



ASPİLSAN INR18650A28 lithium ion cell has the capability to deliver high power and high current during its long cycle life. ASPİLSAN INR18650A28 can give high current up to 25A continuously with a cut-off temperature of 80°C.

ASPİLSAN INR18650A28 also can operate at very low temperatures (-30°C) due to its special cell design. The cylindrical form factor is very versatile, making it easily adaptable to a wide variety of applications and battery systems. Here are some examples for the battery systems below:



Medical Battery  
Systems



Micromobility



Consumer  
Electronics



Portable IOT



Power Tool

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Physical Characteristics



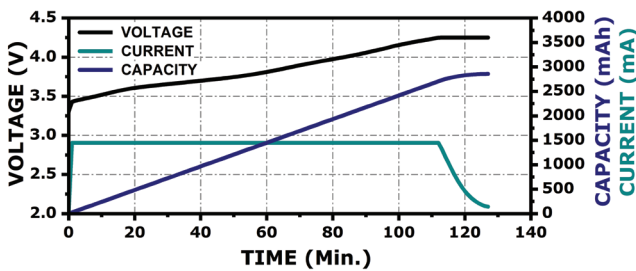
Diameter	18.30 +0.10 / - 0.20 mm
Height	65 ± 0.20 mm
Weight	44.5 ± 0.7 g

Performance Specification

Discharge Capacity		Maximum: 2950mAh Typical: 2900mAh Minimum: 2850mAh
Nominal Voltage		3.68V
Energy Density (Gravimetric - Volumetric)		244 Wh/kg - 618 Wh/L
Charge	Standard Charge Current	1450mA
	Max. Charge Current	2900mA (0°C - 60°C) 4000mA (10°C - 50°C)
	End of Charge Voltage	4.25V
	Cut-off Current	140mA
Discharge	Standard Discharge Current	580mA
	Max. Continuous Discharge Current	25000mA
	End of Discharge Voltage	2.50V
Initial AC Impedance (ACIR)		≤ 20mΩ
Operating Temperature (Require Cell Surface Temperature Control)	Charge	0°C / 60°C
	Discharge	-30°C / 80°C
Storage Temperature Shipping State 30% SOC	Within 1 Month	-30°C / 60°C
	1-3 Month	-30°C / 45°C
	3-12 Month	-30°C / 23°C

Charge Characteristics

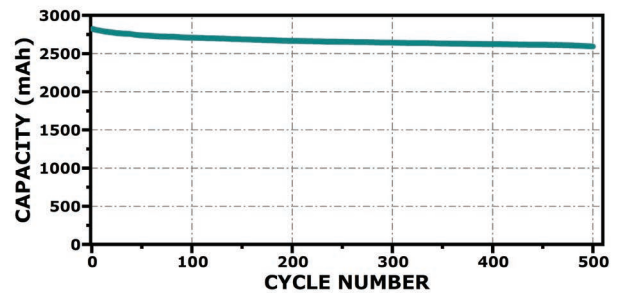
Charge: 0.5C CC-CV at 25°C



Cycle Life to 90% of Initial Capacity

Charge: 0.5C CC-CV at 25°C

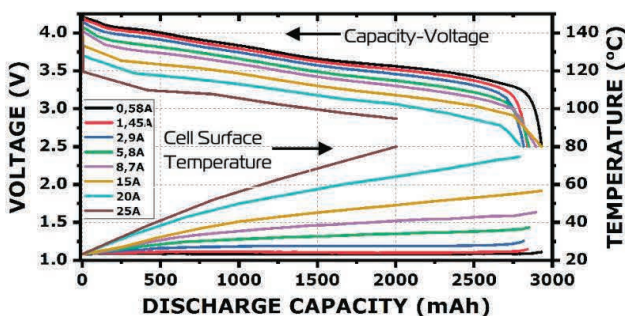
Discharge: 1C CC at 25°C



C-rate Dependency of Discharge Performance

Charge: 0.5C CC-CV at 25°C

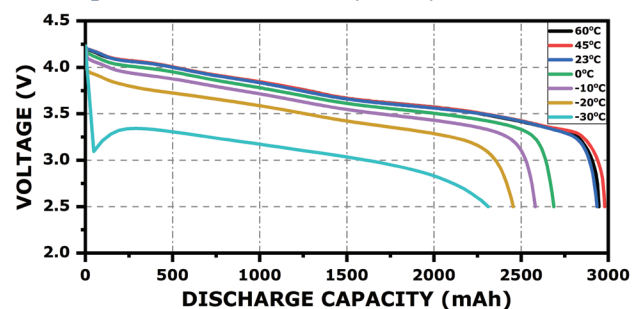
Discharge: CC at 25°C - Cell temperature cut-off 80°C



Temperature Dependency of Discharge Performance

Charge: 0.5C CC-CV at 25°C

Discharge: CC 0.2C for each temp. except -30°C (1C)



\*INR18650A28 has been certified in UN 38.3, IEC62133-2, IEC61960, IEC62619 for 4.20V charging voltage - Certifications including UL1642 for 4.25V charging voltage are in process.

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