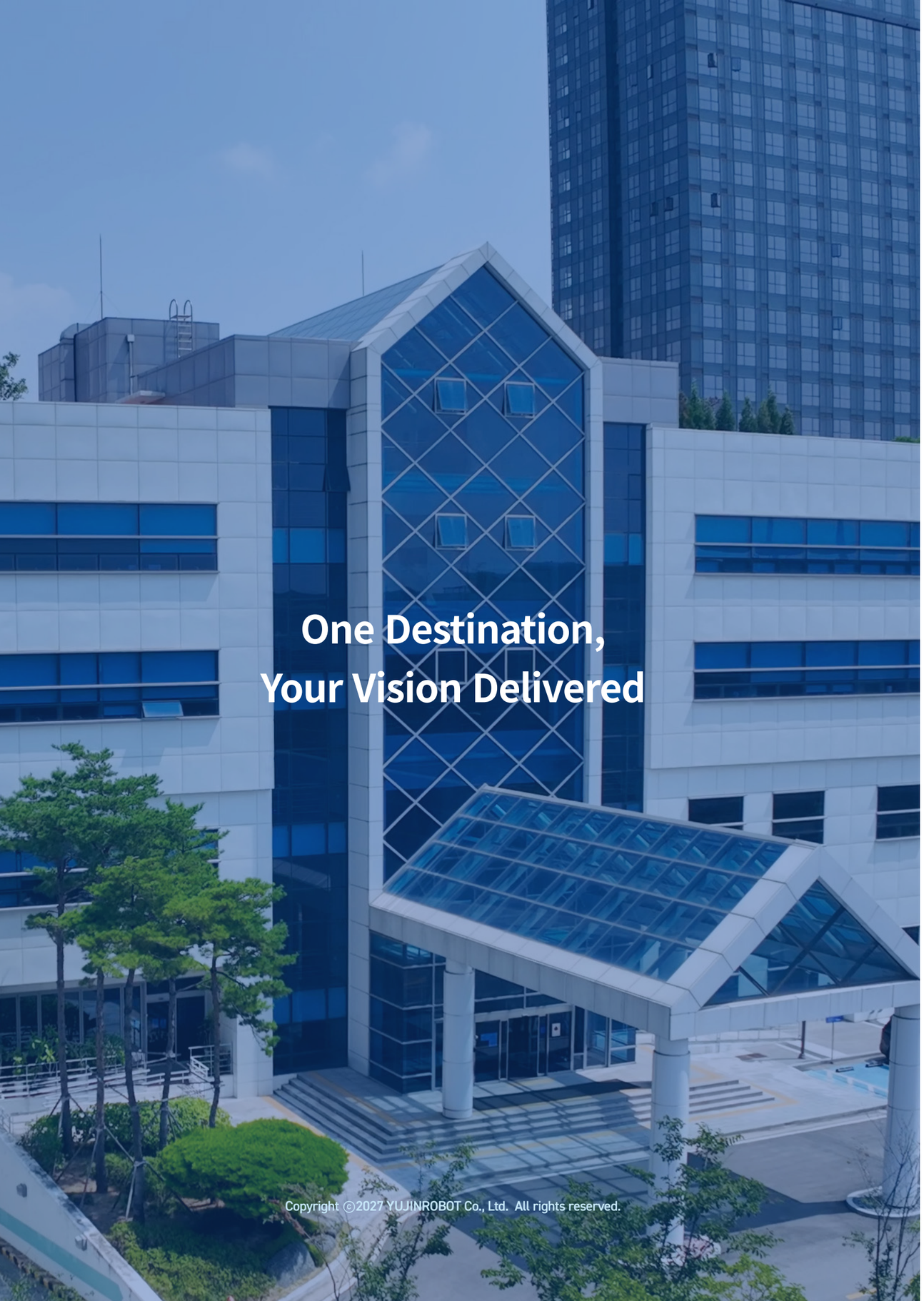
Total Solution Provider for Industry 4.0 & Smart Factory



Your One-stop Smart Factory Solution

YUJIN ROBOT



Copyright ⓒ2027 YUJINROBOT Co., Ltd. All rights reserved.

YUJIN ROBOT

Contents

Company Profile 4

Smart Factory Solution 6

Products

GoCart180 / 250 / 1000 / 1500 / 300 Omni Custom AMR 10

FMS 14

Robotization Solution 15

- Component Solution
- AGV Retrofit Solution
- Commercial Equipment Robotization Solution

Smart Factory Reference Case 18

One Destination, Your Vision Delivered

39 Years of Leading the Future of Robotics

For over 39 years, YUJIN ROBOT has delivered trusted robotics and smart automation solutions worldwide - built on innovation, technology, and proven expertise.

Over 1 Million Robots Delivered Worldwide

Proven by global standards of quality and trust, YUJIN ROBOT has supplied over one million robotic solutions - from service and professional robots to smart logistics and automation systems - across industries worldwide.

Over 30 Countries of Global Trust

Trusted by partners and customers in Korea, Europe, North America, and across Asia - expanding our reach through continuous innovation and reliability.

