POWERING YOUR MILITARY DEVICE

If the US Army were a city, it would be the 10th largest in the US, with over one million soldiers relying on battery-powered devices. This checklist highlights what to consider when choosing the best battery for a military device.

HOW LONG MUST THE BATTERY LAST?

If a military device runs out of power, soldiers' lives can be put at risk. Often soldiers need their devices to last a 24-hour mission before needing a recharge. Time needs to be carefully considered.



Device will need to last more than 24 hours

Device will only be used for short periods of time

WHAT TEMPERATURES WILL BE EXPERIENCED?

Above 60 degrees Celsius, the performance of lithium-ion batteries deteriorates and below zero degrees Celsius, charging becomes challenging. Does the battery need heaters or thermal insulation?



Device will operate at high temperatures

Device will operate at low temperatures

HOW WILL THE DEVICE BE STORED?

Some military devices, such as surveillance devices, must lie dormant for long periods, but rapidly activate when needed. Therefore, they require a battery that can store power, but release it instantly when needed.



Device will lie dormant for extended periods

Device will use power regularly

WHAT ARE THE DEVICE'S DIMENSIONS?

Size and weight are paramount when considering military equipment design, especially for long mission use. Soldiers may need small, lightweight batteries to fit into their small, lightweight devices.



Space for battery is minimal

Space for battery is not a concern

WHAT PHYSICAL CONDITIONS WILL BE FACED?

Soldiers travel with their devices on the majority of their missions. This means the batteries must withstand harsh conditions including rough terrain and high humidity.



Device will be exposed to harsh conditions

Device will be used in humid environments

IS A SMART BATTERY REQUIRED?

Many military devices use smart batteries that communicate with the user. For example, they can inform the user of the state-ofcharge or the need to be cooled down.



State of charge monitoring is advantageous

Users need to observe performance data

For advice on how to integrate batteries into your military devices, contact Ultralife Corporation on +1 (315) 332 7100.

