

Infrastructure-Free AMR Logistics Automation

Provides smart logistics and factory solutions
via AI-powered autonomous mobile robots

The logo for TWINNY, featuring the word "TWINNY" in a bold, white, sans-serif font. Above the "I" in "TWINNY" is a small orange graphic element consisting of two horizontal bars of different lengths, with the longer bar on top.

TWINNY Co., Ltd.

Solutions

01	Logistics Automation Solutions	01-02
02	Autonomous Navigation Software Solution	03-04

Autonomous Mobile Robots

03	NarGoW100	05
04	NarGoF300, NarGoF600	06
05	NarGo Series	07
06	TarGo100	08

TWINNY

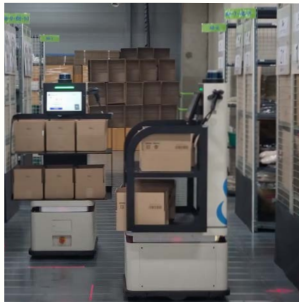
07	Our Partners	11-12
----	--------------	-------



Logistics Automation Solutions

An AI-based autonomous, customized logistics automation solution by TWINNY that maximizes operational efficiency by analyzing logistics center characteristics, environments, and workflow scenarios

Use Cases



AGABANG
Logistics Center
Mezzanine, B2B,
High-Mix, Low-Volume,
Multi-Order Picking



YONGMA LOGIS
High Rack, B2B,
Low-Mix, High-Volume,
Total · Multi-Order Picking



STL
High Rack, B2C,
Low-Mix, Low-Volume,
Total Picking



AGABANG
Logistics Center
Lightweight Rack, B2C,
High-Mix, Low-Volume,
Multi-Order Picking



PICO INNOVATION
High Rack, B2B,
Low-Mix, High-Volume,
Multi-Order Picking

Core AI Technologies

01

Order Distribution Optimization

Analyzes orders to match optimized SKUs and locations, and consolidates invoices to maximize processing speed

02

Obstacle Recognition Technology

Enables robots to detect and accurately avoid forklifts without reflective tape using forklift avoidance technology

03

Multi-Robot Control

Enables multiple robots to plan routes without bottlenecks, ensuring stable operation even in noisy environments

Scenarios

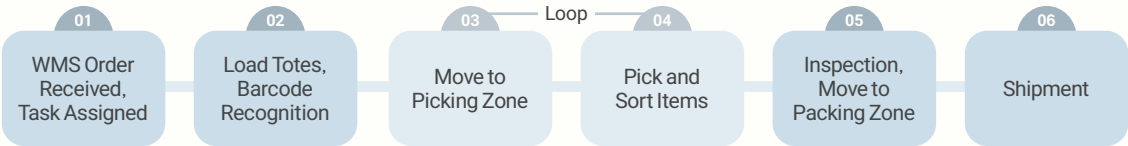
Total Picking Scenario for Single Orders

Batch picking of multiple orders combined with AMRs reduces worker travel distance and increases picking density



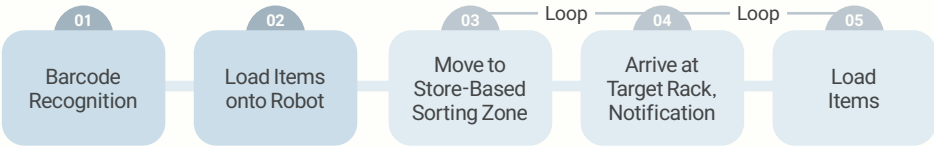
Multi-Order Picking Scenario for High-Mix Orders

Uses order-based totes to perform picking and sorting simultaneously, ensuring both accuracy and productivity



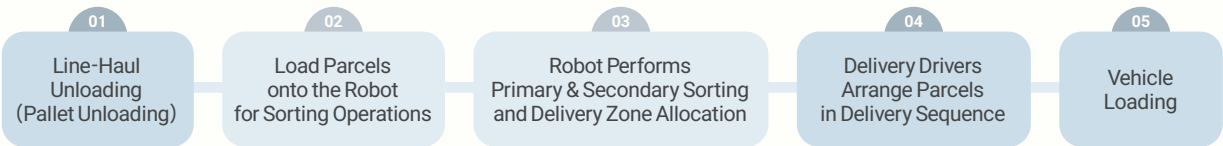
Returns · Inbound Scenario

Standardizes inbound and returns processes through barcode-based automatic navigation



Sorting Scenario for Large-Scale Hub Centers

Automates parcel movement through real-time sorting of same-day and early-morning deliveries by destination zone.



