

The logo for Hinson, featuring the word "HINSON" in white, bold, sans-serif capital letters. The letter "i" is stylized with a dot above it. The logo is set against a blue diamond-shaped background.

HINSON

The title "Enterprise Profile" is written in a large, bold, blue sans-serif font. It is centered on the right side of the slide. Below the title is a thin green horizontal line.

Enterprise Profile

The company name "Guangdong Hinson Technology Co. Ltd" is written in a blue sans-serif font. It is centered below the title. Below the company name is a thin green horizontal line.

Guangdong Hinson Technology Co. Ltd

A horizontal navigation menu consisting of several blue diamond-shaped icons pointing towards the right, followed by the text "| company | product | quality | market | Serve |" in a blue sans-serif font.

| company | product | quality | market | Serve |



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01

PART 01

Enterprise

Enterprise introduction



Guangdong Hinson Technology Co. Ltd is headquartered in Guangdong, China. It is a high-tech enterprise integrating R&D, design, production and sales of industrial automation sensing and control equipment.

It is committed to providing high-quality automated sensing and control solutions. Hinson's products are widely used in automated factories, smart warehousing, automobile manufacturing and logistics, machinery and equipment, energy and environment and other fields.

Whether in industrial automation on production lines or in mobile robot navigation and safety systems, Hinson products and technologies play a key role.

They have won a good reputation in the industry for their excellent quality, high reliability, and high innovation and have become One of the outstanding suppliers of core sensing and control components in the world.

Philosophy

With the concept of "Enabling Intelligent Manufacturing" and the goal of "Intelligence, Efficiency, Accuracy, and Reliability", Hinson independently develops the vehicle motion system solution to create high-quality AGV motor drivers, LIDAR sensors, laser scanning sensors, RFID sensors, data transmission devices, line following sensors and other series of products allow customers to shorten the development cycle, help customers to take the lead in launching products to the market, and win valuable early market occupation time.

Purpose

Taking scientific and technological innovation as the driving force and helping the industry develop as the goal

Core Value

Quality is the soul of the product, and the product is the soul of the enterprise. Make products that satisfy customers with heart

Team Concept

Help industry customers develop rapidly, stabilize applications, reduce costs, and shorten development cycles



Development Path

2014

Hinson was founded in Shenzhen in 2014. In the same year, the first generation of line following sensor was developed. The first generation of "one drive two" drive First Generation RFID Sensors

2017

Expand the scale of the enterprise. Established Hinson in Foshan, Guangdong. Launched Laser Obstacle Avoidance Sensor. Simultaneously set up a 360° laser navigation project

2020

Established a branch in Suzhou, Jiangsu. Identified as "Double Soft Enterprise" "Member Unit" of Guangdong Software Industry Association. Introducing Segmentation from Multi-LiDAR

2022

Received several suppliers' excellent supply chain awards. Won the special new enterprise of Foshan City. Awarded as an innovative small and medium-sized enterprise in Guangdong Province. Awarded as a small and medium-sized technology-based enterprise in Guangdong Province.

2024

Make persistent efforts
Create another glories

Launched the "dual steering wheel" and "dual differential" magnetic navigation vehicle bottom motion control algorithm. Laser LIDAR research and development project approval.

2016

Identified as a "high-tech enterprise" 360° laser navigation LIDAR launched. Other types of sensors such as optical communication. Annual sales exceeded 30 million.

2019

Headquarters settled in Shunde High-tech Industrial Park "Director Unit" of Guangdong Intellectual Property Protection Association. Passed ISO9001 quality system certification. Passed ISO14001 environmental system certification.

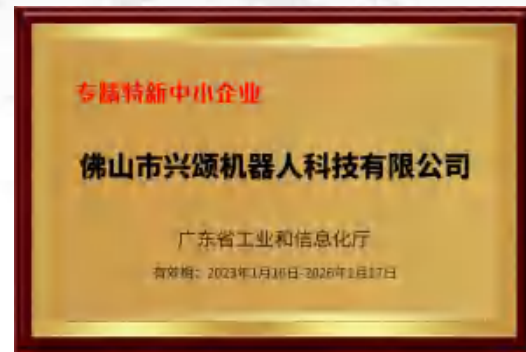
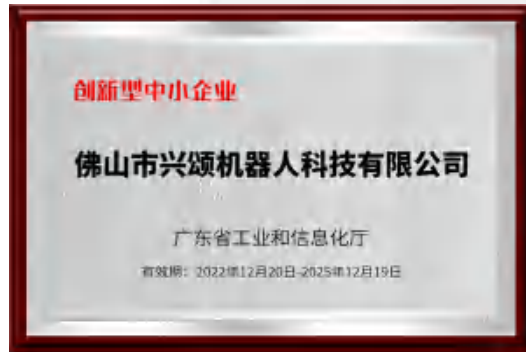
2021

Company changed from Foshan Hinson Robot Technology Co., Ltd to Guangdong Hinson Technology Co., Ltd

2023

Honor

We are well aware of the importance of innovation and the importance of intellectual property rights. Hinson has more than 50 national patents and rights registration certificates. Won many honors such as innovative enterprises in Guangdong Province, high-tech enterprises in Guangdong Province, specialized and special new enterprises in Foshan City and robot body manufacturing and cultivation enterprises in Foshan City.



