

# POWERED BY LITHIUM. DRIVEN TO PERFORM.

OUTMANEUVER.  
OUTPERFORM.  
OUTLAST.

Engineered around a proven and powerful Raymond® built lithium-ion battery, the 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 power 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 applications.



## WHY LITHIUM

- + **Run Longer** — Lithium offers increased power capacity allowing fewer work disruptions to charge batteries and does not require battery changeouts
- + **Recharge Quicker** — Lithium offers lower internal resistance, allowing quicker recharging times 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, as well as truck and lithium pack fault codes
- + **Lower Maintenance Costs** — Lithium battery requires none of the traditional maintenance of lead acid batteries such as watering, equalizing or cleaning



*Truck:  
IP65 Rated*

*Battery:  
IP65 Rated*

*All components are completely sealed to protect against water and dust.*

If you're looking for a partner with the tools and experience to help you run better and manage smarter, contact us today at 1-800-235-7200 or visit us at [raymondcorp.com](http://raymondcorp.com).

# RAYMOND



## 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 users to schedule charge times, notifies users when a charge is required, and monitors the battery to prevent overcharging and discharging.
- **CAN COMMUNICATION**  
Enables the truck and battery pack to communicate with each other, instantly sharing commands and information for optimum performance.
- **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.
- **UNIQUE HEADS-UP DISPLAY (HUD)**  
Shows the battery's real-time state-of-charge and alerts the operator if maintenance is required.
- **SLEEP MODE**  
Automatically activates when the charge level is low to protect components and conserve energy when the truck is not in use.
- **RUN PROTECTION**  
Enables charging without unplugging battery pack for added convenience.
- **LOW STATE-OF-CHARGE ALERT**  
Notifies users when the battery pack requires charging with an audible alarm and flashing light.



# 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 crank and  
wheel forks, and polycarbonate covers



**+ reliable performance**  
with stainless steel undercarriage pins  
and IP65 Protection; electronics can  
take regular wash downs with sealed  
components\*

**+ increased operator confidence**  
with Click2Creep™ the tiller can be tucked  
closely to the tractor for a tighter turning  
radius and increased maneuverability

**+ 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**  
the ability to run longer and charge  
faster with a standard 110 outlet

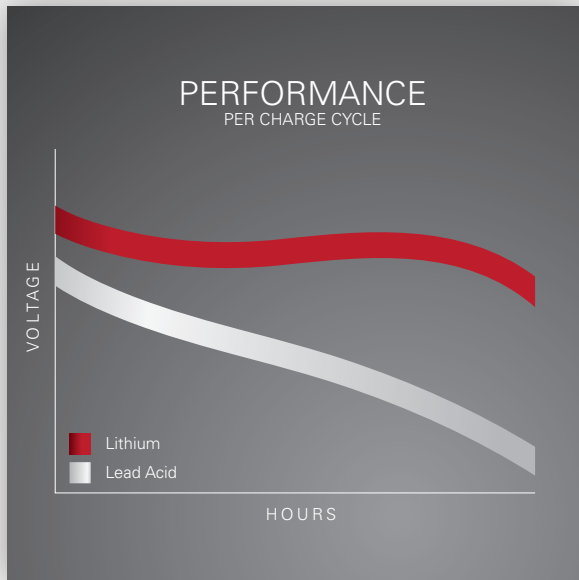
# MADE FOR EACH OTHER

A TRUCK AND BATTERY DESIGNED TOGETHER FOR ULTIMATE PERFORMANCE.

## PRODUCTIVITY

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

- **OPPORTUNITY CHARGING CAPABILITY**  
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.



