



#### CAPACITY

4,400 lbs.

52"x48" maximum pallet size in Autonomous mode

#### BATTERY

Integrated 205 Ah lithium battery with on-board 120 VAC charger

#### TRAVEL SPEED

24V AC Curtis Travel Controller Variable 2.8 mph max speed in autonomous mode, 5 mph max speed in manual.

#### TIRES AND WHEELS

Drive tire

9" x 2.95" polyurethane

STABILITY casters (2) 5.12" x 2.16" polyurethane

Dual load wheels (4) 2.91" x 2.56" polyurethane

#### AUTONOMOUS SYSTEM

Fusion sensor architecture comprised of a primary safety Lidar and advanced camera module complies with ANSI/ITSDF B56.5 and B56.1. Obstacle detection and avoidance is active during autonomous travel and mapping is stored locally so no data connection or infrastructure is required for operation. The localization and self-driving software utilizes natural feature recognition to operate in dynamic environments once a given work area is established.

#### OPERATION & CONTROLS

The Pallet Mover User Directed AMR is based on our popular end control rider pallet truck chassis and supports both conventional and autonomous operation. A tablet and intuitive UI is provided to support the easy creation of automated tasks and missions once the machine is loaded by a human operator. This highly compact unit features electronic power steering and a small rider platform which allows for easy operation from either the floor or riding position, creating maps for autonomous self-driving, or navigating in tight areas. The position of the control head and grab bar supports good ergonomics for most operators with easy-to-use controls are provided for travel, lift, lower and horn functions. Dual butterfly thumb controls for forward and reverse travel support driver stances on the left or right side of the vehicle.



## PALLET MOVER User Directed AMR

Collaborative autonomous mobile robot designed to empower workers and drive operational productivity. Easy to set-up, map, and start missions in less than 1 hour.

SELF-DRIVEN BY  
**thoro.ai**

#### BRAKE SYSTEM

Electromagnetic brake is mounted on motor armature shaft multiplying the braking power through the transmission. Brake is applied when control arm is in the vertical or lowered horizontal handle position. The system features anti-roll back & neutral braking.

#### CASTER SYSTEM

Heavy duty spring loaded articulating system designed to maintain good truck performance and operator confidence during use.

#### LOW PROFILE FORK ASSEMBLY

Low profile forks with collapsed height under 3" and pallet entry rollers for easy pallet entry and exit. Split dual load wheels disperse heat while maintaining solid life expectancy. Easily accessed grease zerks are provided on pivot points for ease of maintenance and to ensure long equipment service life. Heavy duty adjustable pull rods

#### ACCESSIBILITY

Heavy duty composite single piece cover exposes major components for inspection and maintenance.

#### OPTIONAL EQUIPMENT

60" load backrest and tool tray

22" nominal fork widths

Universal Carrier Load Platform

Upgraded 208/240VAC external charger

Step Shield to prevent ride-on functionality

#### ELECTRICAL

Heavy-duty, 24 VAC system for demanding warehouse applications. The programmable Curtis traction controller and matching drive motor provide high performance throughout the entire speed and torque range. Emergency power disconnect, hour meter, battery discharge indicator, key switch, and are provided as standard equipment. The integrated lithium battery and battery management system communicates through the vehicle's CAN system to deliver optimal performance during operation, opportunity charging or full cycle charging operations.

#### HYDRAULICS

Heavy duty pump motor hydraulic reservoir, solenoid, and gear pump with center mounted lift cylinder. Integral pressure compensated flow control valve regulates lowering speeds.

