



# NexSys<sup>®</sup> iON

ADVANCED LITHIUM-ION TECHNOLOGY



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NexSys<sup>®</sup> iON battery solutions include the industry's most advanced Lithium-ion (Li-ion) technology from EnerSys<sup>®</sup> — a technology that powered the world's first Li-ion battery powered satellite in 2001 and currently powers hundreds of satellites in orbit.

Built to the highest safety, design and manufacturing standards, and ideal for heavy-duty applications, low-upkeep NexSys iON batteries are available in a scalable range of sizes and configurations. They also feature fully integrated battery management controls that support greater safety, reliability and battery life.

Whatever the size of your fleet or facility, NexSys iON batteries can help cut downtime and battery ownership costs, contributing to more productive and profitable operations.



# A SUPERIOR POWER EXPERIENCE



As the global leader in stored energy solutions for industrial applications, EnerSys® has long been developing technologies to help material handlers maximize productivity and profitability.

Our next giant step in that direction is the NexSys® battery product portfolio – a comprehensive line of intelligent, flexible power solutions that slash the unplanned downtime and unexpected operating costs associated with conventional lead acid batteries.

By providing simpler and more productive, predictable power, NexSys batteries give material handling operations more time to focus on their core business. Or more simply put, NexSys batteries offer a Superior Power Experience.



Maximize run time – efficiently charge during breaks to eliminate battery changing, and charge without long equalization times.



Virtually maintenance-free power solutions with no battery watering, no battery washing, and no chance of messy acid spill clean-ups.



Convenient, integrated, plug-and-play power systems with no compatibility issues, and no need to manage multiple vendors.



Trustworthy power – system performance and ownership costs are verified before you buy, and backed by a supplier and a warranty you can count on.



## Safeguards operations and operators

- Designed to meet CE and UL standards (UL2580 and the new EN 1175:2020)\*
- Designed to Automotive / Rigorous Functional Safety Standard ISO26262, exceeding standard industrial compliance requirements.
- Double-tray design
  - External tray customized for accurate fit and weight
  - Sized for no hassle fitment in most Class 1, 2, and 3 trucks
- Mounted charge connectors ease plug-in operation, prevents connector damage and actively prevents accidental drive-away when charging
- Battery Management System (BMS) actively enforces safety and optimizes operational lifetime
- Controller Area Network (CAN) communication for full vehicle integration

## Cost-cutting convenience

- Faster recharge rates cut unproductive downtime
- No hassles or surprise expenses from daily maintenance
- Eliminate costly battery changing – optimized for opportunity charging
- Easy plug-and-play charging – no need to disconnect battery from the truck

## Sustainable Nickel Manganese Cobalt (NMC) chemistry

- Leverage gains from automotive industry development
- Predicted to be dominant Li-ion chemistry by 2025
- Commercially valuable elements for better recyclability
- Cells sourced from suppliers committed to Organization for Economic Co-operation and Development (OECD) guidelines\*\*

## Peak productivity

- Extended run times at peak power with higher sustained voltages
- Fewer plug-ins with > 80% usable State of Charge (SOC)
- 24/7 operation with no downtime for watering and equalizing\*\*\*

## Cost-effective modularity

- Precisely engineer the power system to minimize cost
- Upsize or downsize power module set-up based on operational demand
- Minimize service downtime with replaceable modules

## Reliable, total system integration

- Avoid issues related to integrating components from multiple vendors
- One comprehensive data and reporting solution
- Easy-to-use platforms provide operational support

\*Certification ongoing as additional variants are released

\*\*More about OECD Due Diligence Guidance at [www.enersys.com/en/about-us/suppliers/](http://www.enersys.com/en/about-us/suppliers/)

\*\*\*Requires EnerSys analysis for proper application sizing

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