

Panasonic

Lithium ion

RECHARGEABLE LITHIUM-ION BATTERY

Cylindrical Type

Capacity Road Map

August 2014

Capacity Road Map (Cylindrical Type)

August, 2014

- Charge 1Cx3hrs, Discharge 0.2C, End V 2.75V at 25 °C

	CY2013		CY2014				CY2015				CY2016	
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
UR14430	660 / 700mAh											
UR14500	800 / 840mAh											
UR14500Y <small>Cost Performance Model</small>	680 / 710mAh											
UR14650	940 / 980mAh											
UR18500F	1620 / 1700mAh											
UR18500H <small>High Rate Model</small>	1450 / 1520mAh											
UR18500Y <small>Cost Performance Model</small>	1300 / 1400mAh											

Capacity : Minimum Capacity / Typical Capacity

: Mass-Production Model
 : Under Development
 : Under Consideration

Capacity Road Map (Cylindrical Type)

August, 2014

- Charge 0.7Cx3hrs, Discharge 0.2C, End V 2.75V at 25°C

	CY2013		CY2014				CY2015				CY2016	
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
UR18650F	2500 / 2600mAh (9.6Wh)											
UR18650ZY <small>Cost Performance Model</small>	2500 / 2600mAh (9.6Wh)											
UR18650E <small>High Rate Model</small>	2050 / 2150mAh (7.7Wh) <i>(without PTC)</i>											
UR18650EA <small>High Rate Model</small>	2250 / 2350mAh (8.5Wh) <i>(without PTC)</i>											
UR18650A <small>Cost Performance Model</small>	2150 / 2250mAh (8.1Wh)											
UR18650AA <small>Cost Performance Model</small>	2150 / 2250mAh (8.1Wh) <i>(without PTC)</i>											
UR18650Y <small>Cost Performance Model</small>	1900 / 2000mAh (7.4Wh) <i>(without PTC)</i>											

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Capacity Road Map (Cylindrical Type)

NCA System (NCA: Ni Cathode Material)

August, 2014

- Charge 0.7Cx3hrs, Discharge 0.2C, End V 2.5V at 25 °C

	CY2013		CY2014				CY2015				CY2016	
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
NCR18650	2750 / 2900mAh (10.4Wh)											
NCR18650PF	2750 / 2900mAh (10.4Wh) (*0.5C-Charge) (without PTC)											
NCR18650A	2950 / 3070mAh (11Wh) (*0.5C-Charge)											
NCR18650BF	3250 / 3350mAh (12Wh) (*0.5C-Charge)											
NCR18650G ※	3450 / 3550mAh (13Wh) (*0.3C-Charge)											
NCR18650E <small>High Rate Model</small>	2150 / 2250mAh (8.1Wh) (without PTC)											
NCR18650F <small>Low Temp Model</small>	2750 / 2900mAh (10.4Wh) (*0.5C-Charge)											
NCR18500	1900 / 2000mAh (7.2Wh)											

※ This model is not controlled under Wassenaar Arrangement because of the relaxation for criterion.
However, some of the countries have not amended the laws and/or regulations.
Please make sure to confirm with the governmental authorities of the relevant countries for further detail.

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Capacity Road Map (Cylindrical Type)

August, 2014

HV System (HV : High Voltage Charge)

	CY2013		CY2014				CY2015				CY2016	
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
UR16650ZT * 4.30V Charge	2100 / 2200mAh(8.1Wh)											
UR16650ZTA ** 4.35V Charge	2380 / 2500mAh(9.3Wh)											
UR18650ZT * 4.30V Charge	2700 / 2800mAh (10.4Wh)											
UR18650ZTA * 4.35V Charge	2900 / 3000mAh (11.1Wh)											

* 0.7CA-4.30V Constant Current-Constant Voltage (3hrs.) at 25 °C

** 0.5CA-4.35V Constant Current-Constant Voltage (4hrs.) at 25 °C

Discharge : 0.2C(CC) (E.V.=3.00V) at 25 °C

Capacity : Minimum Capacity / Typical Capacity

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Capacity Road Map (Cylindrical Type)

August, 2014

- Charge 1Cx3hrs, Discharge 0.2C, End V 2.75V at 25 °C

	CY2013		CY2014				CY2015				CY2016	
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
<i>For High Power Applications</i>												
UR14650R	1000 / 1050mAh(10A *) (without PTC)											
UR18650SA	1250 / 1300mAh(18A *) (without PTC)											
UR18650W	1500 / 1600mAh(18A *) (without PTC)											
UR18650WX	1500 / 1600mAh(25A *) (without PTC)											
UR18650RX	1950 / 2050mAh(20A *) (without PTC)											

* Recommended maximum continuous discharge current

- Charge 1Cx3hrs, Discharge 0.2C, End V 2.75V at 25 °C

	CY2013		CY2014				CY2015				CY2016	
	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q
<i>For Back-Up Applications</i>												
UR18650U	1100 / 1200mAh (4.0V Charge) (without PTC)											
UR18650ZK	2280 / 2350mAh (4.1V Charge)											

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