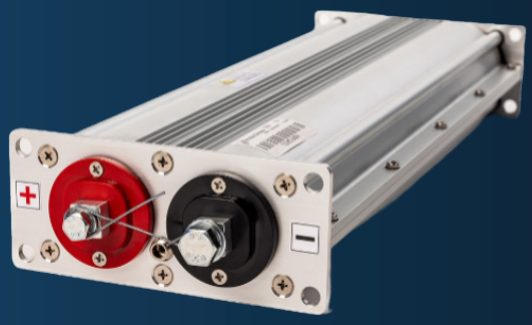
Tecate Group

Power, Performance, Solutions

Medical Solutions

Ultracapacitors and lithium-ion capacitors offer several advantages for medical technology, where reliability, performance, and safety are critical. Their ability to deliver rapid bursts of power makes them ideal for emergency backup power, pulse energy delivery, and power smoothing functions in devices like portable defibrillators, diagnostic equipment, and surgical tools. They also perform reliably in a wide range of temperatures and are not classified as hazardous goods, enhancing safety in sensitive medical environments. These features make ultracapacitors and lithium-ion capacitors dependable and efficient energy solutions for modern medical applications.



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Portable Instrumentation

Ultracapacitors and lithium-ion capacitors provide key benefits for portable medical and dental instruments by delivering the quick, reliable bursts of power needed for high-performance operation. Their fast charging capability allows devices to recharge rapidly between uses, reducing downtime and increasing workflow efficiency in clinical settings. With a long cycle life and minimal degradation over time, ultracapacitors enable extended device longevity. Battery-operated devices are heavier, have a shorter life, and can have a thermal runaway event that would be catastrophic in a medical environment, making ultracapacitors the superior choice.

Patient Monitoring

Ultracapacitors are well suited for patient-monitoring devices in hospital settings, where continuous, reliable power is essential. They provide instant backup power during brief outages or power fluctuations, ensuring uninterrupted monitoring of critical patient data. With fast charging and a long cycle life, ultracapacitors reduce maintenance requirements and enhance equipment availability. Their ability to operate in a wide range of temperatures and conditions supports dependable performance across various hospital environments. This makes them a robust and efficient power solution for enhancing patient safety and monitoring system reliability.

Imaging Devices

Ultracapacitors provide significant benefits for X-ray and MRI equipment by efficiently handling peak power loads during high-demand imaging cycles. Their ability to deliver rapid bursts of energy reduces strain on the primary power supply, helping to stabilize voltage and improve overall system performance. This not only extends the life of the equipment but also minimizes the risk of power-related disruptions during critical imaging procedures. Additionally, ultracapacitors recharge quickly and have a long cycle life, offering a reliable and low-maintenance energy-storage solution. Their performance in demanding conditions makes them ideal for enhancing the reliability and efficiency of advanced medical imaging systems.

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