

Spec. No.	INR21700-50G	Version No.	0.1
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1. Scope

This product specification has been prepared to specify the rechargeable lithium-ion cell ('cell') to be supplied to the customer by Samsung SDI Co., Ltd.

2. Description and Model

2.1 Description	Cell (lithium-ion rechargeable cell)
2.2 Model	INR21700-50G
2.3 Site	Manufactured in Korea

3. Nominal Specifications (*1)

Item	Specification
3.1 Standard discharge Capacity	Min. 4,900mAh - Charge: 0.33C(1617mA), 4.2V, 0.025C(123mA) cutoff @ RT - Discharge : 0.2C(980mA), 2.5V cutoff @ RT * 1C = 4,900mA
3.2 Charging Voltage	4.2V
3.3 Nominal Voltage	3.63V
3.4 Charging Method	CC-CV (constant voltage with limited current)
3.5 Charging Current	0.33C (1,617mA)
3.6 Charging Time	4hours
3.7 Max. Charge Current	1C (4,900mA)
3.8 Max. Discharge Current	9,800mA (for continuous discharge) 14,700mA (not for continuous discharge)
3.9 Discharge Cut-off Voltage	2.5V
3.10 Cycle life	Capacity \geq 3,920mAh @ after 1,000cycles (80% of the Standard Discharge Capacity @ RT) - Charge : 0.33C(1,617mA), 4.2V, CCCV 0.05C(245mA) cut-off @ RT - Discharge: 1C(4,900mA), 2.5V cut-off @ RT
3.11 Recovery characteristics	Capacity recovery (after the storage) \geq 4,410mAh (90% of the Standard Discharge Capacity @ RT) - Charge : 0.33C(1,617mA), 4.2V, CCCV 0.05C(245mA) cut-off @ RT - Storage : 30 days @ 60°C - Discharge : 0.2C(980mA) 2.5V cut-off @ RT
3.12 Cell Weight	Max. 69.5g
3.13 Cell Dimension	Cell Height : Max. 70.15mm Diameter : Max. Φ 21.10mm
3.14 Operating Temperature(*2) (Cell Surface Temperature)	Charge : 0 to 45°C Discharge : -20 to 60°C