



# 7 REASONS TO CONSIDER

*adopting in-truck battery visualisation*

Today's IoT technology is improving forklift trucks' productivity by measuring vital parameters in real time and setting alerts. This data can be also used for deeper analysis to inform both strategic and tactical decisions.

The Truck iQ™ smart battery dashboard, designed by EnerSys®, can now deliver all this data to your truck driver, via a vehicle dashboard-mounted monitor display. How could this further aid your warehouse productivity? In answer, here are seven reasons why you may want to consider deploying these displays on your warehouse's materials-handling vehicles.



# 1.

## KNOW YOUR BATTERY STATUS WITHOUT STOPPING YOUR TRUCK

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Based on data collected in real time from the battery sensors, Truck iQ™ smart battery dashboard display can show the state of charge, together with alarms and alerts for the battery condition, temperature, electrolyte level, low state of charge, and cell imbalance.

# 2.

## EASILY CONNECT TRUCK IQ™ SMART BATTERY DASHBOARD TO ANY TRUCK IN YOUR WAREHOUSE

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Monitor displays can start quickly and automatically on power-up, without requiring driver intervention. The Truck iQ™ recognizes a battery's ID automatically on start-up.

# 3.

## ALL REAL-TIME DATA FOR TIMELY DECISIONS

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Based on data collected in real time from the battery sensors, Truck iQ™ smart battery dashboard display can show the state of charge, together with alarms and alerts for the battery condition, temperature, electrolyte level, low state of charge, and cell imbalance.



# 4.

## CRITICAL INFORMATION DISPLAYED IN AN ACCESSIBLE, EASILY UNDERSTOOD FORMAT

The battery's most important parameter is its state of charge (SoC), so Truck iQ™ smart battery dashboard shows it on a primary screen and visible by default. The vehicle's remaining work time has high prominence, as, for the driver, this is the SoC's most significant implication. Clear display of battery temperature is also included, as out-of-tolerance temperatures will adversely impact battery reliability and lifetime.

Other parameters that Truck iQ™ shows on the primary screen include a user ID, the worked time in hours and minutes, and the amount of energy, in terms of Ah, that has been re-injected into the battery during vehicle braking.

# 5.

## AUXILIARY SCREENS CAN BE DESIGNED TO SHOW DEEPER, MORE DETAILED INFORMATION

The truck driver can also benefit from plenty of further information. Truck iQ™ smart battery dashboard includes an extra, more detailed screen that can be accessed through simple touch commands. Battery information can extend to type and serial number, daily and total discharge in Ah and total discharge time, as well as daily worked time and usage time. Truck data can include an hour meter, shock detection and the truck's ID.

Warning history information is available as well; this can cover date- and time-stamped entries of the last warnings for low electrolyte level, high battery temperature, cell imbalance, over-discharge or other factors.

Truck iQ™ allows drivers to see and modify system settings. For example, they can enable or disable connections to the networks being used, or switch the alarm buzzer on or off.

# 6.

## YOUR DRIVERS CAN BE PROMPTLY ALERTED TO CRITICAL SITUATIONS

If any battery parameter starts to become critical, Truck iQ™ smart battery dashboard displays relevant alarm messages on screen. These can be reinforced with audible alarms, to make sure of gaining the driver's attention. Situations that would merit such warnings include 'go to charge', high battery temperature, or problems with electrolyte levels or battery imbalance.

# 7.

## THE MONITOR IS A COMPONENT OF A COMPLETE FLEET MONITORING SYSTEM

Truck iQ™ smart battery dashboard will help the driver to prevent truck misuse while improving battery utilisation and service life. Additionally, it can boost efficiency and energy management. However, Truck iQ™ can also perform as a component of a complete fleet monitoring system.

EnerSys® provides a complete system solution for the power management of your forklift batteries. The system is based on the Wi-iQ® battery monitoring device, which collects usage and charging data from vehicle battery sensors. The data collected by the Wi-iQ® can be available on the PC with the report suite or on a mobile with the E-connect app. Data can also be used also by the Xinx™ battery operations management system for deeper analysis and long-term strategies. The power management system provides a deep understanding of the fleet's overall battery performance, and enables pre-emptive action on impending failure warnings.