

PRODUCT SPECIFICATION

Rechargeable Lithium Ion Battery

Model : 18650HE4 2500mAh



LG Twin Towers 128, Yeoui-daero, Yeongdeungpo-gu,
Seoul, Republic of Korea, 150-721

1. General Information

1.1 Scope

This product specification defines the requirements of the rechargeable lithium ion battery to be supplied to the customer by LG Chem.

1.2 Application: Power Tools

1.3 Product classification: Cylindrical rechargeable lithium ion battery

1.4 Model name: 18650 HE4

2. Nominal Specification

Item	Condition / Note	Specification
2.1 Capacity	Std. charge / discharge	Nominal 2500 mAh (C_{nom})
2.2 Nominal Voltage	Average for Std. discharge	3.60V
2.3.1 Standard Charge (Refer to 4.1.1)	Constant current	1250mA
	Constant voltage	4.2V
	End condition(Cut off)	50mA
2.3.2 Fast charge (Refer to 4.1.3)	Constant current	4000mA
	Constant voltage	4.2V
	End condition(Cut off)	100mA
2.4 Max. Charge Voltage	-	$4.20 \pm 0.05V$
2.5 Max. Charge Current	-	4000mA
2.6.1 Standard Discharge (Refer to 4.1.2)	Constant current	500mA
	End voltage(Cut off)	2.5V
2.6.2 Fast Discharge (Refer to 4.1.3)	Constant current	10000mA, 20000mA
	End voltage(Cut off)	2.5V
2.7 Max. Discharge Current	For continuous discharge	20000mA
2.8 Weight	Max.	47.0 g
2.9 Operating Temperature (Cell Surface Temperature)	Charge	0 ~ 50℃
	Discharge	-20 ~ 75℃
2.10 Storage Temperature (for shipping state ¹)	1 month	-20 ~ 60℃
	3 month	-20 ~ 45℃
	1 year	-20 ~ 20℃

* Shipping state : About 40% capacity of fully charged state

Description

Lithium Ion LG 18650 HE4 2500mAh

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Rev

0

3. Appearance and Dimension

3.1 Appearance

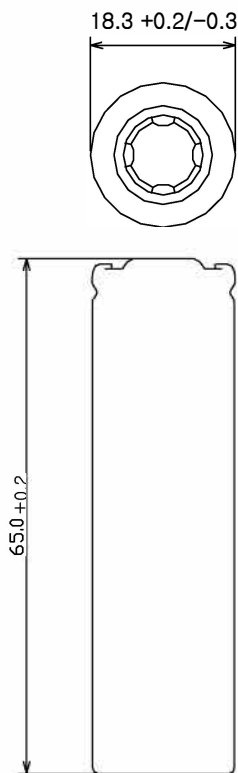
There shall be no such defects as deep scratch, crack, rust, discoloration or leakage, which may affect the commercial value of the cell.

3.2 Dimension

Diameter : $18.3 + 0.2/-0.3$ mm (Max. 18.5 mm)

Diameter is defined as the largest data value measured on the "A" area of a cylindrical cell.

Height : 65.0 ± 0.2 mm (Max. 65.2 mm)



4. Performance Specification

4.1 Standard test condition

4.1.1 Standard Charge

Unless otherwise specified, "Standard Charge" shall consist of charging at constant current of 1250mA.

The cell shall then be charged at constant voltage of 4.2V while tapering the charge current. Charging shall be terminated when the charging current has tapered to 50mA. For test purposes, charging shall be performed at $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$.