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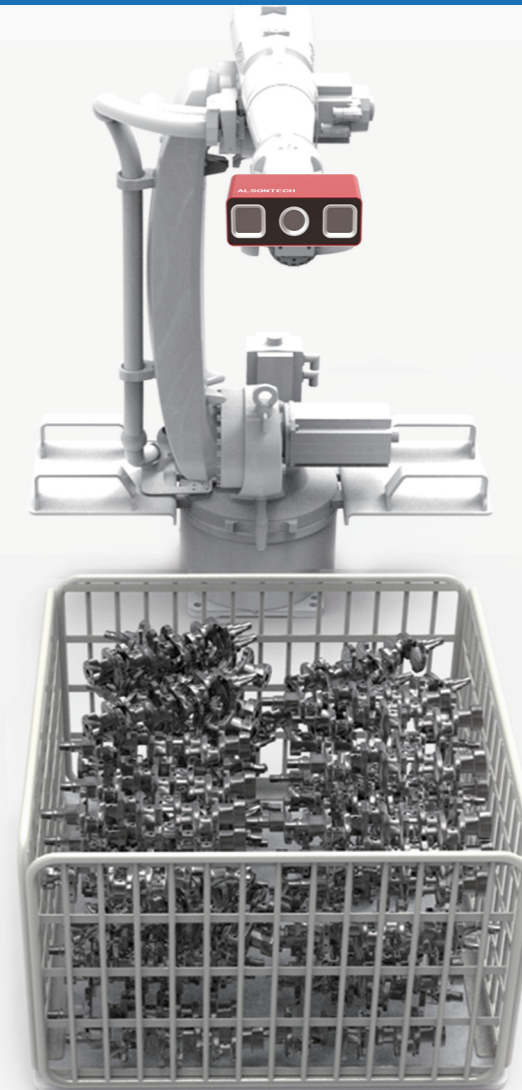


Bin Picking

3D vision & AI analysis & Path planning

3D vision positioning system

Give robots human-like eyes and AI brains



Professional robot 3D vision solution provider

Quantum Technologies Global

Singapore:

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Tel: +65 6778 3655

Email: sales@quantumsg.com

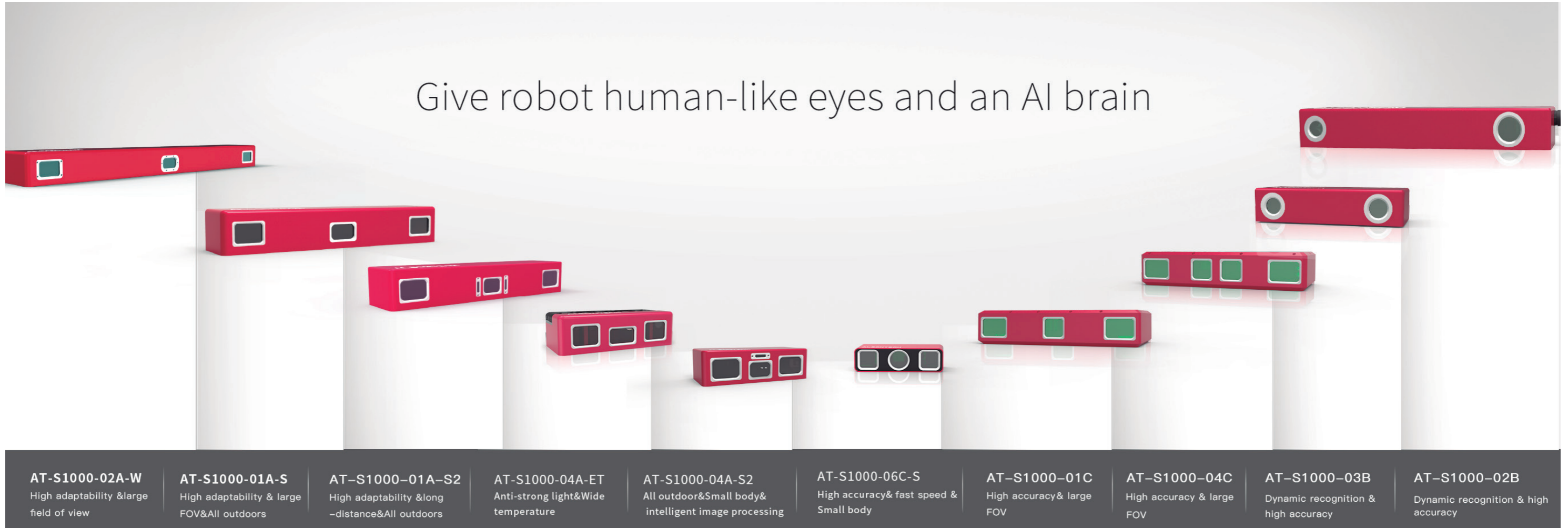
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Email: sales-vn@quantumsg.com