Robotics


Soccer Robot


Social Robot iRobi


Military Robot Robhaz


Vacuum Cleaning Robot iClebo


Guidance Robot Galaxy


Mobile Platform Developer Kit Kobuki


Logistics Robot GoCart

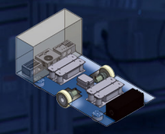

YUJIN LiDAR (2D/3D)


Autonomous Mobile Platform GoCart180 & 250


Autonomous Mobile Platform GoCart200 Omni



-GoCart500/1000 -Robotization Package (3D LiDAR & SLAM & Navigation & Safety)


Custom AMR


Autonomous Mobile Platform GoCart300 Omni


GoCart1500


AGF

Established Company 1988

Factory Automation Business 2000

2002 2004 2005 2008 2011 2016 2020 2021 2022 2023 2024 2025 2026 2027

AMS

SAS

Automation

HYUNDAI MOBIS — ECU, Sensor Assembly

Continental — Cluster, ECU, Sensor Assembly

Komtec — Valve, Pump, Actuator Assembly

GMB — Valve, Pump, Actuator Assembly

DAEWOO — CU, Sensor Assembly

vitesco TECHNOLOGIES — ECU, Sensor & Inverter Assembly

HYUNDAI MOBIS — ECU, Sensor Assembly

Robotics for the future with YUJIN ROBOT

Founded in March 1988, YUJIN Robot is now Korea's leading robotics company, providing a variety of solutions that improve our quality of life through advanced technology and optimal efficiency.

For more than 39 years, YUJIN Robot has been at the forefront of South Korea's highly developed robotics industry. Our commitment to technological advancement, combined with the knowledge and skills gained from years of experience, enables us to create reliable products and solutions. Historically, these solutions have encompassed robots of all types and functions ranging from soccer, social, military and guidance robots to vacuum-cleaning robots.

Today, we align ourselves with Industry 4.0 and Logistics 4.0, and offer products and services such as factory automation, autonomous mobile robots, mobile platform demo kits for research purposes, LiDAR sensors, SLAM technology and navigation software. We also provide end-to-end robotization services, customized solutions that transform and enhance manual devices to observe their surroundings, recognize situations, and act accordingly. Our technologies are ready to service the world's most forward-thinking companies including from manufacturing, material handling, robotics, and engineering business to warehouse and Smart Factories.

+600 Project

Expertise and know-how accumulated through more than 600 project experiences

+94 Portfolio

Established overseas production lines in 10 cities in 6 countries

(USA, Mexico, China, Romania, Iran, India)

39

39 years of business experience

Centralized network and smart automation system

Total End-to-end Solution Provider for Smart Factory

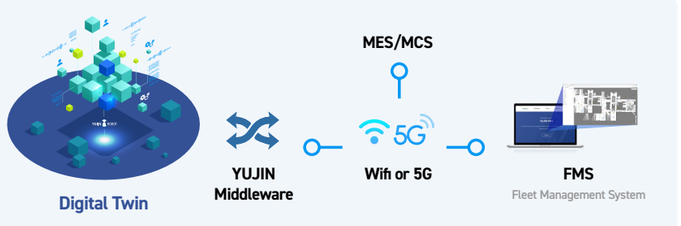
YUJIN Robot provides comprehensive solutions for building smart factories aligning with Industry 4.0 and Logistics 4.0, including factory automation, autonomous mobility robots, and Robotization services that equipped LiDAR sensor/SLAM technology and navigation software.

Autonomous Mobility Solutions (AMS)

We've developed autonomous mobility technologies and applied them in various areas ranging from industrial sites to everyday life. Based on the technology we have accumulated technological prowess as a first-generation robotics company in South Korea, we have developed our own robotic component units, SLAM, navigation, and 3D LiDAR, and applied end-to-end robotics solutions with our autonomous mobility platform, GoCart, to various industrial sites, including factories, warehouses, and hospitals, to improve production efficiency and create customer satisfaction and value.

Smart Automation System (SAS)

Since 1988, we have built up a strong track record and expertise in robotics and automation for over 39 years, enabling us to manufacture and supply factory automation equipment to the automotive parts, semiconductor, and heavy industry sectors. Based on a variety of design know-how, deep trust and connection with our customers, YUJIN Robot provides optimized solutions for factory lines, cells and stand-alone equipment of automation systems, and offers thorough after-sales management, strict quality control and prompt customer service system.

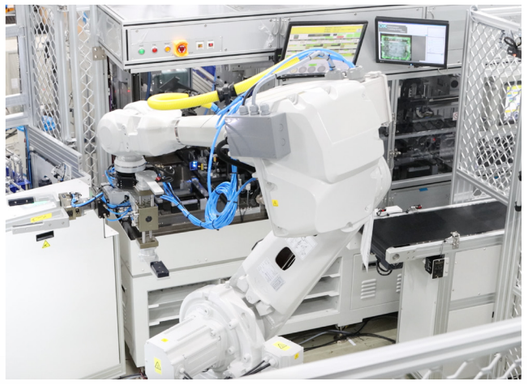


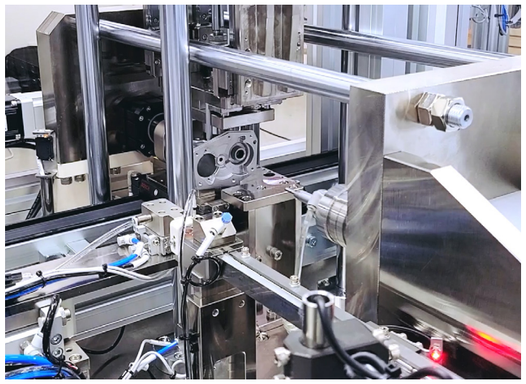
*Dynamic Work Planning & Data Pipeline connected with IT System(MES, ERP) on site.



Smart Factory Assembly Automation

Manufacturing and supplying factory automation equipment that optimized for customers' environments including production lines, cells, and stand-alone equipment.