02

PART 02

Product



Product Categories

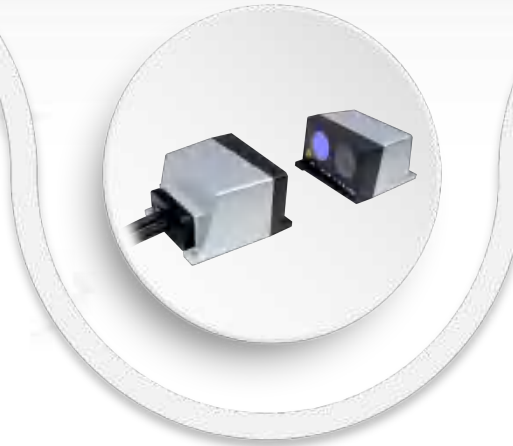
Sensor series

LIADR, laser sensor, line following sensor, RFID sensor,



Communication series

Optical data transmitter, data transmission device (Optical Communication Sensor), IO remote module, etc.



Driver series

Servo drive, DC Brushless Driver, steering wheel drive, hybrid drive

Control equipment series

IPC (industrial computer), interconnected auxiliary controller, etc.

LE series LE-50821 / LE-50711 / LE-50621

360° TOF LIDAR Sensor

The maximum scanning angle is 360°, the maximum detection distance is 50 meters radius, and the highest accuracy is $\pm 2\text{cm}$.

200KHZ measurement frequency, minimum angular resolution 0.018°

Based on innovative object surface smoothing algorithm and support noise jitter filtering level

Navigation and obstacle avoidance 2 in 1

The new "wireless power supply" technology minimizes heat loss

It supports LED data display in the scanning window, which can be set as the current IP, motor speed, scanning frequency and other parameters. It also supports setting scrolling/static display of letters and numbers in any font. Display status information more intuitively and conveniently!

$\leq 6\text{W}$ ultra-low power consumption

The product is suitable for

AGV navigation, obstacle avoidance, security area protection, contour environment recognition, overrun detection, Overflow Control and Counting



HE series HE-3081/HE-3051/ HE-3021/HE-3061/HE-3031

320° TOF LIDAR Sensor

The maximum scanning angle is 320°, the maximum detection distance is 30 meters radius, and the highest accuracy is $\pm 2\text{cm}$.

The minimum angular resolution is 0.025° , and it also supports smoothing algorithm and noise and jitter filtering level design, which can feedback the real outline of the current measured environment, friendly debugging interface, navigation and obstacle avoidance two-in-one, and supports original data and obstacle avoidance signal output at the same time.

Support output point cloud data (depth data and environment gray value in 2D environment)

At present, it is widely used in the environment positioning and recognition of AMR natural navigation. It comes with an OLED display, which can be set as the current IP, internal temperature of the sensor, motor speed, scanning frequency and other parameters. It also supports setting scrolling/static display of letters and numbers in any font. Display status information more intuitively and conveniently

$\leq 2\text{W}$ ultra-low power consumption

Support area detection at the same time, with 4 switch NPN outputs

The product is suitable for

AGV/AMR navigation, obstacle avoidance, security area protection, contour environment recognition, overrun detection, Overflow control and counting, etc.



HE-3091F series 320° TOF LIDAR Sensor

The longest measuring radius is 30 meters, the minimum angular resolution is 0.025°, and the scanning angle is 320°. It has high-speed sampling capability up to 432KHZ. It supports object surface noise filtering level settings, tailing filtering settings, and supports sensor optical cover surface coating, which can effectively reduce the adsorption of water droplets and dust, and can be used in different indoor and outdoor scenes.

Surface coating characteristics

1. Stable light transmittance;
2. Surface anti-fog;
3. Rainwater will not form beads or water beads on the surface, nor will it affect the optics;
4. Good anti-fouling and dust-proof effect, easy to clean;
5. The surface is wear-resistant;
6. When the weather is dry, the surface is not prone to static electricity.

The product is suitable for

AGV/AMR navigation, obstacle avoidance, security area protection, contour environment recognition, over-limit detection, Overflow control and counting, etc.



SE series SE-0522/ SE-0526/SE-0533/SE-0535 SE-1022/ SE-1026/SE-1033/SE-1035 270° TOF LIDAR Sensor

The scanning angle is 270°, the maximum detection distance is 10 meters,

Minimum angular resolution 0.1°

64 switching channel options, each channel can be designed with 3 different sensing ranges

Support autonomous channel switching

Passed the German TUV certification, the market has a large number of applications, strong stability

Support a variety of communication methods, support Ethernet output point cloud data

Intelligent hardware self-diagnosis and analysis function

Supports interconnection with multiple devices

About 1.4W ultra-low power consumption

Professional Hinson configuration software support

The product is suitable for

AGV navigation, obstacle avoidance, security area protection, contour environment recognition, overrun detection,

Overflow control and counting, etc.



