

Adapting medical carts to their environment

Medical carts can offer many benefits in healthcare settings, such as speeding up electronic data entry and communication during emergencies. However, to encourage widespread use of these carts, manufacturers must consider potential scenarios they will face in the field.

MEDICAL CART SCENARIOS AND SOLUTIONS

Scenario

Lack of available space by a patient's bedside, resulting in the need for medical carts to be small and light (down to the power solution).

Solution

Increasingly, hospitals are using compact pole/mobile carts that power devices requiring USB-C or USB-A power only (not AC mains). For this type of cart, Ultralife has developed the X5-LITE Power Solution (compatible with the X5 hot-swappable battery).

Scenario

The large cart needs to be connected to AC mains to power printers, monitors and other electronic devices for long periods (using batteries to keep the devices powered during transportation).

Solution

Ultralife's X5 Power System provides 120VAC output and can power multiple devices up to 150W (and is compatible with both the X5 hot-swappable and U1 embeddable battery).

Scenario

Many staff are using the cart and some may not be trained to handle the batteries properly, which could lead to overcharging, overheating or other issues.

Solution

Ultralife uses rechargeable Lithium Iron Phosphate chemistry in its medical cart batteries for optimal safety. These batteries contain electronic protection against over-charging etc.

Scenario

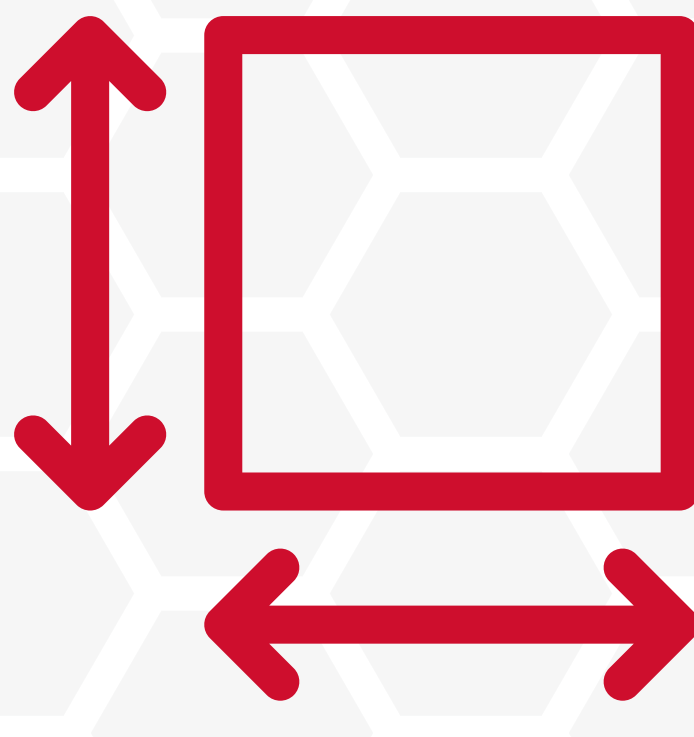
The medical cart cannot be easily manoeuvred around the wealth of devices, patient beds and people in the hospital.

Solution

Ultralife's U1 battery can be embedded in the base of the cart in any orientation, so the cart can be designed in a way that is easier to wheel.

Consider these, and other similar scenarios, and the potential reward is huge. The medical cart market is due to grow at a rate of **13.9 percent until 2026** – potentially reaching **\$1,512 million**.

There are many factors that support this growth



Carts of all sizes (to suit all budgets)



Real-time updates to electronic records



Environmentally friendly (reduces paperwork)

Not only do Ultralife's portable power products consider these scenarios by design, they also offer a high level of **safety, performance and reliability**.

MOBILE POWER KITS

X5 POWER SYSTEM

The X5 Power System gives medical cart users a safe and simple way to power a wide range of devices. When the power system is plugged into AC mains, its X5 hot-swappable and/or U1 embeddable batteries will be re-charged (taking approximately one hour per battery).



X5-LITE POWER SOLUTION

In the place where the power system would be mounted to the cart (or in other locations if required), the specially-designed X5-LITE cradle is mounted instead. When the X5 hot-swappable battery is inserted into the cradle, X5-LITE will use it to power USB-C or USB-A devices (e.g. certain laptops).

RECHARGEABLE BATTERIES

X5 (HOT-SWAPPABLE)

ULTRALIFE's 276.5Wh battery has a high-quality aluminum handle, allowing it to be easily installed, removed and carried using a single hand. It also has a 10-segment blue LED state-of-charge indicator (gas-gauge) and is certified to UN 38.3, IEC 62133-2 and UL 62133-2.



U1 (EMBEDDABLE)



ULTRALIFE's 584Wh battery provides a hybrid solution to cart power, coupling the flexibility of hot swap with the longevity of an embedded solution. The U1 battery acts as an energy reservoir, sitting in the base of the cart, providing energy when the X5 hot-swappable battery is exhausted. Certified to UN 38.3 and IEC 62133-2:2017.

All these products have been pre-engineered, so have no NRE costs. They have been developed specifically to cater for the many and varied power requirements of medical cart users and manufacturers.

To find out more visit ultralifecorporation.com/ecommerce/

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