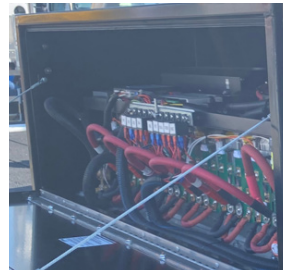




Electrolyte Power System

Lithium Ion Battery system minimizes the need to idle a locomotive when not in use, potentially saving up to \$100K/year in fuel and maintenance costs



- Keep locomotive systems powered for over 3 hours without idling the engine
- Enables continuous operation of the locomotive HVAC system, enhancing crew comfort and decreasing motivation to over-ride an AESS
- "Tops Off" the Lead Acid battery to minimize restart issues
- Supports Sustainability Initiatives by reducing GHG emissions from unnecessary idling by up to 2,000 lbs/day
- Reduced restarts can extend service life of multiple components ranging from filters to starter motors
- Compact enough to mount in the Sand-box in the rear of the locomotive

*Presented data represents estimates based on data obtained from locomotive on-board systems and railroad associate input
Your experience may vary*

It's standard practice to leave a yard locomotive running when not in use in order to eliminate restart issues and keep auxiliary systems operational. But leaving a Locomotive idling for often 17 hours a day* creates a huge waste of fuel and is counter-productive to Sustainability initiatives.

Many Railroads employ Automatic Engine Start/Stop (AESS) systems to address this issue, but find it is an imperfect solution. AESS systems by definition (i.e. Start/Stop) are binary, turning off all locomotive systems, including HVAC, safety and analytic devices. The continuous starting and stopping of the engine also leads to shortened life of components such as starters and filters.

The *Electrolyte* Lithium Ion battery system from ACS Railroad Solutions can power a full load of locomotive systems for in excess of three consecutive hours when not in operation. Proven in other demanding transportation applications, the Electrolyte Power System recharges with less than two hours of engine run time, leading to at least a 74% reduction in idle time.

Ordering Information

**System requirements vary based on Locomotive Model and Operating Conditions
Please contact ACS-RS for details on your application**