SE-F系列 SE-0522F11/ SE-0526F11/SE-0533F11/SE-0535F11 SE-1022F11/ SE-1026F11/SE-1033F11/SE-1035F11

270° TOF LIDAR Sensor

Built-in tailing filtering algorithm

Optical cover coating can effectively reduce dust adsorption

Equipped with multiple echo functions, it can reduce false triggering of the sensor caused by rain, fog, and dust to a certain extent.

Scanning angle 270°, maximum detection distance 10 meters,

Minimum angular resolution 0.1°

64 switching channel options, each channel can be designed with 3 different sensing ranges

Support independent channel switching

The software has the function of "drawing in the air" (Model: SE-1022F16/SE-0522F16)

The product is suitable for

AGV car navigation, obstacle avoidance, security area protection, contour environment recognition, over-limit detection, Overflow control and counting, etc.



DE series DE-4211/ DE-4611/DE-4311/DE-4511

120° TOF LIDAR Sensor

120° scanning angle, up to 4 meters detection distance,

The 4-wire interior adopts mechanical rotary scanning, and the sensing range can be set arbitrarily

Minimum angular resolution 0.1°

64 switching channel options, each channel can be designed with 3 different sensing ranges

Support output point cloud data

Intelligent hardware self-diagnosis and analysis function

Supports interconnection with multiple devices

≤2W ultra-low power consumption

Professional Hinson configuration software support

The product is suitable for

AGV navigation, obstacle avoidance, security area protection, contour environment recognition, overrun detection, Overflow control and counting, etc.



SPR series Optical distance sensor

T0F technology

Extremely low power consumption <1W

1mm resolution

With extremely high measurement frequency of 144K

< 10ms response time, fast response speed

When reflectivity $\geq 90\%$, maximum measuring distance is 10m

High-precision ranging technology with a repeatability of $\pm 10\text{mm}$

IP65 protection level, excellent dustproof and waterproof performance,
usable indoors and outdoors

One-click teaching button to adjust distance, easy and quick debugging

Infrared detection light source, strong anti-interference ability

The sensor outlet adopts a 270° rotatable joint, which is more suitable for
various compact installation spaces.

The product is suitable for

In scenes such as production lines and conveyor belts, distance measurement and position
detection of objects can be performed

Range detection of robot working range

Calculate the distance to objects, obstacles, walls or the ground around the robot, etc.



PHR series Laser distance sensor

3KHz update rate

High-precision repeatability of 1 mm/second

Supports movement rate measurement up to 12 meters/second

High reliability, maintaining ± 2 mm accuracy even within the longest range (200 meters)

With IP65 waterproof rating, SSI, CANOpen and Ethernet interfaces, it can adapt to more usage scenarios

With the help of the operable display, distance values and configuration parameters can be viewed intuitively and quickly

Humanized design, hard metal aluminum shell and fixed bracket make installation and replacement of equipment easier

The product is suitable for

Positioning and moving automation components, moving and lifting axes of stacker equipment, gantry suspension bridges and pulleys

Electroplating equipment, elevators, cranes, cranes and other mobile units



Vision sensor series

QR code sensor (code reader)

With high-definition imaging and high-speed image processing capabilities

110 fps processing frame rate, maximum read speed 110 code/second

Comes with LED light source, soft light, reducing the impact of low light environment

Supports DM QR code, which has the characteristics of high density, strong anti-fouling ability, and diverse coding.

Supports multiple triggering methods, automatic sensing, command triggering, etc.

The product is suitable for

AGV/AMR positioning navigation, industrial automation guidance, measurement, defect detection, automatic sorting, pallet scanning,

Scenario applications in automation fields such as picking and parcel sorting



OPT series

Long distance optical data transmitter

The longest transmission distance of cross detection is 0.1~300 meters (80/150/300m available)

Support up to 100Mbit/s bandwidth transmission, support full-duplex communication

Support signal strength display, automatic adjustment of transmission power

Integrated laser-assisted calibration and level calibration, back fixed plate adjustment, to achieve precise docking, minimizing installation and calibration time.

Support monitoring the status and signal strength of both sides of the interconnected equipment, optical path interruption frequency, optical path data verification, high and low temperature warning of equipment, etc.

The product is suitable for

It is used in scenarios where stacker cranes, rack manipulators, aerial cranes, and cranes in the vertical warehouse need to move quickly and require long-distance data transmission



OPS series optical data transmitter

There are four transmission distances to choose from, namely 2 meters, 5 meters, 10 meters, and 30 meters.

100Mbit/s Ethernet optical communication rate, supports any protocol

Support mainstream industrial control buses (Profinet, Ethercat)

Fast connection, short waiting time, device reconnection <50ms

Stable data transmission under fast moving conditions

There are no restrictions on device connection, and can be connected to any network device with a network cable such as laser sensors, servo drives, PLCs, cameras, etc.

The product is suitable for

It is mainly used in AGV docking, short-distance shuttles in small three-dimensional warehouses, rack manipulators, cranes and small overhead cranes, etc. in scenarios that require fast movement and short-distance data transmission.



