel cobalt oxide
Negative electrode	Graphite

Electrical characteristics*

Nominal voltage	3.6 V
Nominal capacity at 0.2 C	7.5 Ah
Minimum capacity	7.1 Ah
AC Impedance (1 kHz)	≤ 1.2 mOhm
DC Resistance (ESR) (2 s pulse discharge @ 20 C/ 50% SOC)	≤ 6.5 mOhm
Specific energy at 0.2 C	84 Wh/kg
Energy density at 0.2 C	207 Wh/l
Specific power (2 s pulse discharge @ 40 C/ 100% SOC)	2340 W/kg
Power density (2 s pulse discharge @ 40 C/ 100% SOC)	5730 W/l

Operating conditions*

Recommended charge method	Constant current - constant voltage
End of Charge	$I \leq C/100$
Maximum charge voltage	4.2 V
Recommended charge current	up to 7.5 A (1 C)
Continuous charge current	up to 30 A (4 C)
Maximum pulse charge current (15 s) (Max. SOC 80 %, average current < 30 A)	120 A (16 C)
Recommended voltage limit for discharge	3 V
Lower voltage limit for discharge	2.7 V
Lower voltage limit for pulse discharge	2 V
Recommended discharge current	up to 15 A (2 C)
Maximum discharge current	up to 150 A (20 C)
Maximum pulse discharge current (2 s)	up to 300 A (40 C)
Operating temperature	- 30°C to + 60°C
Recommended charge temperature	0°C to + 40°C
Storage and transport temperature	- 40°C to + 60°C
Cycle life at 20°C and 100% DOD (0.5C charge; 0.5 C discharge)	> 1000 cycles to 80% nominal capacity > 2000 cycles to 60% nominal capacity

* Reference temperature 20°C

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