Centralized Network Control

Provides control system for robot controls, MES system interface, production history management, and customized integration.



Real-time On-site Monitoring

Real-time facility operation and history management via modular touch panel.



Diverse Robotics Integration

Compatible with autonomous mobile robots*, collaborative robots, 6-axis industrial robots, SCARA, etc.

* Also, can be integrated with YUJIN Robot GoCart

• Smart Automation System Process



YUJIN ROBOT SAS(Smart Automation System) Division, which has been in business for, over 39 years since 1988, manufactures and supplies factory automation equipment for automotive parts, semiconductor, and heavy industries. With a wealth of design expertise gained through years of experience, we provide automation solutions that minimize trial and error. We offer optimized designs based on the deep trust and bond with our customers, and have a thorough follow-up after-sales management, strict quality control and prompt customer service system.

• Representative Factory Assembly Automation Processes

- Dispensing
- Gluing / Sealing
- Coating Varnishing / Trickling
- Crimping / Caulking
- Welding Plastics / Metals
- Leakage Test
- Vision Test
- Screw Driving
- Pressing
- Pressfit / PCB Assembly
- Molding (Inline)
- Handling Robots
- Milling

39 Years

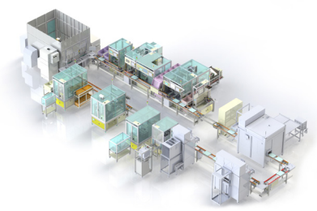
Acquired credibility with customers through smart factory assembly automation business

700 Projects

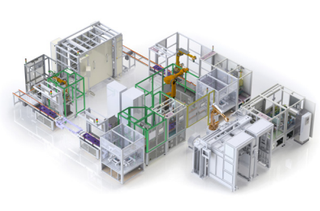
Accumulated expertise and know-how through successful completion of over 700 projects

98 Portfolios

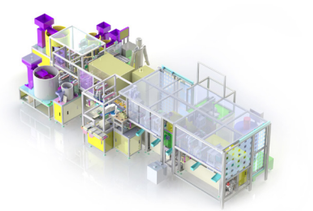
Successful deployment and installation of overseas production lines in 12 cities and in 7 countries (USA, Germany, Mexico, China, Romania, Iran, India)



• Inverter Stack Line



• HKMC Gluing Line



• Assembling and Inspecting Automobile Clusters

• Key Customers

Automotive Parts				Automotive	Heavy Industries	
HYUNDAI MOBIS	HYUNDAI KEFICO	Continental The Future in Motion	SCHAEFFLER	KIA	현대중공업	ASE GROUP
Komtec	GMB	DONGHEE Guide the Vehicles	Valeo	gm	LS ELECTRIC	posco
TI Automotive	LG Innotek	AJIN ELECTRONIC COMPONENTS CO., LTD			vatech	rayence

Autonomous Mobile Platform, GoCart™

YUJIN ROBOT GoCart is an autonomous mobile platform that can be used in various dynamic environments and logistics applications. With its proprietary 3D ToF LiDAR-based intelligent navigation, it supports precise navigation and obstacle avoidance without using any artificial markers.

Agility & Flexibility
- Intelligent mobile platform for various environments such as factory, warehouse, hospital and senior living facility

Simple Installation & Integration
- Shorter and cost-efficient installation and deployment time compared to traditional AGV system
- Easy system Integration and interface for distributors and customers via Software Development Kit (SDK) and APIs

Safety & Reliability
- Fast obstacle recognition and avoidance using multiple sensors
- ISO13482 certified proprietary safety solution ideal for public facilities

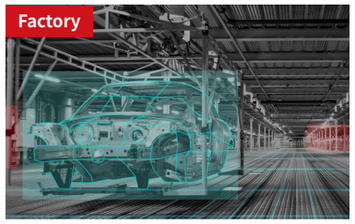
Elevator & Automatic Door Interface with FMS
- Multi-floor operations interfacing elevators and automatic doors
- Can operate in limited access areas such as operating rooms and intensive care units

Key Features

- ✓ Fleet Management System (FMS)
- ✓ 3D SLAM & Navigation based on YUJIN 3D LiDAR
- ✓ Smart interface with automatic doors and elevators via FMS
- ✓ Industry-accredited PL-d level safety system (ISO 13482, ISO 3691-4)

Applications

Factory



- Parts and raw material delivery for assembly lines
- Mobile pick-and-place with manipulators

Warehouse



- Pallets, boxes, and individual items delivery
- DPS (Digital Picking System) cart integration