OPCA series OPCA-CNF/OPCA-N8F/OPCA-P8F
OPCA-CNS/OPCA-N8S/OPCA-P8S

Data Transmission Device

Support RS485\RS232 communication mode, the protocol is transparent and free

Optional switch mode, 8-way input, 8-way output

Strict communication verification to ensure that the receiving end outputs correct and complete data

The longest transmission distance is 4 meters,

Visual deviation angle $\pm 15^\circ$

Support switch NPN/PNP level



The product is suitable for

Production line trolley docking, mobile ceiling trolley, conveyor belt equipment, stacker equipment, etc.

MGS series CNS-MGS-080N/CNS-MGS-160N Line Following Sensor

Using fluxgate technology, compared with traditional Hall detection, the accuracy is higher and more stable

Displacement signal output, the detection accuracy can reach 1mm, and the body swing is smaller during navigation

The signal detection output response time is less than 5ms, which can be used for track deviation correction during high-speed operation

Simultaneous detection of N-pole magnetic stripe and S-pole, or separate detection can be set

0-9, a total of 10 sensitivity adjustment gears, which can be set according to different installation heights

Compact structure design, reliable detection under high frequency vibration

Support RS-232, CAN bus and switch output mode, support customized CAN open

Supports interconnection with multiple devices

The product is suitable for

AGV with magnetic navigation conditions



直线头可选择



MLS series

CNS-MLS-160N/CNS-MLS-320N/CNS-MLS-480N/CNS-MLS-640N

Line Following Sensor

Displacement signal output, the detection accuracy can reach 1mm

Multiple detection ranges are optional, up to 640mm, which can be used for large AGV

Signal detection output response time is less than 5ms

Can be used for AGV navigation positioning and inertial navigation magnetic nail correction

0-9, a total of 10 sensitivity adjustment gears, which can be set according to different installation heights

Compact structure design, reliable detection under high frequency vibration

Support RS-232, CAN bus and switch output mode, support customized CAN open

Supports interconnection with multiple devices



The product is suitable for

AGV with magnetic navigation conditions is more suitable for large-scale heavy-duty handling AGV

Detection range length optional
160mm/320mm/480mm/640mm

SF series CNS-SF50HB Server Driver

Adopts 1-drive 2-mode to save installation space.

The optimized control structure can drive up to two 1200W motors (DC48V).

It is suitable for multiple communication methods and multiple protection mechanisms.

It uses ESD protection for all communication interfaces to be safer and can adapt to complex on-site environments.

Support clients Upgraded

Support integrated differential and steering wheel magnetic navigation algorithms

Support MODBUS TCP communication mode



The product is suitable for

The drive and control of the servo motor of the AGV trolley can be driven and controlled by the steering wheel drive mode or the differential drive mode according to the model

SF series CNS-SF30HB/ CNS-SF30HSN/CNS-SF30HDN Server Driver

One drive two design, can drive two DC servo motors less than 48V/1000W

Small size, easy installation, quick wiring

Debug configuration Through the TYPE-C port, a mobile phone data cable can be quickly connected

Compatible with multiple brands of servo motors, wide compatibility

Built-in magnetic navigation algorithm, which can directly calculate the position deviation signal of magnetic navigation

Rich built-in parameters for adjustment

Support multiple communication methods including CAN Open, RS-232, RS-485, switch analog

Input and output switching ports can be customized by software

The software comes with a virtual oscilloscope for easy debugging

The product is suitable for

The drive and control of the servo motor of the AGV trolley can be driven and controlled by the steering wheel drive mode or the differential drive mode according to the model



MI50H series CNS-MI50HB/ CNS-MI50HDN/CNS-MI50HSN Hybrid Driver

One drive two design, can drive two different types of motors

Internal integrated navigation algorithm (common version, differential navigation version, steering wheel navigation version)

Reduce the programming and debugging of the navigation algorithm program of the AGV main controller, and shorten the debugging time of the underlying motion control of the AGV

Support multiple communication methods including CAN Open, RS-232, RS-485, switch analog

Support incremental encoders, potentiometers, tachogenerators, Hall sensors and other feedback signals, integrated speed closed loop

Control and angle closed-loop control, support interconnection of multiple devices

The product is suitable for

The drive and control of the brushed/brushless motor of the AGV trolley can be driven and controlled by the steering wheel drive mode or the differential drive mode according to the model



BL30 series CNS-BL30HB/ CNS-BL30HDN/CNS-BL30HSN DC Brushless Driver

One drive two design, can drive two DC brushless motors less than 48V/1000W at the same time

Small size, easy installation, quick wiring

Debug configuration through the Micro USB port, an Android phone data cable can be quickly connected

Compatible with multiple brands of brushless motors, wide compatibility

Two-way electromagnetic brake control

The control power supply is separated from the power supply

Integrated magnetic navigation algorithm, can control steering wheel or differential drive models

The product is suitable for

The drive and control of the servo motor of the AGV trolley can be driven and controlled by the steering wheel drive mode or the differential drive mode according to the model



RH and CNS-RFID series RFID Sensor

RH223/ RH323/RH623 CNS-RFID-1S/N CNS-RFID-01

The reading and writing frequency is 13.56MHz, ISO15693 protocol

Built-in multi-card anti-collision algorithm, multiple tags can be read at the same time

Distinguish electronic tags by data blocks, and support up to 45 data blocks

Guaranteed not to miss reading at a maximum speed of 3m/s

Support output card reading signal strength RSSI

Support multiple communication methods

With Ethernet interface, support Modbus-TCP protocol

The product is suitable for

AGV car, production automation management, AGV site positioning, etc.



