

Flexible and Powerful: The Shuttle System You Need with Intelligent Movement in Every Direction

The SSI Pallet Roaming Shuttle is an intelligent, rail-guided shuttle robot designed for high-density pallet storage and retrieval in three-dimensional warehouse environments. Integrated with WMS or enterprise-level systems, it enables real-time coordination, automated identification (RFID and barcode), and optimized inventory management for efficient inbound and outbound operations.



Key Outcomes:

- Increase storage density and maximize available space
- Improve throughput with fast, repeatable pallet moves
- Reduce operating costs with energy-efficient motion and smart charging
- Improve inventory accuracy through automated identification and system-controlled processes
- Support cold chain and temperature-controlled operations

Where It Fits Best



Cold chain
/ deep-freeze
warehouses



Retail &
distribution
centers



Manufacturing
(raw material &
finished goods)



3PL & logistics
operation requiring
scalable automation



Food &
beverages
distribution

Technical Data

External dimensions	1,030 x 980 x 125 mm
Weight of Shuttle	260 ± 10 kg
Max Aislewise Speed w/o loading	1.6 m/s
Max Aislewise Speed loaded	1.5 m/s
Max Aislewise Acceleration	1 m/s ²
Max. Payload	1,500 kg
Positioning Method	RFID + Photoelectric
Positioning Accuracy	± 5 mm
Max. HU Dimensions (Standard)	1,500 (Length) x 1,500 (Width) mm
Min. HU Dimension	1,100 (Length) x 800 (Width) mm
Mother rail spacing	912 mm
Sub-rail spacing	883 mm
Guide rail height	147 mm
Communication	Wi-Fi or 5G
Power Supply	Li-ion battery
Charging Voltage	48 V
Environment	For indoor use only
Humidity	45 % ~ 95 % non-condensing
Ambient Temperature Range	-25 °C ~ 45 °C -13°F ~ 113 °F

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