Healthcare



- Sterilized OT tools, lab samples
- Medicine, waste, and meal delivery

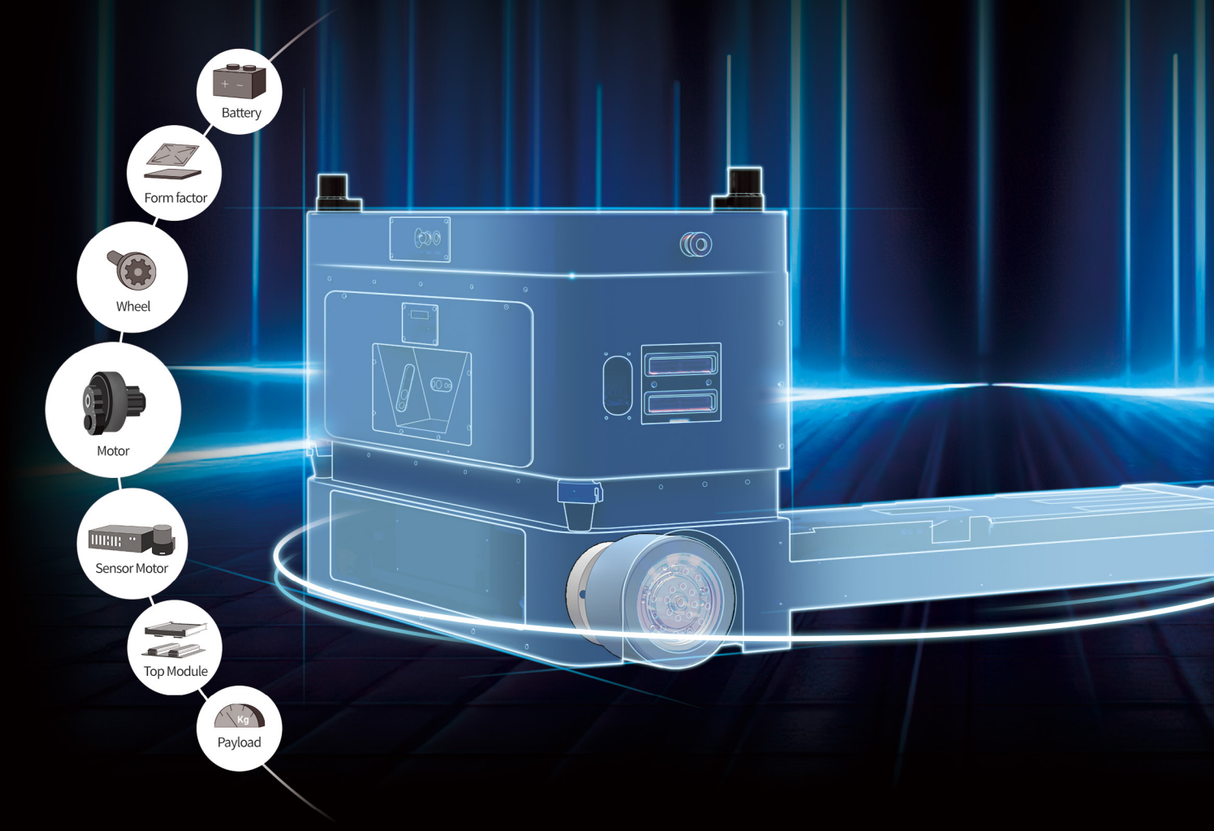


GoCart180 GoCart250 GoCart500/1000

Flexible & Customizable AMR Platform

Custom AMR

Based on YUJIN ROBOT's proprietary autonomous mobility technology, YUJIN ROBOT offers Custom AMR solutions that meet the various needs of customers including, but not limited to, heavy payload and low-height customizable platforms where customers can choose AMR specifications that is most suitable for their applications



YUJIN ROBOT's Key Value Proposition

39 years

1st generation leading robotics company with over 39 years of successful business, know-how and experience.

ISO 13482

1st company in Korea to acquire ISO13482 certification for autonomous mobile robots

Core autonomous mobile technology including but not limited to 3D LiDAR sensor, SLAM, navigation and safety controllers, developed in-house based on own proprietary intellectual technology.

Integration with FMS robot control system

Integration with elevators and automatic doors through smart interface module

Offering various types of customized AMR solutions such as heavy payload AMR, low-height AMR and other customized AMR solutions

Specifications




		GoCart180	GoCart250
Physical Specification	Color	Gray	Gray
	Dimension (L x W x H)	730 x 525 x 420 mm (28.74” x 20.66” x 16.53”)	924 x 724 x 420 mm (36.37” x 28.50” x 16.53”)
	Weight	Around 130 kg (286.60 lbs)	Around 210 kg (462.97 lbs)
	Loading Surface Dimension (L x W)	Max. 646 x 441 mm (25.43” x 17.36”)	Max. 840 x 640 mm (33.07” X 25.19”)
Performance	Max. Payload	On flat floor: 180 kg (396.83 lbs) On slope/threshold: 120 kg (264.55 lbs)	On flat floor: 250 kg (551.15 lbs) On slope/threshold: 200 kg (440.92 lbs)
	Operating Speed	Max. 1 m/s	Max. 1 m/s
	Traversable Step	Max. 10 mm (Based on 120 kg Payload)	Max. 15 mm (Based on 200 kg Payload)
	Traversable Gap	Max. 30 mm (Based on 120 kg Payload)	Max. 30 mm (Based on 200 kg Payload)
	Slope	4.76˚	4.76˚
	Operating Range	24,000 m² (200 x 120 m)	24,000 m² (200 x 120 m)
	Noise	Below 60 dB	Below 60 dB
	Safety Standards	CE, ISO 13482 (10 safety functions complying to ISO 13849-1)	CE, ISO 13482 (10 safety functions complying to ISO 13849-1)
Electrical Specification	Input (Charger Part)	AC 100 ~ 240 V, 50/60 Hz, 8.5 A	AC 100 ~ 240 V, 50/60 Hz, 8.5 A
	Output (Charger Part)	DC 29 V, 50 A	DC 29 V, 50 A
	Input (Robot Part)	DC 23 ~ 29 V (Nominal 25.8 V)	DC 23 ~ 29 V (Nominal 25.2 V)
	Consumption Current	About 8 A (different from environment)	About 9 A (different from environment)
	Allowable Voltage	23 V min (If below 23 V, automatically power off)	23 V min (If below 23 V, automatically power off)
Environmental Specification	IP Class	IP20	IP20
	Wi-Fi Frequency	2.412 ~ 2.472 GHz, 5.180 ~ 5.240 GHz, 5.260 ~ 5.320 GHz, 5.500 ~ 5.700 GHz (Indoor use only)	2.412 ~ 2.472 GHz, 5.180 ~ 5.240 GHz, 5.260 ~ 5.320 GHz, 5.500 ~ 5.700 GHz (Indoor use only)
	Wi-Fi Power	Wi-Fi Power 2.4 GHz band: below 20 dBm (EIRP) 5 GHz band: below 23 dBm (EIRP)	Wi-Fi Power 2.4 GHz band: below 20 dBm (EIRP) 5 GHz band: below 23 dBm (EIRP)
Battery	Runtime	• Without load: approx. 9 hours • With load: approx. 7 hours	• Without load: approx. 10 hours • With load: approx. 8 hours
	Recharging Time	Approx. 2 hours (10 % ~ 90 %)	Approx. 2 hours (20 % ~ 80 %)