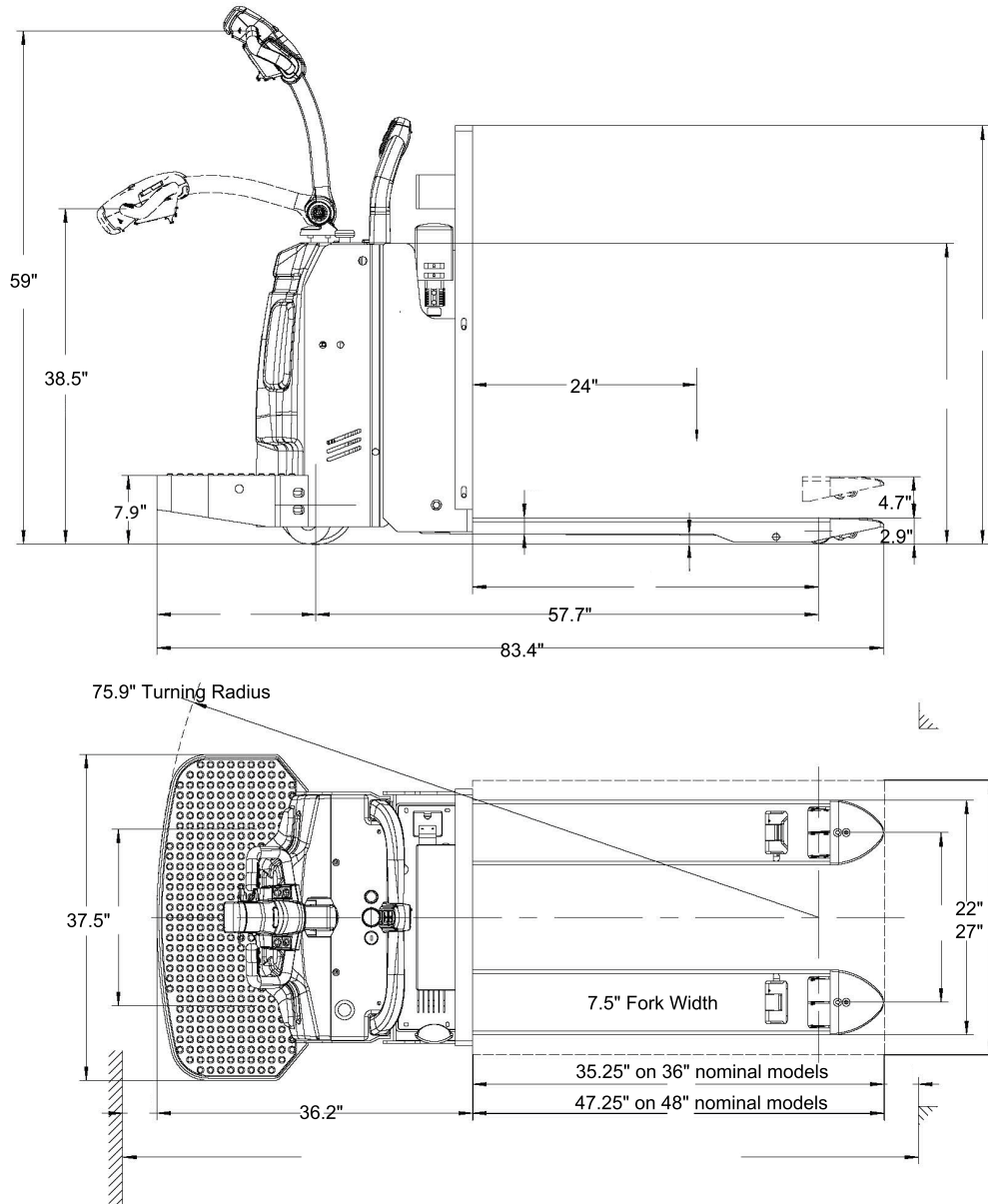
#### DRIVE UNIT

The vertically mounted drive motor is directly mounted to gear housing. Oil bathed bevel gear drive train with tapered roller bearings transfers power to axle. State of the art optimized gear technology supplies advantages such as zero maintenance, low noise level, high efficiency and high performance.

# PALLET MOVER

## User Directed AMR

## Dimensions



All measurements shown are in standard "inch" units

Truck Model	Forks	Capacity	Actual Fork Width	Actual Fork Length	Overall Width	Overall Length	*Weight (lb.)
Fork Dimension: 27 in. Wide							
BPM44	27 x 48	4,400 lb.	27	47.25	37.5	84	1450

\*Estimated Shipping weight with battery and charger



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All units are build to be in compliance with the Occupational Safety & Health Act (OSHA)  
Big Lift LLC will not assume liability for injuries or damage arising from , or caused by , the removal of any safety devices from their vehicles by user. Because of the, Big Lift LLC continuing product improvements, specifications are subject to change without notice.

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2024-09-04\_V01

Certification