Company Introduce

Your partner for automation System Innovation Synchronized.

Your partner for Automation with i-AGV

Since the establishment of SIS COPORATION in 2004, we have been pursuing the infinite passion to make a conventional & intuitive automated system which everyone can use for industrial innovation. For more than fifteen years, SIS CORPORATION has been a leading solution provider who covers a wide range of industrial applications, improving its patented technologies.

By pursuing new technologies and industrial applications, SIS CORPORATION continuously flows the promising spirit of its founder. System engineers in a variety of fields jointly work to create innovative and more advanced system which enables us to be a reliable solution partner all around the world. Every system as a dedicated machine up to customer's own requirements makes us system specialists who take up all the challenges against new queries.

We ensured that our strategic approaches with personnel, expertise and trustworthy careers to develop oneself meet the needs of our business fields ever.

With our certificates including ISO 9001 for design, assembly, installation and other technical services of automated system, we guarantee the reliable and sustainable solutions to your particular applications.

SIS

SOFTWARE

The i-AGV is equipped with a special software, which is based on SLAM technology.

SLAM TECHNOLOGY FOR ACCURATE NAVIGATION

Simultaneous Localization and Mapping is a software and hardware technology, which enables the i-AGV to map its environment while positioning itself in that environment. When using SLAM, you do not need any infrastructure to direct the i-AGV. It can navigate autonomously through your factory or warehouse.

The software allows you to independently program the i-AGV and add or change any commands. Furthermore, it is possible to add other devices, such as e.g. a cleaning robot, to the software to enable both devices to navigate via the same map.

Our partnership is fully in line with our believe that product innovation only comes about through collaboration with the right strategic partner

SAFETY

The i-AGV meets the most stringent safety requirements. High-quality safety components are installed to ensure it can safely navigate through manned spaces.

EXTENSIVE RISK ASSESSMENT

We have performed extensive risk assessments and a calculation to evaluate the safety-related parts of our control systems. The latter resulted in an achievement of outstanding performance.

BUILD YOUR OWN AGV

Turnkey Custom Solution – "build your own AGV". A modularised, pre-defined and scalable solution built in close cooperation with the customer. The vehicle has been designed so as to allow a choice of elevator, chassis size, loads, length of route and communication options.

CONTROL AND MANAGEMENT

Control and management system – "a fleet of automatic vehicles under your control". The i-AGV is fitted with a management control system which ensures the full integration of the truck with the existing intralogistic system: monitoring statuses and stocks, as well as the AGV fleet for location and battery charging levels. Europa Systems as the general contractor delivers and provides advice on the most effective and optimal forms of truck communication and navigation systems (wi-fi, laser, tape).

POWER SUPPLY

The i-AGV is equipped with the latest super capacitor technology and contactless energy transmission.

It is possible to combine these forms of power supply in a hybrid version. In such case we completely eliminate maintenance operations while the truck is in use (no operator involvement is required in order to charge the batteries). Control and management system - "a fleet of automatic vehicles under your control". The i-AGV is fitted with a management control system which ensures the full integration of the truck with the existing intralogistic system: monitoring statuses and stocks, as well as the AGV fleet for location and battery charging levels. The systems as the general contractor delivers and provides advice on the most effective and optimal forms of truck communication and navigation systems (wi-fi, laser, tape).

SAFETY SYSTEM

To make sure of safe driving system, a plentyof safety features mounted on iAGV protect itself and human operaors.

Stereo Vision Camera

Stereo vision camera with high definition 3D visual localization provides depth sensing and motion tracking to prevent from accident happened unexpectedly.