		GoCart180	GoCart250
Charging Station Specifications	Color	Gray	Gray
	Dimension (L x W x H)	510 x 220 x 395 mm(20.07” x 8.66” x 15.55”)	510 x 220 x 395 mm(20.07” x 8.66” x 15.55”)
	Weight	12 kg (26.45 lbs)	12 kg (26.45 lbs)
	Input	AC 100 ~ 240 V, 50/60 Hz, 14 A	AC 100 ~ 240 V, 50/60 Hz, 14 A
	Electric Current	50 A	50 A
	Voltage	DC 29 V	DC 29 V
	Power Consumption	Max. 1,600 W	Max. 1,600 W





GoCart1000	GoCart1500	GoCart200 Omni
Gray	Gray	Stainless Steel (Natural color)
1340 x 940 x 320 mm (52.75” x 37.00” x 12.59”)	1353 x 1100 x 320 mm (53.26” x 43.30” x 12.59”)	1000 x 800 x 346 mm (39.37” x 31.49” x 13.62”)
Around 400 kg (881.84 lbs)	Around 400 kg (881.84 lbs)	Around 175 kg (385.80 lbs)
Max. 1100 x 770 mm (43.30” x 30.31”)	Max. 1222 x 822 mm (48.11” x 32.36”)	Max. 897 x 697 mm (35.31” x 26.73”)
On flat floor: 1000 kg (2,204.62 lbs) On slope/threshold: 800 kg (1,763.69 lbs)	• On flat floor: 1500 kg (3,306.93 lbs) • On slope/threshold: 1200 kg (2,645.54 lbs)	On flat floor: 200 kg (440.92 lbs)
Max. 1 m/s	Max. 1 m/s	Max. 1 m/s
Max. 5 mm (Based on 800 kg Payload)	Max. 5 mm (Based on 1200 kg Payload)	Max. 10 mm
Max. 10 mm (Based on 800 kg Payload)	Max. 10 mm (Based on 1200 kg Payload)	Max. 30 mm
2˚	2˚	2.78˚
24,000 m² (200 x 120 m)	24,000 m² (200 x 120 m)	24,000 m² (200 x 120 m)
Below 60 dB	Below 60 dB	Below 60 dB
CE, ISO 3691-4	CE, ISO 3691-4	CE, ISO 13482 (10 safety functions complying to ISO 13849-1)
AC 100 ~ 240 V, 50/60 Hz, 17 A/230 V AC	AC 200 ~ 240 V, 50/60 Hz, Max. 4KVA Max.18(AC 220 V)	AC 100 ~ 240 V, 50/60 Hz, 6.8 A
DC 58 V, 42 A	DC 58 V, 60 A	DC 29 V, 21 A
DC 46 ~ 58 V (Nominal 51.66 V)	DC 46 ~ 58 V (Nominal 51.7 V)	DC 23 ~ 29 V (Nominal 25.2 V)
About 7 A (different from environment)	About 9 A (different from environment)	About 8 A (different from environment)
46 V min (If below 46 V, automatically power off)	46 V min (If below 46 V, automatically power off)	23 V (If below 23 V, automatically power off)
IP20	IP20	IP15
2.412 ~ 2.472 GHz, 5.180 ~ 5.240 GHz, 5.260 ~ 5.320 GHz, 5.500 ~ 5.700 GHz (Indoor use only)	• 2.412 ~ 2.472 GHz, • 5.180 ~ 5.240 GHz, 5.260 ~ 5.320 GHz, • 5.500 ~ 5.700 GHz (Indoor use only)	2.412 ~ 2.472 GHz, 5.150 ~ 5.250 GHz, 5.745 ~ 5.825 GHz
Wi-Fi Power 2.4 GHz band: below 20 dBm (EIRP) 5 GHz band: below 23 dBm (EIRP)	• Wi-Fi Power 2.4 GHz band: below 20 dBm (EIRP) • 5 GHz band: below 23 dBm (EIRP)	Wi-Fi Power 2.4 GHz band: below 20 dBm (EIRP) 5 GHz band: below 23 dBm (EIRP)
• Without load: approx. 9 hours • With load: approx. 7 hours	• Without load: approx. 11 hours • With load: approx. 7 hours	• Without load: approx. 10 hours • With load: approx. 8 hours
Approx. 2 hours (10 % ~ 90 %)	Approx. 2 hours 20 minutes (20% ~ 80%)	Approx. 4 hours (10 % ~ 90 %)





GoCart1000	GoCart1500	GoCart200 Omni
Gray	Gray	Stainless Steel (Natural color)
510 x 220 x 395 mm (20.07” x 8.66” x 15.55”)	781 x 446 x 360 mm (30.74” x 17.55” x 14.17”)	450 x 150 x 378 mm (17.71” x 5.90” x 14.88”)
12 kg (26.45 lbs)	62 kg (136.68 lbs)	11 kg (24.25 lbs)
AC 100 ~ 240 V, 50/60 Hz, 17 A(at 230 V AC)	AC 200 ~ 240 V, 50/60 Hz, Max. 4 KVA Max.18 (AC 220 V)	AC 100 ~ 240 V, 50/60 Hz, 6.8 A
42 A	60 A	21 A
DC 58 V	DC 58 V	DC 29 V
2,352 W	3,480 W	600 W

Automatically charging through visual marker attached to the front of Charging Station.
※Specifications and design are subject to change without any prior notice.