COR series IPC

COR110000/COR111100

The main control equipment, AGV/AMR industrial computer, is equipped with high-performance AI processor RK3588 and has strong peripheral expansion capabilities.

It supports serial port, USB, Ethernet, CAN Bus and other expansions, rich network communication interfaces (WLAN WWAN Bluetooth GNSS), one-stop AI solution, targeted optimization of hardware design and software SDK, and is suitable for various industry application fields.

The product is suitable for

Mobile robots, intelligent manufacturing, artificial intelligence, network security, rail transit, intelligent medical care, etc.



MFIO series CNS-MFIO-D2/CNS-MFIO-2M Connected Auxiliary Controller

Centrally manage the data of each part of the AGV, act as an "auxiliary controller", and comprehensively calculate the underlying motion control program of the AGV, greatly reducing the computing pressure of the main controller

Coordinate the motion control of dual drives to solve the interaction force between the two drives under certain circumstances

The differential speed type supports access to RFID and laser sensor data, and the two functions of AGV positioning and obstacle detection will be completed by the interconnection auxiliary controller

Integrate the data of each component into a unified format for feedback to the upper computer. Regarding the underlying motion control, the main controller only needs to send relevant execution instructions to the interconnected auxiliary controller.

Rich function parameter settings, just fill in AGV related parameters



other products



AGV steering wheel

AGV power supply device includes steering and walking



RFID card writer

No need for power supply, plug in the computer USB to write to the card



RFID tag

All kinds of coin type, card type, anti-metal type and other labels



Navigation Magnetic Stripe

Various specifications of magnetic strips, flexible and not easy to break



Magnetic stripe protection tape

Protect the magnetic strip from being crushed by the wheels



Buried magnetic strip

Magnetic Concentration Corrosion Resistant



Level shifter

High-Low Level Conversion Module



cable

Adaptive wires of various specifications



DC brushless motor

Troy brushless DC motor



reducer

Troy reducer

03

PART 03

Quality



Quality concept: quality is life and dignity

We are well aware that quality issues are related to the rights and interests of all customers, as well as the survival and development of enterprises. Hinson has carried out arduous exploration in the development process of quality management.

We believe that quality is the evolution process of a product or service that is continuously improved. It is based on several aspects, such as performance, reliability, durability, consistency, features, after-sales service and customer evaluation.

Hinson has invested heavily in testing equipment and introduced a variety of testing equipment to ensure that the performance and stability of each product reach the leading level.



Strictly abide by the quality

Quality is the root of the products

Hinson self-developed products are guaranteed for 24 months

Full inspection of laser series products:

Alternate temperature test, charged vibration test

Operating temperature compensation, full distance calibration

Full inspection of drive series products:

Load test under full power

Temperature rise test Port protection test



Testing equipment display (part)

Professional testing equipment (partial display)



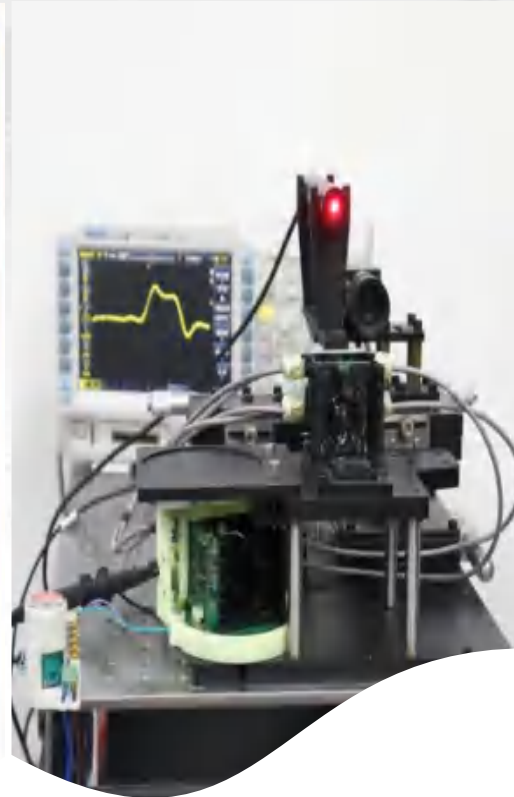
Dynamic balance tester

Test the balance vibration amplitude of laser series products during high-speed rotation, and make corresponding adjustments



