# POWERED BY LITHIUM. DRIVEN TO PERFORM.

### OUTMANEUVER. OUTPERFORM. OUTLAST.

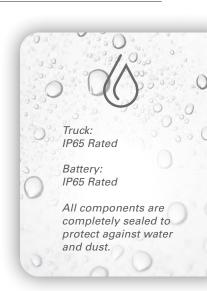
Engineered around a proven and powerful lithium-ion battery pack, the Raymond® 8250 Walkie Pallet truck lets you run longer, recharge quicker, and move more pallets—every shift, every day. Intelligently and durably designed, the truck delivers smooth, controlled operation, greater maneuverability, and exceptional reliability.

Long-lasting and fast-charging, the lithium-ion power pack eliminates the need to buy or store spare batteries for dramatic cost savings. Robust and efficient, the technology reflects Raymond's commitment to alternative energy solutions that can enhance efficiency and productivity in our customers' demanding warehouse applications.



### WHY LITHIUM

- + Run Longer 3 to 4-hour consecutive run time creates fewer work disruptions to charge batteries and does not require battery changeouts
- + **Recharge Quicker** Fully recharged in as little as 3 hours (from 0-100% SOC) with a standard 110V outlet for maximum uptime
- + Increase Performance Integrated heaters allow the battery to operate longer in cold temperatures without degrading performance
- + Smart Technology Continuous communication between truck and battery provides real-time information to the operator on battery state-of-charge, and fault codes
- + Lower Maintenance Costs Lithium-ion battery requires none of the traditional maintenance of lead acid batteries such as watering, equalizing or cleaning





### A WORKHORSE OF A TRUCK

+ enhanced maneuverability

with a 2" shorter head length that offers a tighter turning radius in constricted spaces

+ controlled braking

with an Electronic Brake Release, that when activated in low battery conditions, overrides the electric brake and maintains braking ability when the handle is in the brake position

+ greater strength and durability

with a High Strength Low Alloy (HSLA) ribbed bumper, ductile iron bell crack and wheel forks, and polycarbonate covers

+ reliable performance

with stainless steel undercarriage pins and IP65 Protection; electronics can take a pressure washing with sealed components

+ controlled speed

with Click2Creep™ that automatically reduces travel speed so you can move one inch at a time

+ increased wear protection

with Lift and Go™ programmability that enables travel speed to be reduced until the forks are raised to a specific height – training operators and preventing premature wear of the undercarriage

### A POWERHOUSE OF A BATTERY

+ smart technology

CAN Communication allows continuous data exchange between truck and battery and monitors battery status providing audible and visual indicators if charge is required or low

+ extreme environment performance

integrated heaters and controls provide thermal management



+ greater efficiency

due to low internal resistance generates less heat and results in less energy loss; also operates at a higher voltage with better capacity retention

+ zero maintenance

requires no traditional maintenance (watering, equalizing or special cleaning)

+ increased productivity

longer run times (3-4 hours) and faster recharging (0-100% SOC in as little as 3 hours) with a standard 110 outlet

### MADE FOR EACH OTHER

A TRUCK AND BATTERY DESIGNED TOGETHER FOR ULTIMATE PERFORMANCE.

#### **PRODUCTIVITY**

In addition to offering longer run times and faster recharging, the lithium-ion battery in the 8250 Walkie Pallet truck enhances productivity with:

- OPPORTUNITY CHARGING FRIENDLY
   Recharge the truck quickly, easily and conveniently, and have it ready for work whenever you are.
- INTEGRATED HEATERS AND THERMAL CONTROLS Enjoy longer, undiminished performance in cold storage environments.





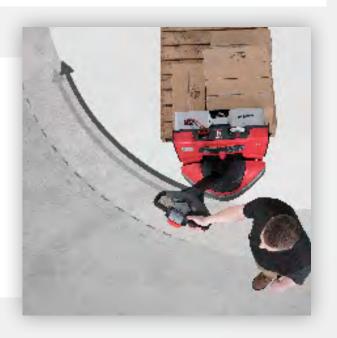
#### **EFFICIENCY**

Compact yet powerful, the lithium-ion battery helps you do more with less by offering a lower internal resistance and higher constant voltage than lead-acid, resulting in:

- LESS HEAT AND ENERGY LOSS
   Battery operates more efficiently with superior capacity retention, better acceptance of regenerative power, and no performance degradation as it discharges.
- LESS MAINTENANCE
   Completely sealed battery design eliminates the traditional battery maintenance requirements (watering, equalizing and cleaning) of lead-acid.