Laser Sensor

It measures the distance with any obstacle around the vehicle by a couple of sensors at the one-sided corner of vehicle which has 360˚range of detection for each other.
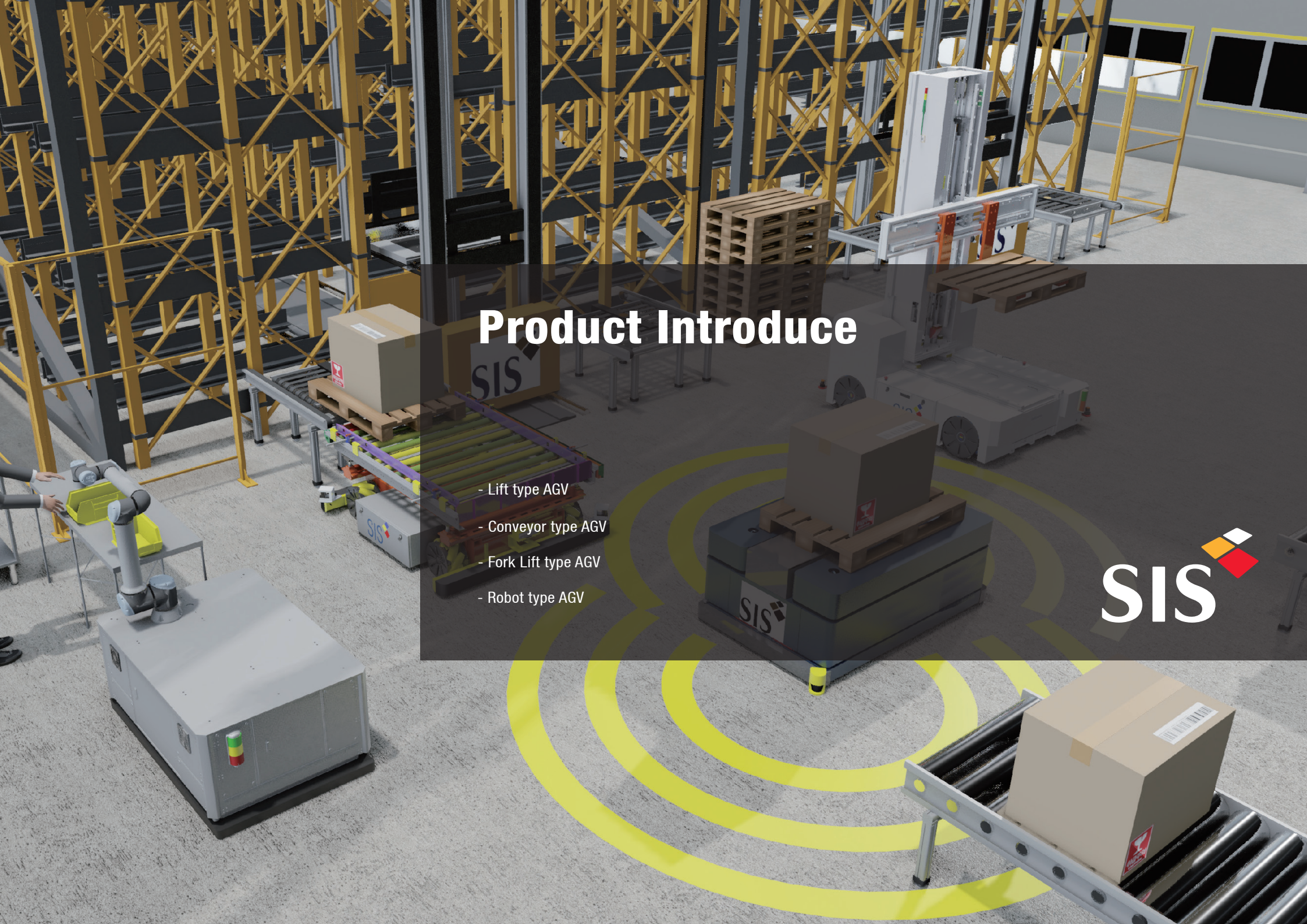
Your choice of a plenty of safty features will make iAGV protect itself and human operators.
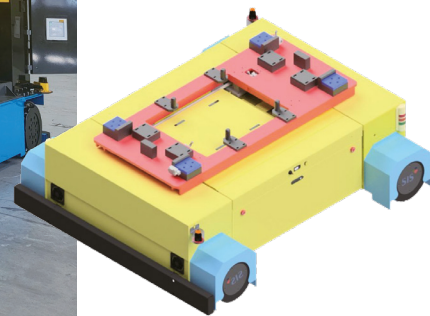
Product Introduce

