PUDU MP2000

AI-Native Pallet Handling Robot

- Plug-and-Play
- AI-Native Autonomy
- Fleet Orchestration
- 20s Fork Insertion
- Omni-Sense Safety
- IoT Integration

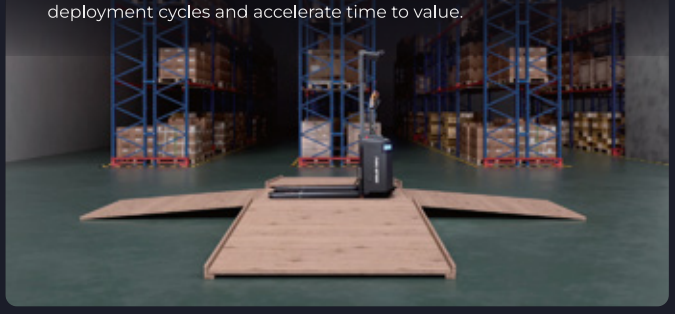


PUDU

tekmark since 1994

Plug-and-Play, Rapid Deployment

Powered by multi-sensor navigation and edge intelligence, the robot requires no site modifications, platform integration, or complex deployment. Fast site mapping and configuration shorten deployment cycles and accelerate time to value.



AI-Native Autonomy

AI-native intelligence enables storage occupancy detection, load-carrier recognition, and clearance assessment for autonomous operation in dynamic warehouses. This reduces manual checks, site modifications, and commissioning.



Intelligent Fleet Orchestration

Distributed fleet orchestration enables each robot to make decisions and plan routes, with inter-robot communication ensuring efficient coordination. Even offline, the fleet continues operating in sync.



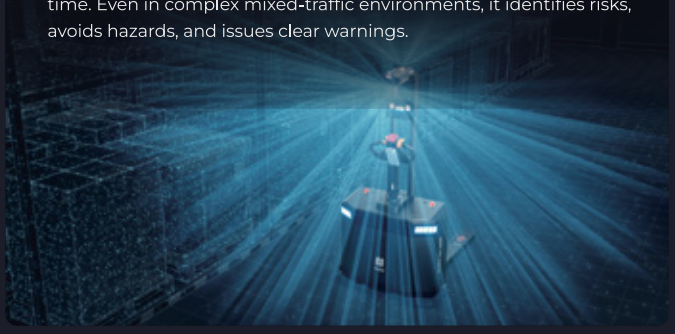
20s Fork Insertion, Fast Pickup

With fork insertion completed in 20 seconds and speeds up to 1.6 m/s (5.2 ft/s) unloaded and 1.2 m/s (3.9 ft/s) loaded, the robot reduces cycle times and accelerates material flow for higher throughput.



Omni-Sense Safety

Depth cameras, 3D LiDAR, and other sensors form a multi-layer safety system that detects people, equipment, and obstacles in real time. Even in complex mixed-traffic environments, it identifies risks, avoids hazards, and issues clear warnings.



IoT Integration & Control

Tasks can be dispatched via PUDU Link, APIs, voice commands, or task buttons. Optional integration with elevator controls, automatic doors, and other IoT devices enables flexible task triggering and device coordination.



Basic Specifications

Overall Dimensions (L × W × H)	1585 × 910 × 1870 mm（62.4 × 35.8 × 73.6 in）	Pallet Pick Offset Angle	Up to 15°
Rated Payload	2000 kg（4,409 lbs）	Drive Mode	Autonomous/Manual
Max. Lift Height	200±5 mm（7.9 ± 0.2 in）	Navigation System	3D LiDAR, VSLAM
Lowered Fork Height	80 mm（3.1 in）	Rated Travel Speed	Loaded：1.2 m/s（2.7mph） Unloaded：1.6 m/s（3.6 mph）
Fork Outer Width	550/620 mm（21.7/24.4 in）	90° Stacking Aisle	2000 mm（78.7 in）
Turning Radius	1350 mm（53.1 in）	Threshold & Gap Crossing	10/35 mm（0.4 in/1.4 in）
Compatible Pallets	Three-runner/Perimeter-base/Nine-leg	Gradeability	3°/ 8°(Full Load/Unloaded)

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