PowerPrecision Battery Solutions

Better battery technology for better power management

Keep your Zebra® mobile computers up and running with batteries and software tools that enable more efficient power management

Without detailed information on the batteries in your mobile computers, your workers can find themselves with a fully discharged battery, unable to work and forced to go in search of a replacement — impacting productivity and customer service quality. Now, Zebra addresses these issues with three solutions: PowerPrecision management software, PowerPrecision and PowerPrecision+ smart Batteries. These intelligent batteries have the integrated technology required to collect the detailed real-time battery metrics needed to maximize useful battery life and ensure every battery in the battery pool is healthy, able to hold a full charge. PowerPrecision Battery Management software completes the solution, providing a single centralized window into the state of all the batteries in your mobile devices, plus the ability to automatically alert users when a battery needs to be replaced or retired. PowerPrecision — the easy way to provide every worker with full-shift battery power.

Better battery design

While all batteries may look alike, quality and performance can vary dramatically. Zebra Solutions PowerPrecision batteries are designed and manufactured to meet the rigorous standards required to deliver superior performance and reliability. We start with premium high-grade cells that have a higher capacity, providing longer life cycles than the typical competitive battery. The strong robust housing increases durability, while a design that helps prevent overcharging and electrical shock improves safety.

Better battery intelligence

The typical battery today allows users to see the percentage of battery power remaining in a specific cycle. But users have no idea if the battery is aging and is no longer capable of holding a full charge. The PowerPrecision battery family from Zebra Solutions changes that by providing that precise information to users and IT. Technology inside the batteries tracks and maintains the metrics required to provide real-time visibility into more meaningful battery statistics — such as total cycle usage of the battery, whether the battery is old and should be retired or how long a battery will take to fully charge. PowerPrecision batteries provide state of health and state of charge information, while PowerPrecision+ batteries provide additional intelligence — for example, remaining charge capacity is calculated based on the current usage profile, while predictions for end-of-life are improved through access to the historical usage and aging of the battery.

Powerful centralized battery management software for better battery management

PowerPrecision Battery Management software revolutionizes battery management. Now, IT can see the metrics of all PowerPrecision and PowerPrecision+ batteries in all mobile devices in a single centralized location. With visibility into the real-time state of health and state of charge, you can automatically send users a customized message when the batteries need to be changed, complete with specific information, such as where to take the device or who to contact to get a replacement. The result? Every user can now start every shift with a healthy fully-charged battery that will last a full shift — no more time spent hunting down charged batteries, time that could be much better spent on task. And aging batteries are easily identified and removed from the battery pool, ensuring that every battery in service is healthy and capable of holding a full charge, protecting user productivity.

PowerPrecision batteries — the precise information you need to get the most from your mobile computer batteries.

For more information, please visit www.zebra.com/powerprecisionbattery or access our global contact directory at www.zebra.com/contact

FEATURES

The PowerPrecision solution family

Enterprise power management done right.

All the right information.

All the right tools.

With our intelligent batteries and battery management software, you'll have everything you need to maximize battery value — and ensure that every user starts the day with a healthy battery for full-shift power.

PowerPrecision Batteries Specifications

POWERPRECISION BATTERY	POWERPRECISION+ BATTERY	POWERPRECISION BATTERY MANAGEMENT SOFTWARE
Basic State of Health: Defines battery state as healthy and able to hold a full charge or unhealthy and unable to hold a full charge. State of health is calculated utilizing the total charge accumulated and the defined threshold IT selects to identify when a battery is no longer capable of holding a full charge and should be retired.	**Advanced State of Health:** Internal battery gas gauge dynamically tracks and stores battery performance and capacity degradation to calculate a highly accurate end-of-life prediction.	**State of Health on User Interface:** The battery management application displays the health of a battery on the mobile device screen as a five star rating and a "stoplight-style" health status light to identify if the battery is healthy and can hold a full charge (green); reaching the end of its life and no longer able to hold a full charge (yellow) or at the end of its useful life and needs to be replaced (red).
Basic State of Charge: Shows the remaining battery power expressed as a percent.	**Advanced State of Charge:** Shows the remaining battery power based on two factors: present charge and present real-time usage patterns of the device. Dynamic usage patterns are constantly calculated, factoring in criteria such as the applications that are in use and scanning frequency.	**State of Charge on User Interface:** The battery management application displays the current charge on the mobile device screen as a percentage of the total capacity of the battery and determines if the battery has enough charge to last a full shift.

METRICS AND CAPABILITIES

POWERPRECISION BATTERY	POWERPRECISION+ BATTERY	POWERPRECISION BATTERY MANAGEMENT SOFTWARE
Battery Management software	Battery Management software	Battery charge represented as percentage of the total capacity
Total charge accumulated since first use	Total charge accumulated since first use	Battery health indicates when the battery needs to be replaced
Battery temperature	Battery temperature	Battery cycle count tracks the number of times the battery has been charged
Serial number	Serial number	Customize notifications: create messages that can be delivered to users based on battery health
Part number and revision	Part number and revision	Centralized information allows the integration of the battery information into Mobile Device Management applications
Date of manufacture	Date of manufacture	**Available now for:** Windows CE7: MC92, WT41, Omnii XT15, Workabout Pro 4
Battery capacity	Battery capacity	Windows Mobile 6.5.3: MC91, MC31, MC92, MC95, EP10, Workabout Pro 4, MC65 and MC67
Gas gauging: running tally of the amount of charge gathered by the battery; mobile device utilizes the data to perform state of health calculations	Gas gauging: information tracking, storage and computations utilizing multiple data types are handled in the battery itself for more granular and accurate data	Windows CE6: MC91 and MC31 Android: MC40, MC67 and TC55
	Cell impedence tracking	Future new products compatible with PowerPrecision Battery Solutions
	Dynamic capacity tracking	
	Charge received tracked by type of charger	
	Total time battery has been in service	
	Stores real-time battery characteristics and the battery usage profile (power consumption based on user actions)	
	Continuous self-calibration	