

FOURWAY SHUTTLE SMART WAREHOUSE



SCALABLE

The system is scalable. It can start at any size of storage, and easily expandable along with business growth.



ADAPTIVE

Adaptive to any architecture design, floor layout, application scenario, and environmental characteristics.



ROBUST

Properly deployed system is proven to be robust and reliable, single equipment faulty doesn't affect overall system operation.

THE NEW ERA OF AUTOMATED STORAGE AND RETRIEVAL SYSTEM



30%

GREATER DENSITY

Uses minimum floor space achieving greatest pallet storage capacity. 30% greater than conventional ASRS.



200%

GREATER EFFICIENCY

Fourway Shuttle Smart Warehouse effectively improving throughput up to 200% greater than conventional ASRS.



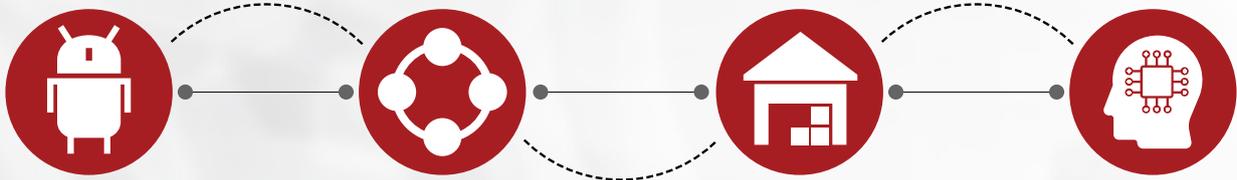
30%

LOWER STORAGE COST

Cost of storage per pallet is calculated to be 30% lower compared to conventional ASRS.

INTELLIGENT SOFTWARE

Warehouse Management System with Intelligent Algorithm



Intelligent Robot

- Positioning & Navigation
- Robot Vision System
- Voice Interaction

Multi-Robot Intelligent Coordination

- Task Assignment
- Route Planning
- Traffic Control

Warehouse Management System

- Order Management
- Inventory Management
- Product Launch Strategy

Intelligent Algorithm

- Inventory Recommendation
- Promotion Recommendation
- Sales Revenue Forecast

SYSTEM ARCHITECTURE



INTERFACE



REACT

Dynamic Loading



VUE

Event Processing



ANDROID

Status Control



INTERACTION



AJAX



http://



RPC
REMOTE PROCEDURE CALL



WEB SOCKETS



Tomcat



Java^{SDK}



EXTERNAL COMM



{JSON}



RESTful



RPC
REMOTE PROCEDURE CALL



DATA ACCESS



JDBC



redis



mongoDB[®]



MyBatis



RocketMQ



DATA STORAGE



MySQL[®]



ORACLE[®]



mongoDB[®]

SHUTTLE SPECIFICATIONS

OBSTACLE AVOIDANCE

- Automatic traffic control of multiple vehicle operation.
- Foreign object detection.
- Off position detection.

ANTI COLLISION & OVER RUN

- Automatic deceleration at route end.
- Elevator pathway fixed stop to prevent falling.
- Shock absorber at route end.

PALLET INSPECTION

- Storage inventory detection.
- Pallet size and weight checking.



ANTI-FALLING

- Safety netting cover at storage route end.
- Main route bottom netting cover.

SMART & SAFE CHARGING

- Battery level alarm system.
- Smart control of Shuttles to get recharge at charging station.
- Fireproof design charging station.

AUTOMATIC POSITION CORRECTION

- Operating position correction.
- Automatic pallet position correction.

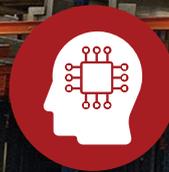
FEATURE	MODEL 1	MODEL 2	MODEL 3
Body Dimension	1090L x 1030W x 150H	1090L x 1030W x 126H	1090L x 1030W x 150H
Application Environment	0 ~ 50°C	0 ~ 50°C	-25 ~ 0°C
Driving Mode	Motor Drive	Motor Drive	Motor Drive
Power Source	Lithium Iron Phosphate Battery	Lithium Iron Phosphate Battery	Lithium Iron Phosphate Battery
Linear Drive Motor	1.2 kW	1.2 kW	1.2 kW
Lifting Height (mm)	50	40	50
Allowable Load (kg)	1,000	1,000	1,000
Application Pallet Size	1,000 ~ 1,400	1,000 ~ 1,400	1,000 ~ 1,400
Shuttle Weight (kg)	350 ~ 500	350 ~ 450	350 ~ 500
Battery Capacity	40AH& >8h	40AH& >8h	40AH& >8h
Anti-Collision Detection	Yes	Yes	Yes

SMARTEST WAREHOUSE SOLUTION



MULTI-FLOORS

Automated Warehousing system deployment through multi floors building has made possible with Fourway Shuttle Smart Warehouse.



A.I

Artificial Intelligence Dispatch System, Intelligent Warehousing Business System.



LOW INITIAL INVESTMENT

In comparison to conventional ASRS with stacker crane, Fourway Shuttle Smart Warehouse initial investment is fraction.

REVOLUTIONARY TECHNOLOGY OF SMART WAREHOUSE

Over the decades, A.S.R.S is a terminology known as the automated warehousing system built with Stacker Crane. With the latest technology invented, A.S.R.S is no longer exclusive term for Stacker Crane warehouse. Introducing shuttle robot smart warehouse, it attributes the latest warehouse technology that has been widely recognized internationally since half a decade ago.

In history, A.S.R.S is meant for considerable large warehouse, those in smaller scale are all left with no opportunities of automation implementation. In the country with majority SMEs' entrepreneurs, there are big numbers of warehouse in relatively smaller scale around. In the era of industrial 4.0, we believe that there will be emerging needs of automated warehouse. The invented shuttle system overcomes nearly all shortages and limitations of conventional A.S.R.S, we are exciting to introduce this technology to all our potential clients.



Manufacturing



3PL



Medical



Cold Storage



Retail



Electronic



New Energy



Furniture