* Steps 2 – 3: Performed by Robots

* Steps 4 – 5: Drivers Only Arrange
Parcels and Load Vehicles

Autonomous Navigation Software Solution

An autonomous robot operation platform solution that integrates TWINNY software with diverse hardware systems

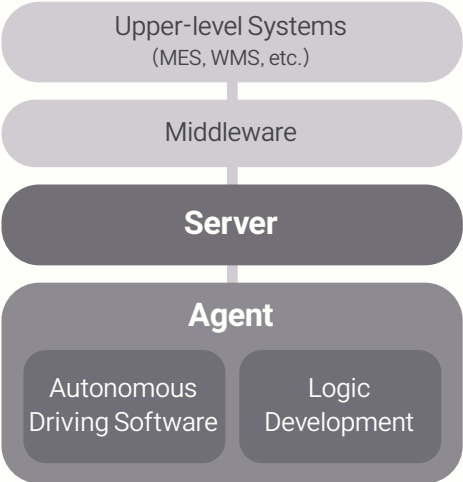
Key Benefits

01 Equipped with TWINNY’s Self-Developed, Industry-Leading Autonomous Driving Software

- Validates performance and reliability through real-world operations in diverse industrial environments
- Ensures stable navigation in large, complex areas via 3D LiDAR-based precision localization
- Enables rapid deployment within existing environments without infrastructure modifications

03 Seamless Integration with High-Level Systems

Integrates effortlessly with various industrial systems, such as WMS and MES



DaruGo Integration Architecture

02 Web-Based Interface

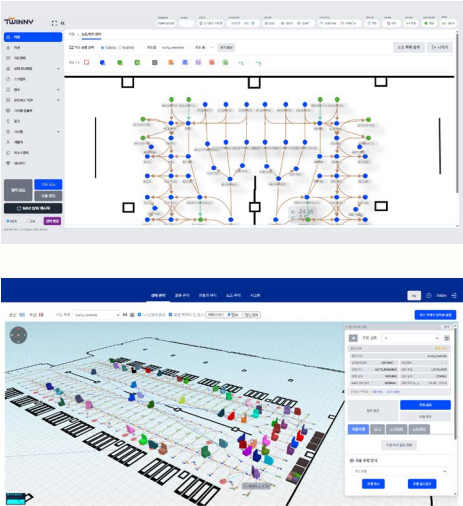
Seamless Operation from Mapping to Control

Agent

- Provides an intuitive UI designed for effortless use by non-experts
- Enables precise map generation and intuitive path configuration based on actual environments

Server

- Optimizes traffic flow via real-time monitoring of robot locations, status, and task progress
- Delivers reliable operational results through simulators with autonomous navigation and control functions



Use Cases

01



DN Solutions
Integrates with collaborative robots to enable autonomous transport

02



INFOIN
Delivers diverse services (coffee delivery, air purification, security, etc.) via autonomous navigation

FieldRo
Powers autonomous driving capabilities on third-party hardwares

Autonomous Logistics Robot

03

NarGoW100

An order picking robot that enhances picking efficiency in logistics centers through AI-based autonomous mobile technology



Brand-matching wrapping design ↑
Cargo boxes customized to item properties →

Key Benefits

Quick Installation

Deployment in 3 weeks on average, no operational downtime

Immediate Deployment, No Infrastructure Changes

Utilizes existing infrastructure and workflows without modification

Improved Picking Accuracy

Reduces picking errors and omissions to enhance operational quality

Reduced Workforce, 64% Labor Cost Reduction

Replaces repetitive tasks, enabling workers to focus on higher-value work

Optimized Picking Routes

Minimizes unnecessary movement by optimizing routes based on order data

Detailed Specification

Safety Devices

3D LiDAR Environment Perception
2D LiDAR Obstacle Detection
Bumper Collision Prevention

Basic Specifications

Size	696 × 546 × 1,509 mm
Shelf Size	500 × 509 mm
Payload	100 kg
Max Speed	1.5 m/s
Temperature	0–40°C
Humidity	≤ 80% RH
Illumination	100–1,000 lx
Network	Wi-Fi, LTE

Battery·Motion Performance

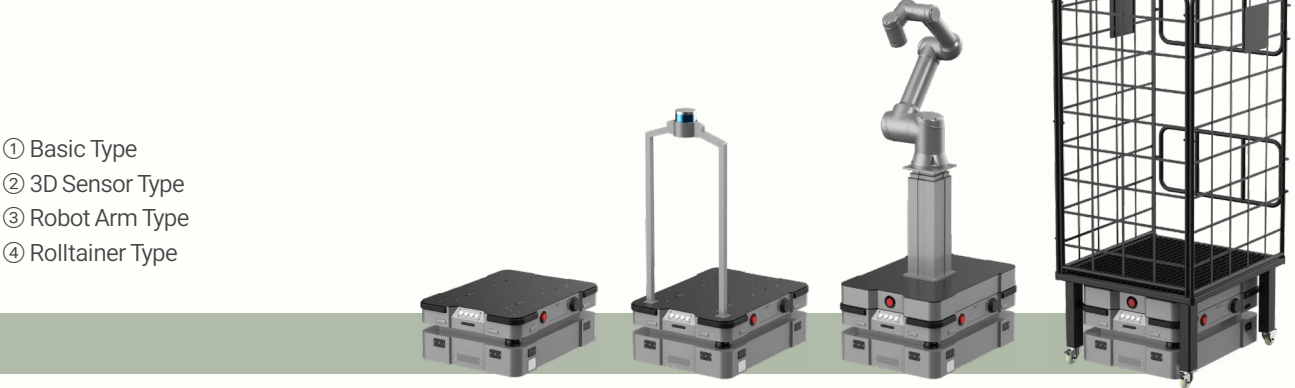
Battery	29.4 V, 54 Ah
Charging Hours	≤ 3 h
Operating Hours	≤ 8 h
Charging Method	Automatic/Manual
Step	± 10 mm
Gap	35 mm
Max Gradability	5°
Stopping Accuracy	100 mm