- Lift type AGV

- Conveyor type AGV

- Fork Lift type AGV

- Robot type AGV

![SIS]

Lift Type AGV

This Lift type AGV is able to lift even heavier products than itself. Those huge products can be lifted up as high as you want. It is convenient to move the products between high and low positions.

Payload

5T ↑

Max. Speed

1.5m/s

Type

Lift Type AGV

Stopping Precisioin

+- 5mm

Duration of Endurance

4H ↑

Dimensions	L1,800*W2,430*H420mm / Customizable
Driving Type	Magnetic Guided, Laser, QR
Navigation mode	All direction
Driving mode	Self-driving, Manual
Charging mode	Auto-Charging System
Running speed	0.1m/s ~ 1.5m/s
Carrying capacity	≤3 ton / Customizable
Climbing ability	Degree
Navigation accuracy	±10.0mm
Driving power supply	DC12V 24V
Safety device	Streo Vision Camera, Laser Sensor
Safe distance	Not more than 1m, emergency braking ±20mm
Alarm form	Acousto-optic alarm
Battery warning	Auto-Charging System
UI	LED
Use environment	Indoor, temperature: 0-35°C, relative humidity: 20% - 80%
Designed life	10 years
Safety Protection	Laser obstacle protection / sound alarm / Bumper strip / Scram button.

Conveyor Type AGV

The SIS Conveyor AGV is great for expanding conveyor systems. This unfixed conveyor is able to serve several fixed conveyors.

Payload

KG

5T ↑

Max. Speed

1.5m/s

Type

Conveyor Type AGV

Stopping Precisioin

+- 5mm

Duration of Endurance

4H ↑

Dimensions	L1,600*W2,150*H740mm / Customizable
Driving Type	Magnetic Guided, Laser, QR
Navigation mode	All direction
Driving mode	Self-driving, Manual
Charging mode	Auto-Charging System
Running speed	0.1m/s ~ 1.5m/s
Carrying capacity	≤ 3 ton / Customizable
Climbing ability	Degree
Navigation accuracy	±10.0mm
Driving power supply	DC12V 24V
Safety device	Streo Vision Camera, Laser Sensor
Safe distance	Not more than 1m, emergency braking ±20mm
Alarm form	Acousto-optic alarm
Battery warning	Auto-Charging System
UI	LED
Use environment	Indoor, temperature: 0-35°C, relative humidity: 20% - 80%
Designed life	10 years
Safety Protection	Laser obstacle protection / sound alarm / Bumper strip / Scram button.

Fork Lift Type AGV

This Fork Lift type AGV is no need for the employee to leave the picking area or drive the truck. It is convenient to move a pallet with heavy products.