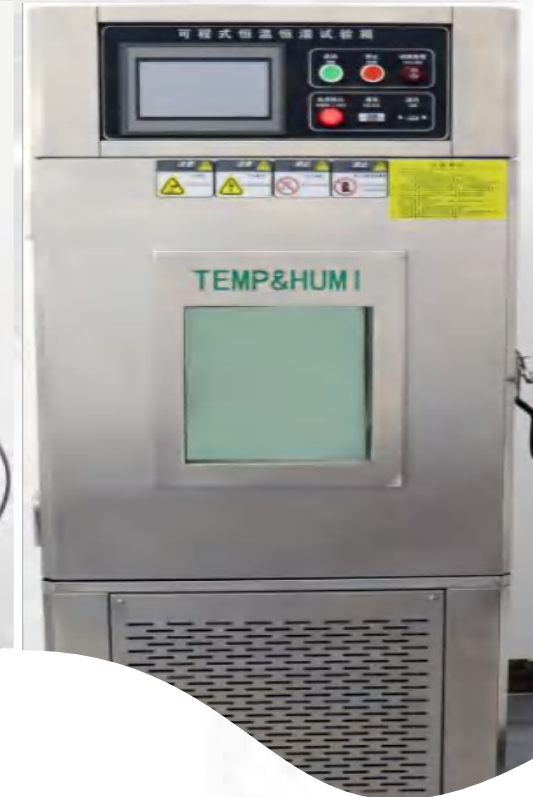
Motor Tester

Test the voltage, current, power, torque, efficiency, speed and other parameters of the motor



Optical Test Bench

Including six-axis fine-tuning pan/tilt, laser camera, oscilloscope, and positioning pen to ensure that the optical performance of each laser is consistent



Constant temperature and humidity machine

Simulate high and low temperature environment and change periodically, so that the sensor can operate stably under all working conditions



04

PART 04

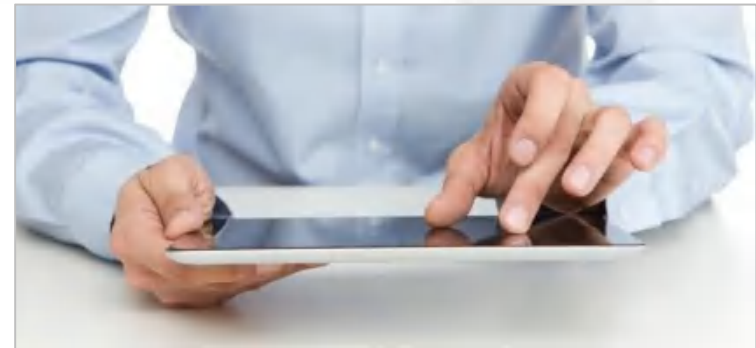
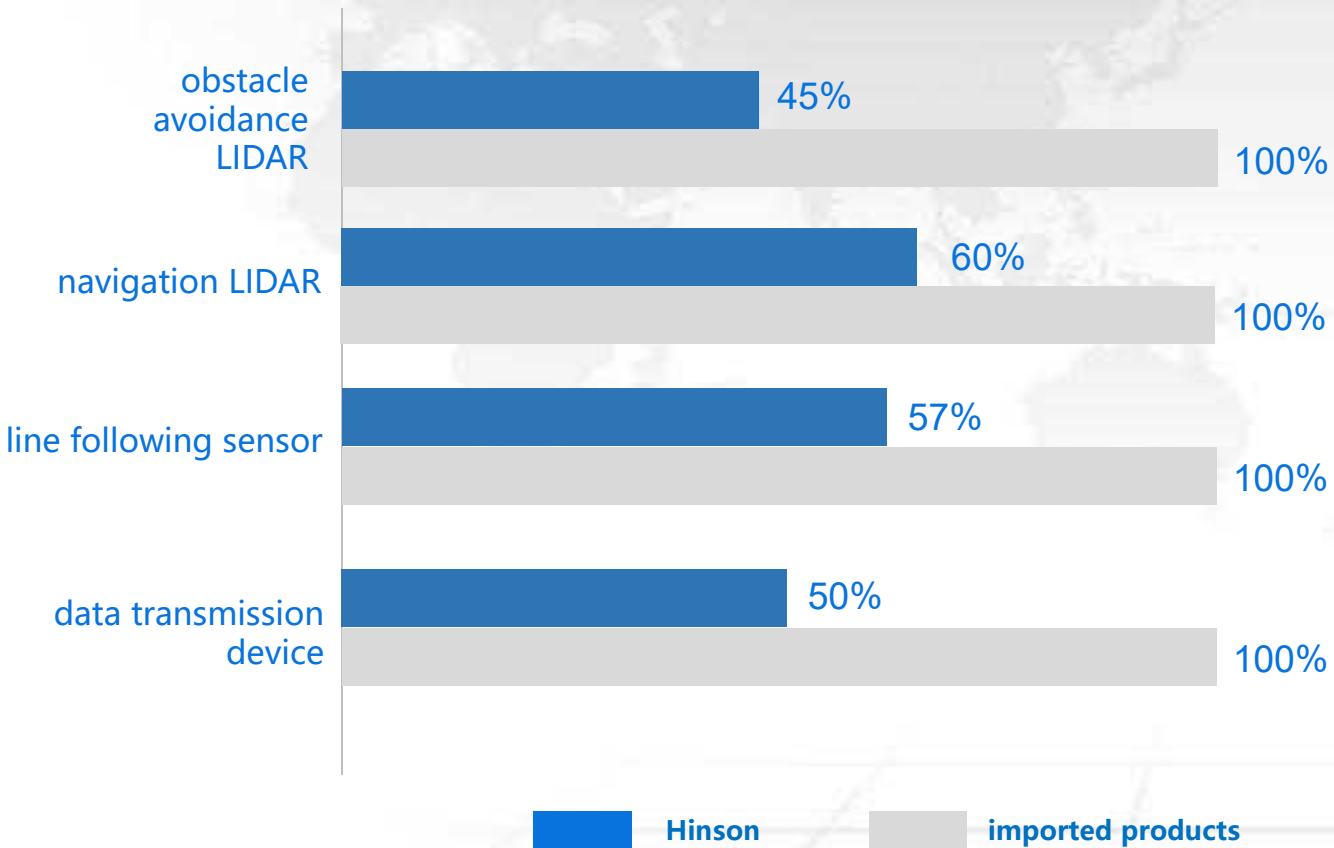
Market



