

Technology Specification

Model: CR2016/CR2025/CR2032

Document No.: QTCR17-1

Version: QT2017-1

Date: 2017.01.01



1. Scope:

This specification defines the technical requirements for CR21016/CR2025/CR2032 battery supplied by Gigacell.

2. Reference documents:

This product complies with EU's battery directive (2006/66/EC).

3. Chemical systems , voltages and designation:

3.1 Chemical systems: Lithium/Manganese Dioxide (Li/MnO₂)

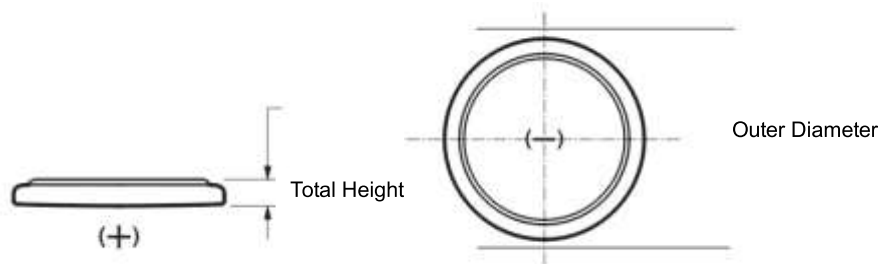
3.2 Nominal voltage: 3.0 V

3.3 Designation: IEC/JIS CR2016、CR2025、CR2032

4. Battery Weight (g):

Designation	CR2016	CR2025	CR2032
Approximate	1.6	2.3	2.8

5. Dimension (mm):



Designation	CR2016	CR2025	CR2032
Outer Diameter	19.7~20.0		
Total Height	1.4~1.6	2.2~2.5	2.9~3.2

6. Capacity: (20±2°C, RH: 35%-75%)

Designation	CR2016	CR2025	CR2032
Approximate(mAh)	80	155	220
Discharge mode	30kΩ, 24h/d e.v.:2.0V	15kΩ, 24h/d e.v.:2.0V	15kΩ, 24h/d e.v.:2.0V

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7. Electrical Characteristics

Unless otherwise stated, all measurements are to be performed at a

Standard Environment of **20°C±2 °C 55±20% RH**

All samples are normalized for 8 hours at least at the above environment prior to measurement.

The measurement accuracy for DCV shall be ±0.1% or better.

The load resistance of the total circuit is accurate within ±0.5% of the specified value.

7.1 Open Circuit Voltage

		OCV(V)
Initial	Min	3.1
	Normal	3.4

7.2 Battery performance

Designation	CR2016			CR2025			CR2032		
Load	2kΩ	4.7KΩ	30KΩ	1kΩ	2KΩ	15KΩ	1kΩ	2KΩ	15KΩ
Test mode	24h/d								
End voltage	2.0V								
Initial* MAD	30h	100h	680h	40h	90h	580h	58h	110h	1100h

h: hour

d: day

*The initial discharge test shall commence within 30 days of manufacture. During stored period, the cells shall be stored under room temperature conditions.

8. Expiry Period:

1 year

9. Precautions in Handling of Lithium Batteries:

Lithium batteries contain lithium metal, organic solvents and other reactive materials, which are combustible. Care must be exercised when handling Lithium batteries to ensure that short circuiting, puncturing or deformation does not occur which may result in heat generation, leakage, explosion or possibility a fire which might cause injury.

To ensure safety and to avoid any possibility of any accidents, please observe the following precautions.

9.1 Do not insert batteries in reverse. Observe the + and – markings on battery and equipment.

When batteries are inserted in reverse they may be short-circuited or charged. This may cause overheating, explosion, or fire.

9.2 Do not short-circuit batteries

When the positive (+) and negative (–) terminals of a battery are connected directly with each other, the battery becomes short-circuited. This can result in venting, leakage, and possibly fire.

(The manufacturer reserves the right to modify product technology specification herein without additionally Notice)

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9.3 Do not charge batteries

Attempting to charge a primary battery may cause internal gas and/or heat generation resulting in venting, explosion and possibly fire.

9.4 Do not force discharge batteries

When batteries are force discharged by means of an external power source, the voltage of the battery will be forced below its design capability and gases generated inside the battery. This may result in venting, leakage, explosion and possibly fire.

9.5 Do not mix batteries

When replacing batteries, replace all of them at the same time with new batteries of the same brand and type. When batteries of different brand or type are used together or new and old batteries are used together, some batteries may be charged due to a difference of cell voltage or over discharged due to a difference of capacity. This may result in venting and/or explosion.

9.6 Exhausted batteries should be immediately removed from equipment and disposed of. When discharged batteries are kept in the equipment for a long time, electrolyte leakage may occur causing damage to the equipment.

9.7 Do not overheat batteries

When a battery is overheated, electrolyte may be released and separators may deteriorate. This may result in leakage, venting, explosion and possibly fire.

9.8 Do not weld or solder directly to batteries

The heat from welding or soldering directly to a battery may cause leakage, venting, explosion, or fire.

9.9 Do not dismantle batteries

When a battery is dismantled, the components may cause personal injury or fire.

9.10 Do not deform batteries

Lithium batteries should not be crushed, punctured, or otherwise mutilated. Such abuse may result in leakage, venting, explosion, or possibly fire.

9.11 Do not dispose of batteries in fire

When batteries are disposed of in fire, the heat build-up may cause explosion and/or fire. Do not incinerate batteries except for approved disposal in a controlled incinerator.

9.12 A lithium battery with a damaged container should not be exposed to water

Lithium metal in contact with water may produce fire and/or hydrogen gas.

9.13 Keep batteries out of the reach of children

Especially keep batteries which are considered swallowable out of the reach of children. In case of ingestion of a cell or battery, seek medical assistance promptly.