FMS

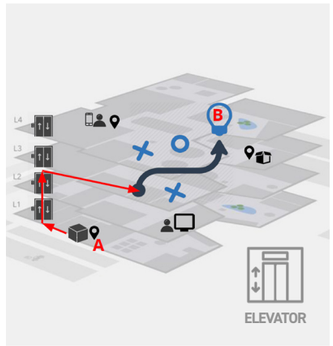
Fleet Management System

YUJIN FMS (Fleet Management System) is YUJIN Robot's proprietary centralized multi-robot management software suite running on a server. **FMS assists deployment of Autonomous Mobile Robots in multi-floor buildings, supports on-demand and scheduled job assignments to optimal robot workers** via GUI, prevents deadlocks and bottlenecks in traffic, bridges with other IoT systems (MES, ERP, etc.), and allows the fleet to scale up as necessary.



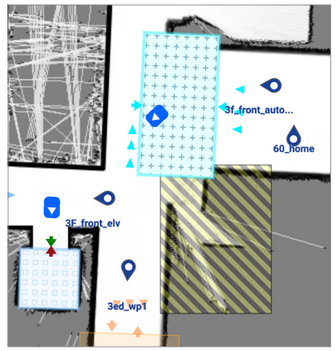
FMS Server

FMS Server is a mini PC device containing Concert, the FMS Server software. It manages the entire FMS network connecting the user PC, mobile robots, elevators/automatic doors, and MES/WMS for optimal robot workflow.



Balcony

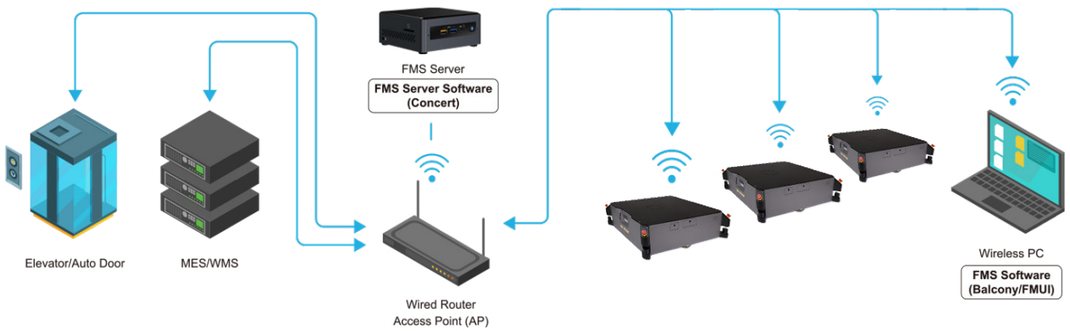
Balcony, a scheduling FMS Software, provides the GUI enabling the user to assign tasks to each robot. Jobs can be reserved or executed repeatedly, and robots put on standby as necessary. Through Balcony, you may view the job history and monitor the robot status in real time.