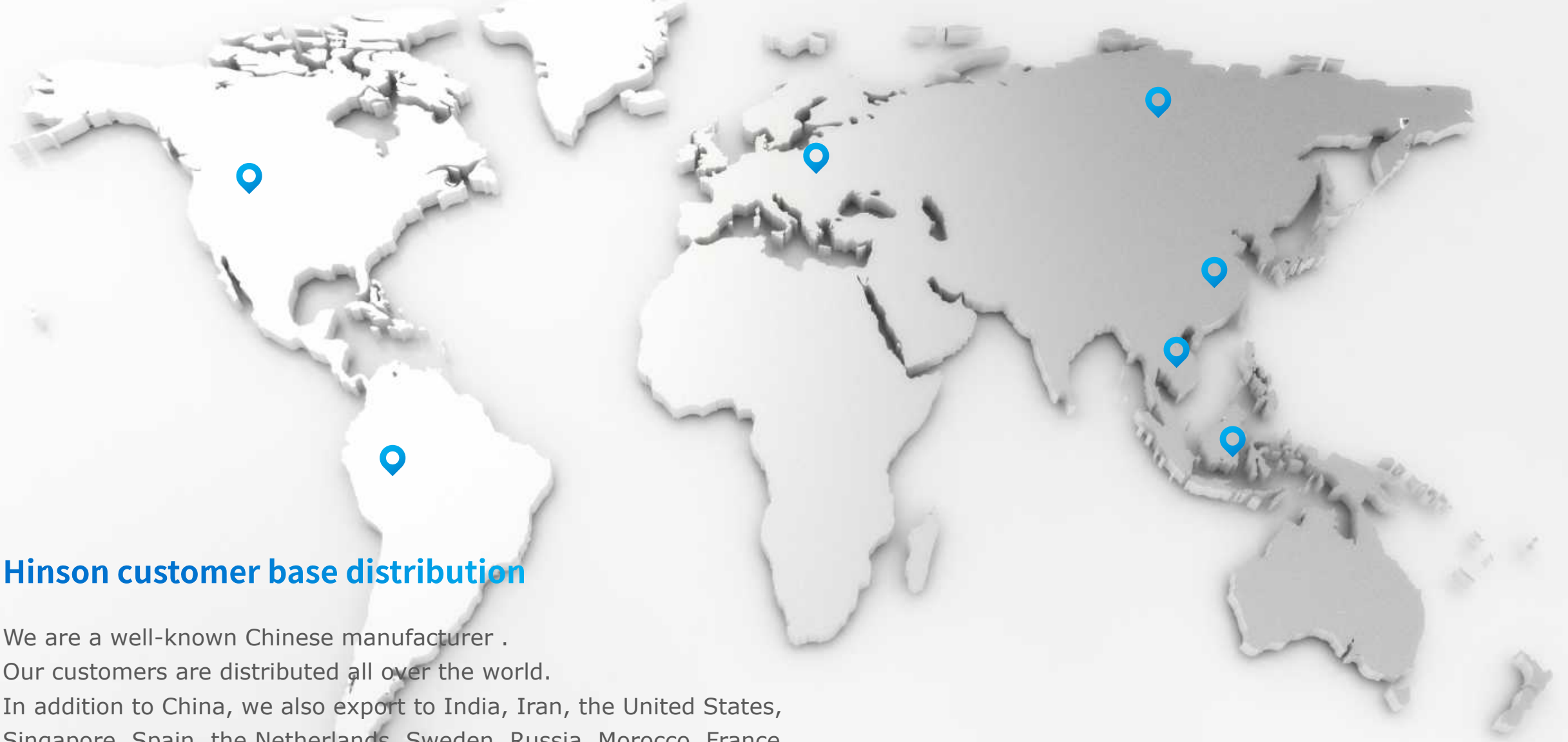
cost analysis

Cost analysis of other countries products and Hinson

MARKET PROSPECT ANALYSIS



Global customer distribution



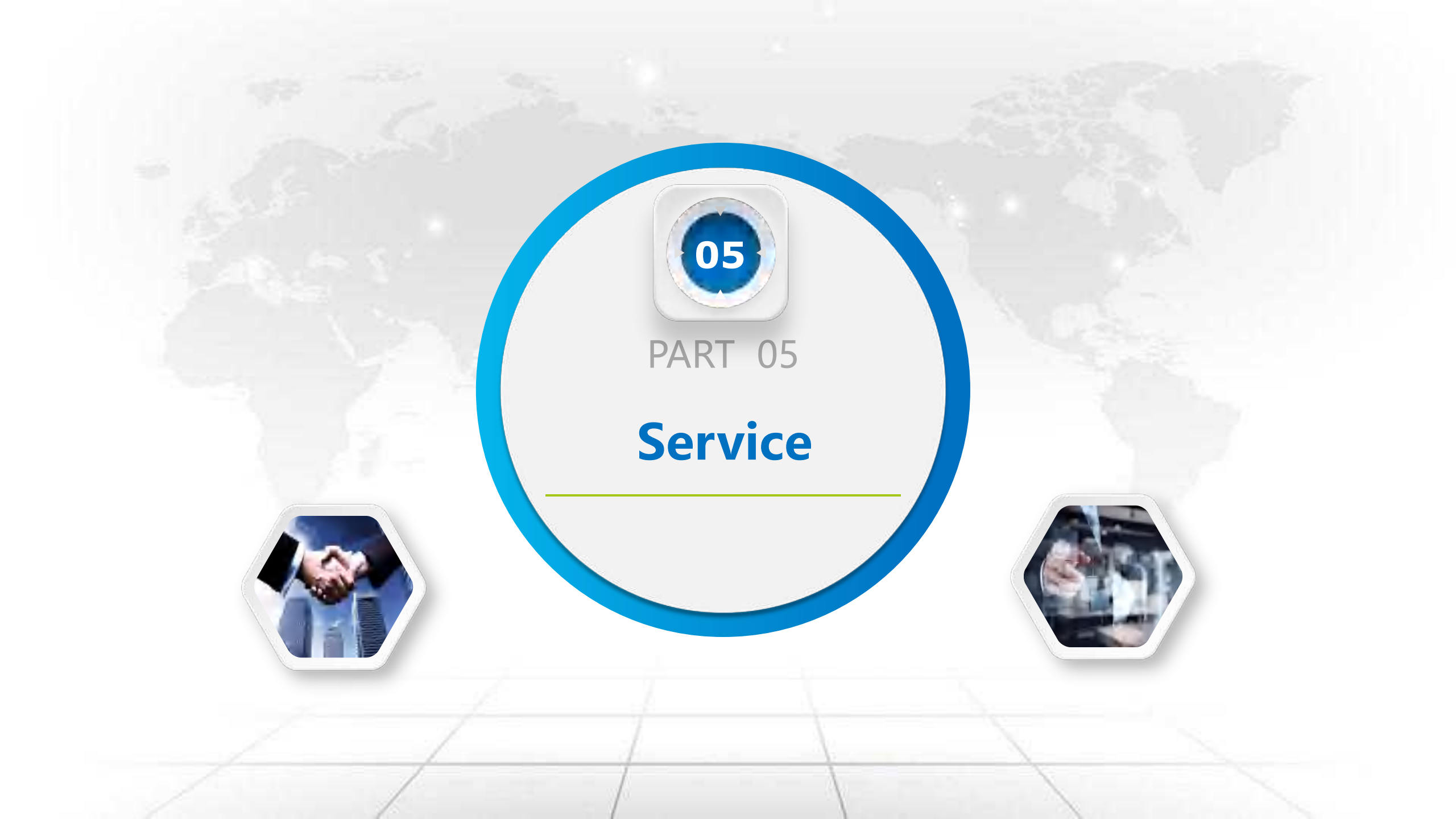
Hinson customer base distribution

We are a well-known Chinese manufacturer .

Our customers are distributed all over the world.

In addition to China, we also export to India, Iran, the United States, Singapore, Spain, the Netherlands, Sweden, Russia, Morocco, France, Japan, Korea, Vietnam, Thailand, Cambodia, etc.





05

PART 05

Service



pre-sale service



Free Technical Solution Support

As a technology-based company, Hinson has technical backgrounds in all key positions, including salesmen, and can provide mature solution evaluations in technical exchanges with customers, and can provide satisfactory product solutions to meet the needs of customers. .



After-sales service



A

Program Evaluation Optimization



B

Abnormal situation analysis



C

Provide the solution



D

Continue to follow up after sales

The slide features a light gray world map in the background. On the left, there are several blue geometric shapes: a large diamond at the top containing the 'HINSON' logo, and two smaller diamonds below it containing images of modern glass skyscrapers. The text 'Thank you' is prominently displayed in the center-right in a large blue font, underlined. Below it, the company name 'Guangdong Hinson Technology Co. Ltd' is also underlined. At the bottom, a series of vertical bars separate the words 'company', 'product', 'quality', 'market', and 'Serve'.

HINSON

Thank you

Guangdong Hinson Technology Co. Ltd

| company | product | quality | market | Serve |