

Fall Detection System

Primary Lithium Button Cells



Fall Detection System

A fall detector is a device that is worn by the user that will detect if they have had a fall or require assistance. The fall detector will let the control hub know that the user has potentially fallen, without them having to activate the alarm themselves. The device can be worn in a variety of ways: as a pendant, on the wrist or on the waist.

Battery challenge

Reliability and performance of the battery are key for applications such as Fall Detection Systems, where the user needs 100% confidence that the system will work when needed. Maximum pulse discharge is also one of the biggest challenges for wearable, medical and healthcare devices. The battery must be able to provide enough to run the application and support communication. For this kind of application a prolonged lifetime is expected as well.

For more information, please visit our website:

www.varta-ag.com/en/industry/product-solutions/lithium

Technical solution

Primary Lithium Button Cell CR 2032



CHARACTERISTICS	PRIMARY LITHIUM BUTTON
Capacity	230 mAh @ 3V
Dimensions	20.0 mm diameter 3.2 mm height
Special Feature	Long life-time > 10 years
Maximum Pulse Discharge	~50mA / 3s
Self discharge	< 1% per year

Primary Lithium Button Cells

The lithium manganese dioxide cell chemistry was one of the first solid cathode cells commercially developed and is still the most widely used battery system today. These cells offer an excellent shelf life, wide operating temperature range, low self discharge rates and broad range of different sizes and capacities. Potential applications for these cells are devices in telecommunication, metering, instrumentation, sensoric and other portable equipment. Based on the outstanding energy density, cell performance and reliability, these cells have been able to meet the requirements of our customers worldwide.

- High open circuit and load voltage
- High Energy density (400Wh/kg or 600Wh/l)
- Low self-discharge for long storage and operating time
- Wide operating temperature range (-20 °C up to 70 °C)
- High pulse load capability
- UL Recognition
- Bare cells, misc. versions for PCB mount and wire/ connectors available