

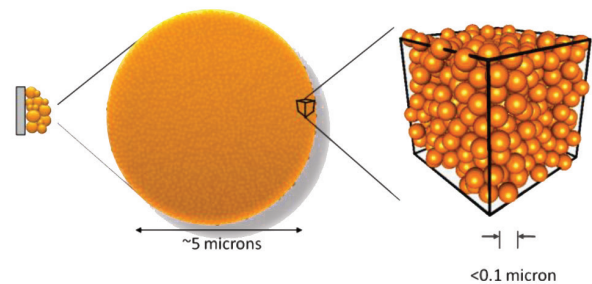
18650 Lithium Ion Power Cell

NanoPhosphate® Technology



Lithium Werks' high performance NanoPhosphate® lithium ion battery technology (LiFePO_4) delivers high power in a small size. Combine these advantages with excellent safety and outstanding life and this lightweight solution exceeds most requirements. Lithium Werks' 18650 cells have high usable energy over a wide state of charge (SOC) and low capacity loss allowing them to meet end-of-life energy requirements. With concepts for virtually any lithium-ion application, Lithium Werks' high performance cells provide customizable solutions for multiple market needs.

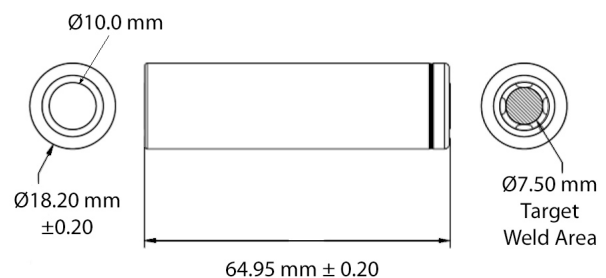
NanoPhosphate® battery technology offers stable chemistry, faster charging, consistent output, excellent cycle life and superior cost performance. It provides the foundation for safe systems while meeting the most demanding customer requirements. Multiple layers of protection are employed at the chemistry, cell and system level to achieve an energy storage solution with superior safety and abuse tolerance compared to metal oxide lithium-ion chemistries.



Applications

- Communications technologies
- Aerospace
- Electrified mobility devices
- Industrial equipment
- Medical devices

Dimensions



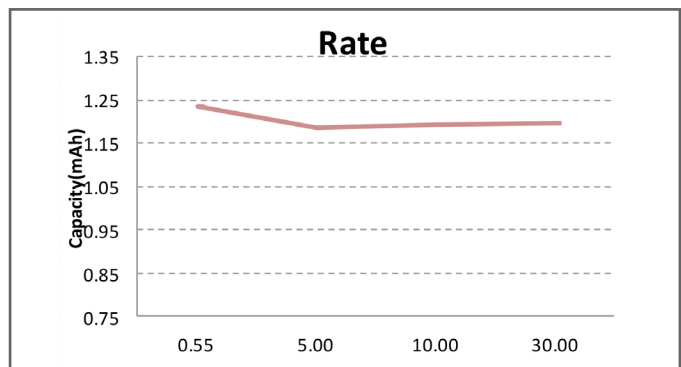
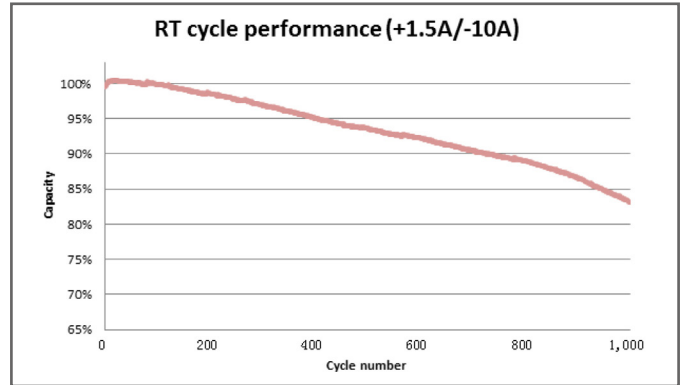
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Specs for APR18650m1B

Nominal Ratings	
Voltage	3.3 V
Capacity	1.1 Ah
Energy	3.63 Wh
Impedance (1KHz AC Typical)	12 mΩ
Cycle Life at 1C/1C, 100% DOD	> 4000 cycles
Discharging	
Max Continuous Discharge	30 A
Max Pulse Discharge Current <50% SOC (10s)	50 A
Minimum Voltage	2 V
Temperature	-30°C to 55°C
Charging	
Recommended Standard Charge	1.1 A
Max Charge Rate	4 A
Max Pulse Charge Current >50% SOC (10s)	10 A
Float Voltage	3.45 V
Recommended charge V & Cut-off Current	3.6 V, taper to 50mA
Temperature (reduce charging current to <40mA when under 0°C)	0°C to 55°C
Mechanical	
Diameter	Ø18.2 +/- 0.2 mm
Length	64.95 +/- 0.2 mm
Mass	39 g
Certifications	
Transportation	UN 3480 (UN38.3), CIQ
Safety	UL 1642, IEC 62133
Part Number 300749-006	

Cell Data



Abuse

Nail penetration	Pass - EUCAR4
Over-Discharge	Pass - EUCAR3
Thermal Stability	Pass - EUCAR4
External Short	Pass - EUCAR3
Crush	Pass - EUCAR3



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Performance may vary depending on, but not limited to cell usage and application. If cell is used outside specifications, performance will diminish. All specifications are subject to change without notice. All information provided herein is believed, but not guaranteed, to be current and accurate.
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