Autonomous Logistics Robot

04

NarGoF300, F600

An autonomous logistics robot that improves work efficiency and productivity by automating heavy-load transport tasks in factories



- ① Basic Type
- ② 3D Sensor Type
- ③ Robot Arm Type
- ④ Rolltainer Type

Key Benefits

Industrial Navigation, Stable Performance in Factories

Ensures reliable autonomous driving even in high-traffic factory environments

Scalable Customization

Supports flexible integration of robotic arms, conveyors, and rolltainers

Immediate Deployment, No Infrastructure Changes

Deploy directly on-site without additional infrastructure setup

24/7 Continuous Operation

Automates repetitive transport tasks to maintain seamless operations

Detailed Specification

Safety Devices

2D LiDAR Obstacle Detection
Bumper Collision Prevention

F300 Specifications

Size	820 × 622 × 330 mm
Payload	300 kg
Max Speed	1.5 m/s

F600 Specifications

Size	762 × 1,052 × 378 mm
Payload	600 kg
Max Speed	0.9 m/s

Basic Specifications

Temperature	5–40°C
Humidity	≤ 80% RH
Illumination	100–1,000 lx
Network	Wi-Fi, LTE

Battery·Motion Performance

Battery	Li-ion, 50.4 V, 36 Ah
Charging Hours	≤ 3 h
Operating Hours	≤ 8 h
Charging Method	Automatic/Manual
Step/Gap	± 6 mm/30 mm
Max Gradability	5°

Autonomous Mobile Robot

05

NarGo Series

A series of autonomous mobile robots that automate material handling tasks across various industrial environments

Key Benefits

- Customizable Cargo Structure
- Tailors storage modules to meet specific service requirements
- Expanded Conversational Interface
- Integrates LLM-based voice commands and context-aware interaction
- Integrated Indoor-Outdoor Navigation
- Ensures stable autonomous driving in complex, dynamic environments
- Contactless Smart Delivery
- Enables secure automated delivery within office and residential areas



Detailed Specification

Safety Devices

- 3D LiDAR Environment Perception
- 2D LiDAR Obstacle Detection
- Bumper Collision Prevention

NarGo60 Specifications

Size	736 × 477 × 1,247 mm
Shelf Size	560 × 446 × 670 mm
Payload	60 kg
Max Speed	1.2 m/s
Temperature	5–40°C

NarGoD40 Specifications

Size	560 × 540 × 1,220 mm
Shelf Size	340 × 308 × 410 mm
Payload	30 kg
Max Speed	1.0 m/s
Temperature	0–40°C

NarGo100 Specifications

Size	916 × 667 × 1,446 mm
Shelf Size	740 × 640 × 810 mm
Payload	100 kg
Max Speed	1.2 m/s
Temperature	5–40°C

Common Specifications

Humidity	≤ 80% RH
Illumination	100–1,000 lx
Network	Wi-Fi, LTE
Charging Hours	≤ 3 h
Operating Hours	≤ 8 h

Target Following Robot

06

TarGo100

A target following robot that increases work efficiency by supporting material transport while tracking the operator without additional devices

Key Benefits

- Reliable Safety System
- Plans secure robot trajectories by integrating a triple-layer safety system
- User-Friendly Operation
- Features intuitive controls for immediate use without the need for training
- Device-Free Smart Following
- Recognizes target information to track automatically without additional devices
- Tailored Customer Customization
- Tailors storage modules to meet specific service requirements



- Safety & Reliability
- 01 Recognizes targets using RGBD camera technology
- 02 Perceives environments via 2D LiDAR sensors
- 03 Enables emergency stops through physical bumpers



Detailed Specification

Safety Devices

- RGBD Camera Target Perception
- 2D LiDAR Obstacle Detection
- Bumper Collision Prevention

Basic Specifications

Size	975 × 690 × 1,288 mm
Shelf Size	740 × 625 × 797 mm
Payload	100 kg
Max Speed	1.0 m/s
Temperature	10–35°C
Humidity	≤ 80% RH
Illumination	100–1,000 lx
Network	Wi-Fi, LTE

Battery Performance

Charging Hours	≤ 3 h
Operating Hours	≤ 8 h

A Specialist in Autonomous Logistics Robots, TWINNY

Clients of TWINNY

Our proven solution has already demonstrated its effectiveness across numerous enterprises.





A Specialist in Autonomous Logistics Robots, TWINNY

Contact

HQ +82.42.716.1558

Product Inquiries +82.42.866.8232

Address 90, Gajeongbuk-ro, Yuseong-gu, Daejeon, South Korea

Website twinny.ai

Email salescontact@twinny.ai

① Website

② Youtube