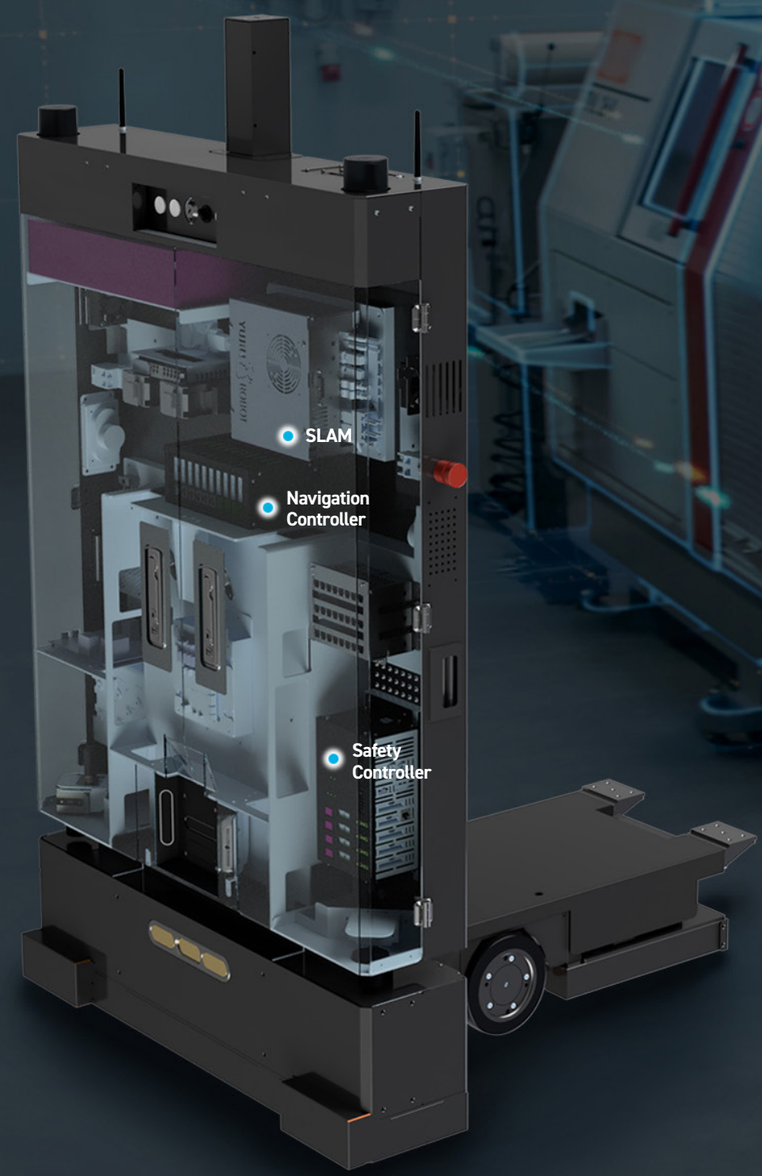
FMUI

FMUI, a map-based FMS Software, provides the GUI for setting key locations, such as starting points, waypoints, destinations, charging stations, and prohibited zones. You can also mark and edit the elevators and automatic doors. FMUI enables robots to locate themselves with respect to the map and plan paths accordingly.

Sytem Configuration



Robotization Solution



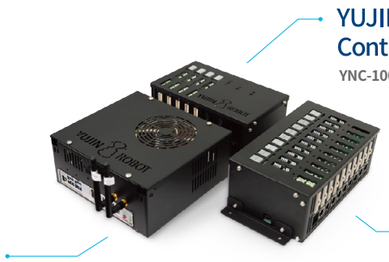
Factory Automation | Logistics Automation

Consulting | Simulator | API | Development | Training

1 Component Solution

A one-stop solution based on autonomous mobility technology to build your own AMRs





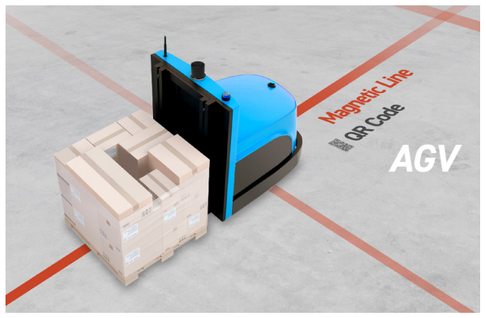
YUJIN Navigation Controller
YNC-1000

YUJIN Safety Controller
YSC-1000

YUJIN SLAM
YSL-1000

2 AGV Retrofit Solution

Retrofits AGVs into Autonomous Mobile Robot





3 Commercial Equipment Robotization Solution

A one-stop solution that uses robotization to automate industrial vehicles.





YUJIN SLAM(YSL-1000)

Functionality	Mapping, route planning & Obstacle avoidance
Input Data	LiDAR Data (Angle, Range), Odom Data (Encoder, IMU)
Output Data	Map (PNG File, Key Frame), adjusted Pose (x, y, theta)
Dimension (L x W x H)	198.2 mm x 196.8 mm x 89.0 mm (7.80" x 7.74" x 3.50")
Weight	1.7 kg (3.74 lbs)
Board General Data	• CPU: Intel i7-7700 • Memory: DDR4 8GB • Ports: HDMI (2 ea), USB 3.0 (4 ea), Ethernet (2 ea) • Slot: PCIe, Mini PCIe, mSATA • Power: DC 12 V, 5.5 A
Communication Protocol	• Input Data: UDP (User Datagram Protocol) • Output Data: WebSocket or PLC *PLC may have limited functions.
Interface I/O	Ethernet RJ-45
Maximum Mobile Platform Speed in Mapping (SLAM) Mode	0.5 m/s ~ 0.6 m/s
Maximum Mobile Platform Speed in Mapping (Localization) Mode	2 m/s
SLAM/Localization Accuracy	Typically ± 10 mm, ± 1°
Pose Update Rate	25 Hz
Mapping Coverage	700 m x 700 m

YUJIN Navigation(YNC-1000)

