

Title	Lithium Ion Battery Specification (Cylindrical Type)	Page	6/14
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3 Scope

This specification applies to the Lithium Ion Battery NCR18650B

This Specification shall not apply to special applications requiring a high degree of quality and reliability where the failure or malfunction of the products may directly jeopardize life or cause threat of personal injury. A non-exhaustive list of such applications includes: weapons, aircraft and aerospace equipment, aircraft electronics equipment, medical equipment (excluding Class 1 equipment), intrinsically safe equipment, electric vehicles, hybrid electric vehicles, and electric motorcycles (excluding electric bicycles).

4 Battery Classification and Product Code

4.1 Battery Classification	Lithium Ion Battery
4.2 Product Code	
4.3 Model Name	NCR18650B
4.4 Cell Type	NCR18650BM

5 Nominal Specifications

Item	Specifications	Notes
5.1 Rated Capacity	2980mAh	0.596A discharge at 20°C
5.2 Capacity (Minimum)	3030mAh	0.606A discharge at 25°C
5.3 Capacity (Typical)	3180mAh	Reference only
5.4 Nominal Voltage	3.6V	0.606A discharge
5.5 Discharging End Voltage	2.5V	
5.6 Charging Current (Std.)	0.909A	
5.7 Charging Voltage	4.20 ± 0.03V	
5.8 Charging Time (Std.)	5.0 hours	
5.9 Continuous Discharge Current (Max.)*1	3.636A	0 ~ +40°C
5.10 Internal Resistance	less than 100mΩ	AC impedance 1 kHz
5.11 Weight	less than 49.5g	
5.12 Operating Temperature	Charge	+10 ~ +45°C
	Discharge	-20 ~ +60°C
5.13 Storage Conditions (Shipping Charge State)	less than 1 month	-20 ~ +50°C
	less than 3 months	-20 ~ +40°C
	less than 1 year	-20 ~ +20°C

*1 The maximum discharge current for a single cell use. However after the battery pack assembly, maximum discharge current will be limited by a protection circuit or device.

*2 Recoverable Capacity = $\frac{\text{Discharge Time after Storage}}{\text{Initial Discharge Time}} \times 100$

The discharge time is measured by fully charging the battery at 25°C and then discharging it at a current of 0.606A to 2.5V per cell in series.

File No.	NCR18650	Rechargeable Battery Business Division, SANYO Electric Co., Ltd.
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