

ULTRALIFE THIN CELLS® VS. COIN CELLS



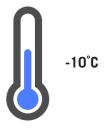
RUNNING VOLTAGE & ENERGY DENSITY

Although coin cells and Ultralife Thin Cells® share the same non-rechargeable Lithium Manganese Technology, Thin Cells® have a higher running voltage during discharge (less current consumption). Thin Cells® also have approx. 1.5 times greater volumetric and gravimetric energy density.



DISCHARGE CAPABILITY

Coin cells are ideal for applications where the discharge current is low and continuous. When applications impose higher or pulsed loads, Ultralife Thin Cells® offer significantly better performance with continuous discharge currents 10 times that of coin cells of the same capacity.



2X CAPACITY AT LOW TEMPERATURE

When ambient temperatures drop the internal resistance of a battery increases causing a reduction in voltage and capacity. Coin cells suffer from a falloff in performance at low temperatures whereas the low internal resistance construction of Ultralife Thin Cells® means they can provide twice the capacity of the best performing coin cells at -10° C. Thin Cells® can operate safely between -20° C & $+60^{\circ}$ C.



SUITABLE FOR FIT-AND-FORGET

Coin cells are used in devices where they can be removed. In embeddable applications, Ultralife Thin Cells® can be safely integrated for the lifetime of the product (UN 38.3 and UL 1642 certified). Thin Cells® are ideal for RFID, smart security cards, toll pass tags, drug delivery systems and more.



EXCELLENT STORAGE CAPABILITIES

The self-discharge rate of Ultralife Thin Cells® is less than 1% after 1 year of storage at +20°C and the shelf life is greater than ten years; equalling or surpassing the best coin cells. Lithium Manganese does not suffer from passivation, so Thin Cells® and coin cells are always ready to use.



AVAILABLE IN CUSTOM SIZES

While coin cells are manufactured in a small number of standard sizes, Ultralife Thin Cells® are pouch cells that can be custom designed to meet customer requirements, which means no compromises when it comes to the development of tomorrow's high tech portable and IoT devices.



9 STANDARD SIZES TO CHOOSE FROM

1.1mm Thickness



- √ 3.0V, 380mAh, 4.0g
- ✓ ≤ 100mA pulse capability
- √ 50mA const. discharge current

1.3mm Thickness



- ✓ 3.0V, 165mAh, 1.7g
- ✓ ≤ 30mA pulse capability
- √ 15mA const. discharge current

2.6mm Thickness



- ✓ 3.0V, 700mAh, 5.7g
- ✓ ≤ 150mA pulse capability
- √ 75mA const. discharge current

3.2mm Thickness



- ✓ 3.0V, 115mAh, 1.1g
- ✓ ≤ 70mA pulse capability
- √ 35mA const. discharge current

3.2mm Thickness



- ✓ 3.0V, 150mAh, 1.4g
- ✓ ≤ 100mA pulse capability
- √ 30mA const. discharge current

4.4mm Thickness



- ✓ 3.0V, 1500mAh, 13.0g
- ✓ ≤ 250mA pulse capability
- √ 125mA const. discharge current

5.2mm Thickness



- ✓ 3.0V, 600mAh, 4.5g
- ✓ ≤ 300mA pulse capability
- √ 75mA const. discharge current

5.2mm Thickness



- ✓ 3.0V, 1200mAh, 9.0g
- ✓ ≤ 300mA pulse capability
- √ 150mA const. discharge current

6.2mm Thickness



- ✓ 3.0V, 1900mAh, 15.7g
- ✓ ≤ 1,000mA pulse capability
- √ 500mA const. discharge current

ULTRALIFE CORPORATION (GLOBAL)

www.ultralifecorp.com

EXCELL BATTERY (USA/CANADA)

www.excellbattery.com

SOUTHWEST ELECTRONIC ENERGY (USA)

www.swe.com

Scan the QR-Code to view the product datasheets & inquire:



ELECTROCHEM (USA)

www.electrochemsolutions.com

ACCUTRONICS LTD (UK/EUROPE)

www.accutronics.co.uk

ABLE (CHINA)

www.ultralifechina.com