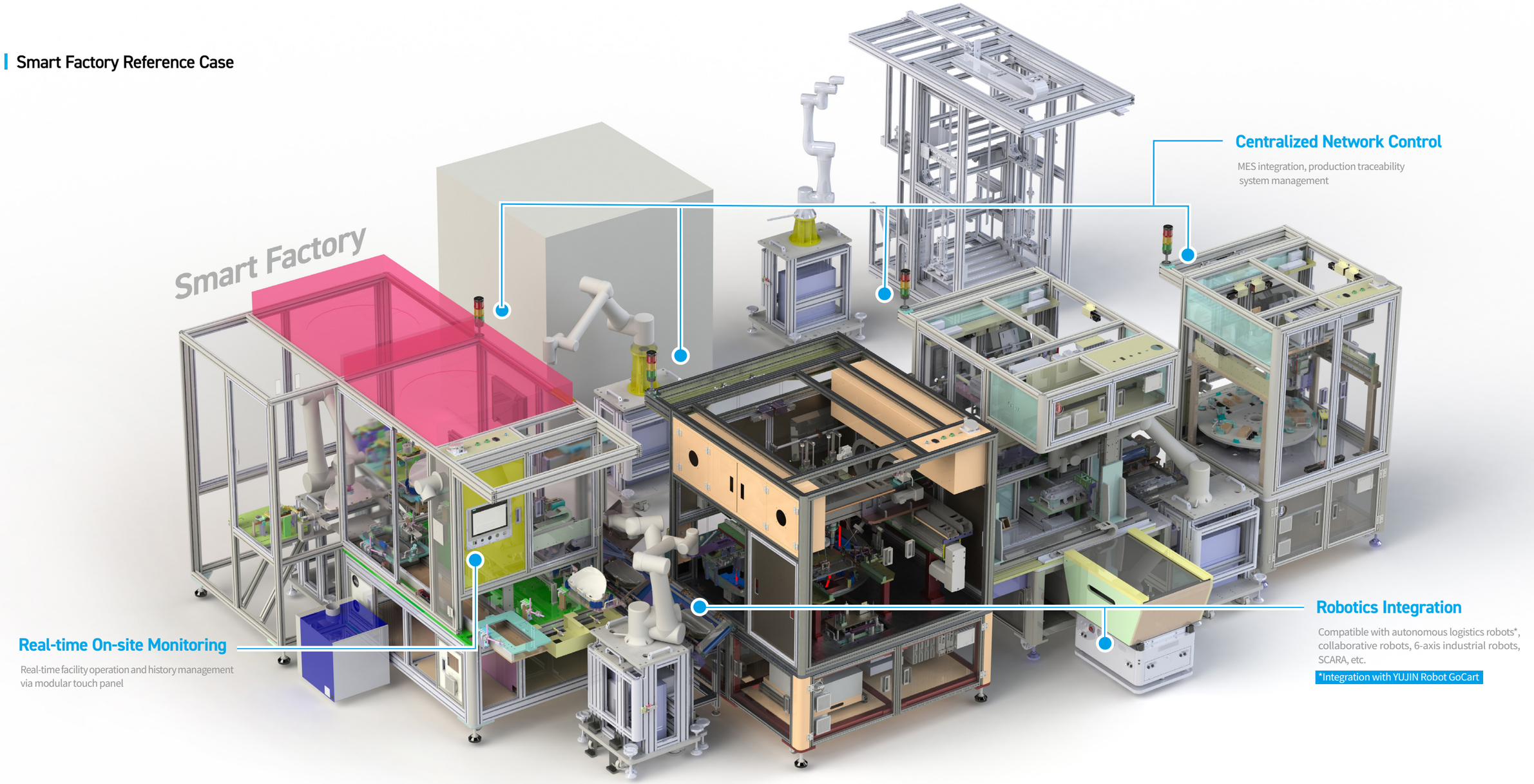
Functionality		Localization, support button & GPIO interface
Dimensions (L x W x H)		203.7 mm x 122.2 mm x 84.4 mm (8.01" x 4.81" x 3.32")
Weight		1.21 kg (2.66 lbs)
Kinematics		Differential drive, mecanum drive
Accuracy		± 10 mm, ± 1°
Obstacle Avoidance Rate		10 Hz
Path Following Rate		10 Hz
Compatible Laser Scanners	2D LiDAR	SICK TiM 510, 571
	3D LiDAR	YUJIN YRL3-Series
Motor Drives		RS485, Ethernet/IP
User Configurable I/Os		• 8 dig. in / 8 dig. out • 2 anal. in / 2 anal. out
Input Voltage		DC 24 ~ 58 V
Power Consumption		100 W

YUJIN Safety(YSC-1000)

Functionality	Functional Safety
Dimensions (L x W x H)	216.8 mm x 122.6 mm x 84.4 mm (8.53" x 4.82" x 3.32")
Weight	1.07 kg (2.35 lbs)
Input Time	≥ 50 ms
Type of Output	• Magnetic Contactor A, B • Digital I/O, I2C, SPI, UART, RS232, RS485, CANopen • Debug Port (UART) • JTAG
Response Speed	≤ 200 ms
Input Voltage	DC 24 V
Power Consumption	50 W

※Specifications and design are subject to change without any prior notice.

Smart Factory Reference Case





Transport Automation System

You can automate the transfer process by adopting the GoCart with a customized top module.



Delivering heavy materials in Factory

GoCart AMR, Delivering heavy-weight materials at a tool manufacturer.



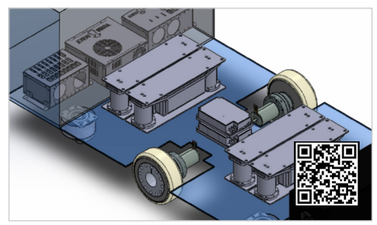
Injection Moulded Container Delivery Process Automation

Automated loading & unloading processes by the customized top module, sensors.



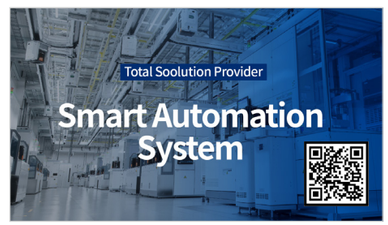
Digital Picking System (DPS)

Integration of DPS order picking solution with GoCart autonomous mobile robot increases overall productivity for warehousing logistics applications.



Introducing YUJIN Custom AMR Service

Custom AMR Service, from Low-height, Heavy payload to Customized AMR that can optimize the efficiency of the production line.



Smart Automation System

Our diverse design expertise in the automotive, semiconductor and heavy industry sectors enables us to provide the best automation solutions.

One Destination, Your Vision Delivered

YUJIN ROBOT Co., Ltd.

33, Harmony-ro 187 beon-gil, Yeonsu-gu, Incheon, Republic of Korea (22013)

T +82-32-550-2300 F +82-32-550-2301 M ams_sales@yujinrobot.com