#### **MANEUVERABILITY**

Compact 5.8" battery compartment gives the 8250 Walkie Pallet truck a 2" reduced head length, allowing a tighter turning radius for simpler pinwheeling in the back of trucks, secure handling on lift gates, and easier navigation in congested spaces.



### LITHIUM vs LEAD ACID

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MAINTENANCE REQUIREMENTS	None	Watering, equalizing, cleaning
RECHARGING TIME	3 hrs. (0-100% SOC)	ChargeTime: 8 hrs. Cool DownTime: 8 hrs.
WARRANTY*	5 years or 10,000 hours (whatever occurs first)	Wet Cell: 15-18 months Industrial: 5 years Thin Plate: 3 years
OPPORTUNITY CHARGING	Yes	Wet Cell: Not Recommended Industrial: Yes Thin Plate: Yes
RUNTIME ON A SINGLE CHARGE	3-4 hrs.	Wet Cell: 2-3 hrs. Industrial: 5-6 hrs. Thin Plate: 2-3 hrs.
VOLTAGE	24 (26 nominal)	24
AMP HOURS	78 Note: you typically require 2X the ah in lead acid when compared to lithium	Wet Cell: 156 Industrial: 195 Thin Plate: 85,137,170
kWh	2.028	Wet Cell: 3.744 Industrial: 4.68 Thin Plate: 2.04, 3.288, 4.08
REGENERATIVE CHARGER	Yes	Yes
PERFORMANCE DROP OFF IN COLD STORAGE	None	25-40%

### **SPECIFICATIONS**

#### **TRUCK**

- + Capacity: 5,000 lbs.
- + Power System: AC Traction Control
- + Head Length: 67.2"
- + Frame Width: 28"
- + 5.8" battery

#### **BATTERY**

- + 78 amp hour, 24V lithium-ion
- + Run Time: 3-4 hours
- + Recharging Time: 3 hours (0-100% SOC)

### **CERTIFICATIONS**

UL 583: UL Standard for Safety for Electric-Battery-Powered Industrial Trucks







#### A BATTERY OF TESTS

To ensure optimal performance under a wide array of operating conditions, the 8250 Walkie Pallet truck and its lithium-ion battery are put through numerous durability and strength tests, including, but not limited to:

- Bump Track—Simulated 5-year abuse test; 65,000 impacts
- Drop Test
  - Full battery pack drop
  - Steel ball test
- Vibration and Shock



#### **SMARTER OPERATION**

Designed with smart technology and integrated communication systems, the 8250 Walkie Pallet truck's lithium-ion power pack optimizes your battery use with:

- ONBOARD BATTERY MANAGEMENT SYSTEM (BMS) Allows you to schedule charge times, notifies you when a charge is required, and monitors the battery to prevent overcharging and discharging.
- UNIQUE HEADS-UP DISPLAY (HUD) Shows the battery's real-time stateof-charge and alerts the operator if maintenance if required.
- CAN COMMUNICATION Enables the truck and battery pack to communicate with each other, instantly sharing commands and information for optimum performance.
- SLEEP MODE Automatically activates when the charge level is low to protect components and conserve energy when the truck is not in use.
- LOW STATE-OF-CHARGE ALERT Notifies users when the battery pack requires charging with an

- INTELLIGENT PROTECTION Four levels of protective features guard against over-discharge: low state-of-charge warning, reserve power mode, manual travel restriction and dormant mode.
- RUN PROTECTION **Enables charging without** unplugging battery pack for added convenience.



## RUN BETTER. MANAGE SMARTER.

At Raymond, our aim is to deliver the utmost quality and to work for continuous improvement every day, in every aspect of our business. We are proud of what we build. We are proud of the level of service we provide to keep our customers' business up and running. We take pride in our commitment to our customers through our end-to-end approach in helping them find smarter, more efficient, and more effective solutions.

We value the trust that Raymond has earned through decades of proven performance and hands-on innovation. Since the patenting of the first hand-pallet truck to the invention of the reach truck to our pioneering work in narrow aisle operations and beyond, Raymond has led the way in providing customers with the tools and expertise to improve their business.

IF YOU'RE LOOKING FOR A PARTNER WITH THE TOOLS AND EXPERIENCE TO HELP YOU RUN BETTER AND MANAGE SMARTER, LET'S TALK.

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