

RAYMOND® LITHIUM-ION BATTERIES

POWER YOUR FLEET WITH A FULL LINE OF BEST-IN-CLASS SOLUTIONS

As a member of the Toyota Industries family of companies, Raymond brings a world of automotive battery innovation and engineering expertise to material handling. Our broad range of best-in-class lithium-ion batteries meet the needs of virtually every customer, budget, and application.

FEATURES & BENEFITS

- + **Enhance productivity** with long run times, fast charging, and convenient opportunity charging. Ideal for medium duty applications with 2+ shifts.
- + **Achieve excellent return on investment (ROI)** with a break-even in 10 to 16 months and a lifetime ROI of 415% to 656%.
- + **Reduce energy and operating costs** with more energy-efficient solutions and less need for spare batteries or trucks.
- + **Minimize maintenance costs** with a completely sealed battery design that eliminates the need for watering, equalizing, and cleaning.
- + **Easily deployable** with a drop-in design compatible with your Raymond fleet. This battery never needs to leave the truck.
- + **Avoid unnecessary downtime** with truck/battery data sharing offering visibility into state of charge, fault codes, and charge plug-in compliance.
- + **Run multiple shifts in captive cold applications** with a robust solution designed with internal thermal management, providing long-lasting, durable performance.
- + **Operate more sustainably and responsibly** with cleaner, greener battery technologies.
- + **Optimize truck performance** with 24, 36, and 48V options.
- + **Work more securely and confidently** with UL2580 listed batteries, tested and certified for durability and dependability.

Start with a power study to analyze your lift truck energy usage and get right-sized solutions, charger recommendations, and optimized installation tailored to your operation.

PROUD HISTORY. PROVEN TECHNOLOGY.

The battery management system in Raymond's lithium-ion-powered trucks is purpose-built on the principles established by automotive engineers that pioneered the battery technology for Toyota's electric vehicles. Unparalleled understanding of Raymond trucks, coupled with years of testing experience and continuous learning, allows only Raymond to design a system around the peak energy requirements of each model for exceptional performance and reliability.

Raymond engineered, Raymond built,
Raymond exclusive, offering

17%

PRODUCTIVITY IMPROVEMENT

over lead acid batteries



BETTER ENERGY EFFICIENCY AND LOWER COST OF OWNERSHIP

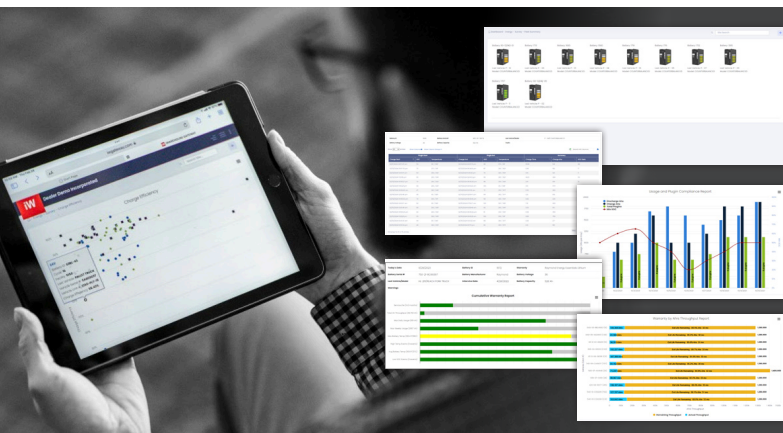
As stricter emission standards—such as California Air Resources Board (CARB)—push operations to convert from internal combustion to electric forklifts, businesses are discovering the broader benefits of a cleaner, greener fleet, including greater operator comfort, a healthier work environment, and lower energy, maintenance, and ownership costs.

PART OF A COMPLETE, INTEGRATED ECOSYSTEM

Designed specifically for our lineup of forklifts and chargers, Raymond's lithium-ion batteries are part of a seamlessly integrated ecosystem that continuously shares data—from plug-in compliance to state of charge—to help you manage energy more effectively and run your business more efficiently.

FLEXIBLE, AFFORDABLE BATTERY LEASING

Raymond offers flexible financing options for lithium-ion batteries—independent of trucks—so you can implement the latest energy-efficient solutions across your broader fleet. Run more efficiently and sustainably by lowering your up-front capital expenditures using green, renewable technology.



BATTERY MONITORING THROUGH THE iWAREHOUSE® GATEWAY WEB PORTAL

Access your battery performance data anywhere, anytime, with Raymond's cloud-based Energy Asset Manager. Get the insights you need to proactively manage your energy consumption and help reduce downtime when using a Raymond branded lithium-ion system.

SPECIFICATIONS

Voltage Range	24V	36V	48V
Battery Compartment (width)	13-14	16-25	21-45
Min. Weight (lbs)	490-2000	1600-3307	1600-4230
Battery Capacity (Ah)	456-604	456-912	456-912
Total Energy Nominal (kWh)	11.8-15.6	17.6-35.2	22.0-44.0
Charging Time	≤ 1 Hour*		
Cycle Life	3,500 cycles*		
Interface	CAN bus		

* Cycle = Amp Hour (Ah) Rating x 80%

Battery Technology

Lithium Iron Phosphate (LiFePO₄)

Ambient Temperature Ranges

Discharge: -30°C to 50°C (-22°F to 122°F)
Charge: 0°C to 50°C (32°F to 122°F)

Charger

Compatible with Energy Essentials
Distributed by Raymond lithium-ion

Warranty

5 Years, 3,500 cycles

GLOBAL PARTNERSHIP. INDUSTRY LEADERSHIP.

Raymond lithium-ion batteries are engineered around modules from a leading provider of EV battery technologies. By partnering with a global leader, Raymond can leverage the latest innovations and greatest economies of scale to create solutions that optimize performance and minimize costs.

For more information or to conduct a power study to identify the best energy source and capacity for your operation, please contact your local Raymond Solutions and Support Center.