Payload

5T ↑

Max. Speed

1.5m/s

Type

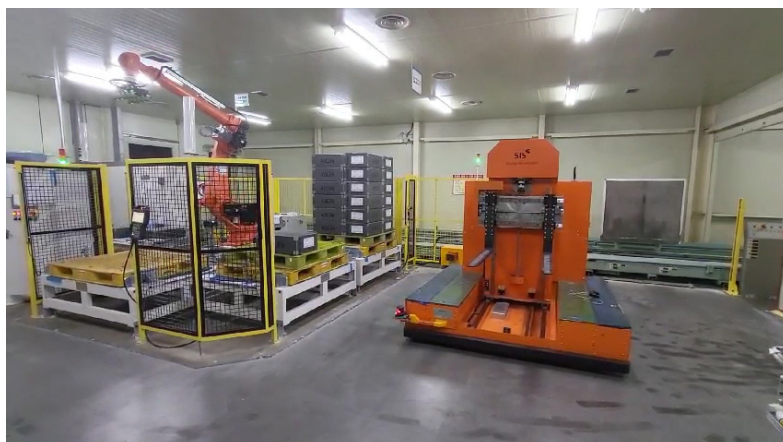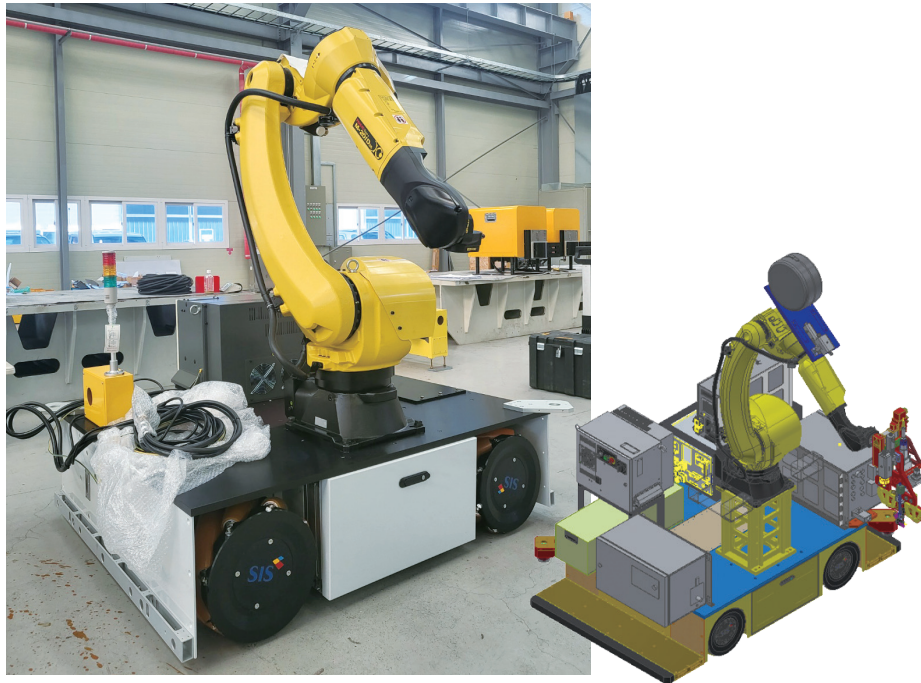Fork Lift Type AGV

Stopping Precisioin

+- 5mm

Duration of Endurance

4H ↑

Dimensions	L / Customizable
Driving Type	Magnetic Guided, Laser, QR
Navigation mode	All direction
Driving mode	Self-driving, Manual
Charging mode	Auto-Charging System
Running speed	0.1m/s ~ 1.5m/s
Carrying capacity	≤ 3 ton / Customizable
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Safe distance	Not more than 1m, emergency braking ±20mm
Alarm form	Acousto-optic alarm
Battery warning	Auto-Charging System
UI	LED
Use environment	Indoor, temperature: 0-35°C, relative humidity: 20% - 80%
Designed life	10 years
Safety Protection	Laser obstacle protection / sound alarm / Bumper strip / Scram button.

Robot Type AGV

Collaborative-Robot can be assembled with AGV. Co-bot can be moved by AGV. It can perform co-bot's tasks that require movement.

Payload 5T ↑

Max. Speed 1.5m/s

Type Robot Type AGV

Stopping Precisioin +- 5mm

Duration of Endurance 4H ↑

Dimensions	L / Customizable
Driving Type	Magnetic Guided, Laser, QR
Navigation mode	All direction
Driving mode	Self-driving, Manual
Charging mode	Auto-Charging System
Running speed	0.1m/s ~ 1.5m/s
Carrying capacity	≤ 3 ton / Customizable
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