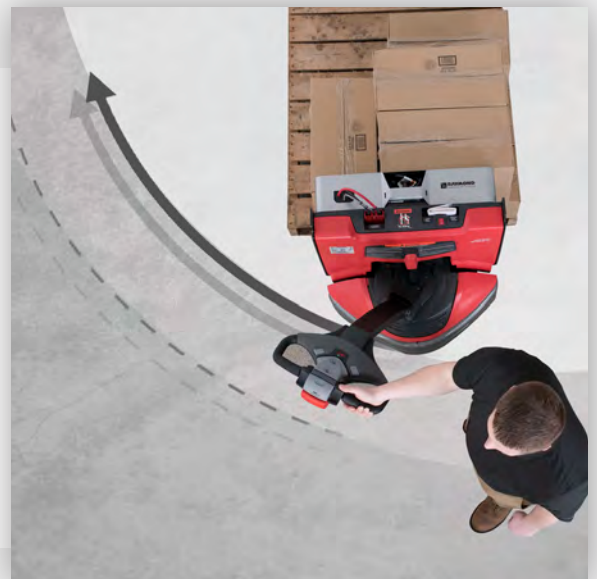
## EFFICIENCY

Compact yet powerful, the lithium 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 the tightest turning radius within the industry for simpler pinwheeling in the back of trucks, secure handling on lift gates, and easier navigation in congested spaces.



# LITHIUM vs LEAD ACID

	 8250 STANDARD	 8250 OPTIONAL	 8210 LEAD- ACID
<b>AMP HOURS</b>	78	156	Wet Cell: 156 Industrial: 195 Thin Plate: 85,137,170
<b>VOLTAGE</b>	24 (26 nominal)	24 (26 nominal)	24
<b>kWh</b>	2.02	4.05	Wet Cell: 3.74 Industrial: 4.68 Thin Plate: 2.04, 3.28, 4.08
<b>RUNTIME ON A SINGLE CHARGE (AVERAGE USE)</b>	3-4 hrs.	6-8 hrs.	Wet Cell: 2-3 hrs. Industrial: 5-6 hrs. Thin Plate: 2-3 hrs.
<b>RECHARGING TIME</b>	2.25 hrs.	5.5 hrs.	Charge Time: 8 hrs. Cool Down Time: 8 hrs.
<b>REGENERATIVE CHARGE</b>	Yes	Yes	Yes
<b>OPPORTUNITY CHARGING</b>	Yes	Yes	Wet Cell: Not Recommended Industrial: Yes Thin Plate: Yes
<b>PERFORMANCE DROP OFF IN COLD STORAGE</b>	None	None	25-40%
<b>MAINTENANCE REQUIREMENTS</b>	None	None	Watering, equalizing, cleaning
<b>WARRANTY*</b>	5 years or 10,000 hours (whatever occurs first)	5 years or 10,000 hours (whatever occurs first)	Wet Cell: 15-18 months Industrial: 5 years Thin Plate: 3 years

Lithium run time noted was based on a 16 ampere-hour discharge rate while simulating unloading a tractor trailer with 1K-3K loads. Run time will be dependent on customer application and use.

For complete warranty details, refer to applicable warranty documentation.  
Lead to lithium ampere-hour conversion rate: 70%

## A BATTERY OF TESTS

To ensure optimal performance under a wide array of operating conditions, the 8250 Walkie Pallet truck and its lithium battery were 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



# SPECIFICATIONS

## TRUCK

- + Capacity: 5,000 lbs.
- + Power System: AC Traction Control
- + Head Length: 672"
- + Frame Width: 28"
- + 5.8" battery compartment

## BATTERY

- |   |   |
|---|---|
| Standard (1CMA)                         | Optional (2CMA)                         |
| + 78 amp hour, 24V lithium-ion          | + 156 amp hour, 24V lithium-ion         |
| + Run Time: 3-4 hours (consecutive)     | + Run Time: 6-8 hours (consecutive)     |
| + Recharging Time: 3 hours (0-100% SOC) | + Recharging Time: 6 hours (0-100% SOC) |

# CERTIFICATIONS

UL 1642: UL Standard for Safety for Lithium Batteries

UN 38.3: Transportation of Cells and/or Packs Approved

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

UL 2271: UL Standard for Safety for Batteries for Use In Light Electric Vehicle (LEV) Applications

UL E/EE approval rating



# 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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SIPB-1056D 819

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