Give robot human-like eyes and an AI brain



GROUP INTRODUCTION ALSONTECH

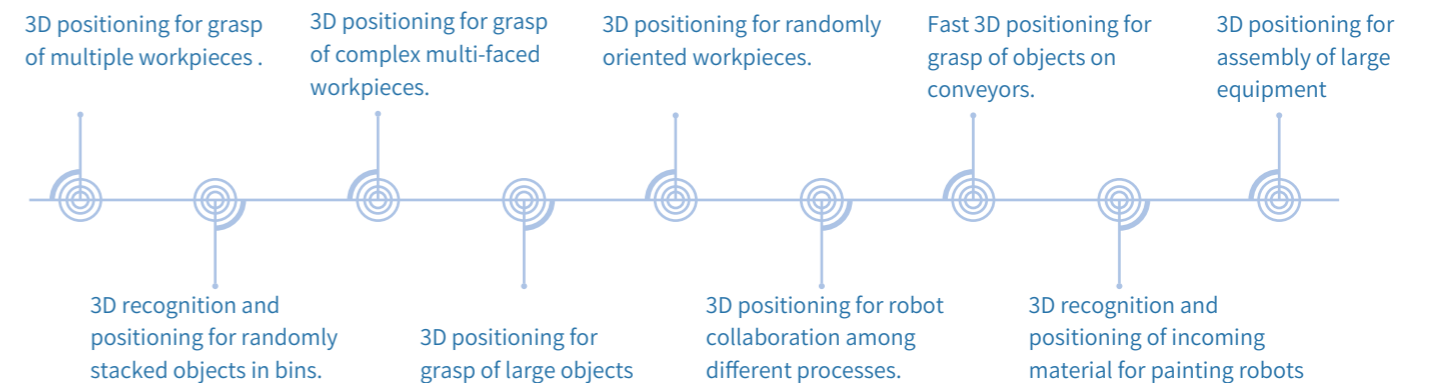
Our goal is to become a leading industrial robot 3D vision manufacturer globally. We specialize in providing mature and advanced robot 3D vision solutions for global industrial users and helping our customers create more social value.

Founded in 2014, our company boasts experienced R&D engineers and professional technical service personnels in 3D vision, image algorithms, AI algorithms, optics, and robot motion algorithms. We have set up service centers all over China so as to ensure a fast response to customers' requests. Besides, we have expanded our market to Korea, Japan, Singapore, Malaysia, German, the US, etc. We have passed the ISO9001, ISO14001, and CE certification.

Based on customers' demand, we have been investing continuously in the R & D in 3D vision, AI, robot motion control and other fields. Till now, we have acquired over 70 invention patents and software copyrights and earned honors and awards in a number of industries. Our successful deliveries are applied in industrial sites of hundreds of world-re-nowned customers, and been recognized by many Fortune 500 clients such as Volkswagen, Nissan, CAT, JD, and Baosteel.

INTRODUCTION

Through 3D fast imaging technology, the profile of objects are scanned to form point cloud data. Then the data is analyzed and processed intelligently. AI analysis, robot path intelligent planning, and automatic anti-collision technology are used to calculate the real-time coordinates and postures of the current workpiece. At last, the system sends instructions to the robot for accurate and automatic grasp.





AT-S1000-A Series

Suitable for loading and unloading, Suitable for loading and unloading, various disordered stationary workpieces. Applicable for machinery, automotive, appliances, 3C etc.

MODEL	DIMENSIONS	FIELD OF VIEW	WEIGHT	MODE	INSTALLATION HEIGHT	ACCURACY	IP RATING
AT-S1000-01A-S1	660mm × 150mm × 110 mm	1144mm × 802mm@1050mm 3136mm × 2464mm@3250mm	6.8kg	Laser structured light	1050mm 3250mm	± 0.2mm~ ± 2mm	IP65
AT-S1000-02A-W	1220mm × 180mm × 110mm	1563 × 1048@1400mm 3570 × 2877@3900mm	14kg	Laser structured light	1400mm 3900mm	± 0.2mm~ ± 2mm	IP65
AT-S1000-04A-ET	330mm × 150mm × 97mm	470mm × 330mm@420mm 1270mm × 995mm@1300mm	5.0kg	Laser structured light	420mm 1300mm	± 0.5mm~ ± 1mm	IP67
AT-S1000-04A-S1	330mm × 150mm × 97mm	470mm × 330mm@420mm 1270mm × 995mm@1300mm	3.6kg	Laser structured light	420mm 1300mm	± 0.5mm~ ± 1mm	IP65
AT-S1000-04A-S2	330mm × 150mm × 97mm	470mm × 330mm@420mm 1270mm × 995mm@1300mm	3.6kg	Laser structured light	420mm 1300mm	± 0.5mm~ ± 1mm	IP65



AT-S1000-B Series

Suitable for 3D recognition and positioning of objects on moving conveyors. Applicable for e-commerce, logistics, food, medicine, 3C, automotive, appliances etc.

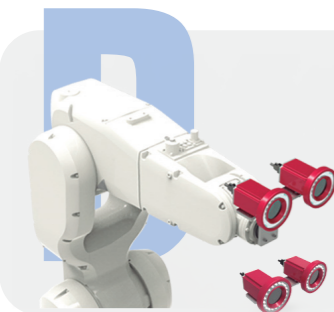
AT-S1000-02B	720mm × 150mm × 100mm	640mm@800mm 1200mm@1500mm	7.0kg	Laser structured light	800mm 1500mm	± 0.2mm~ ± 1mm	IP65
AT-S1000-03B	390mm × 150mm × 85mm	400mm@500mm 800mm @1000mm	4.0kg	Laser structured light	500mm 1000mm	± 0.2mm~ ± 0.5mm	IP65



AT-S1000-C Series

Suitable for high-accuracy sorting, assembly, grasp of disordered materials. Applicable for 3C, appliances, precision parts, aerospace etc.

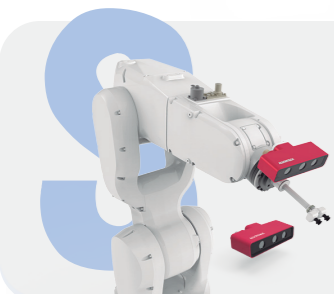
AT-S1000-01C	450mm × 200mm × 95mm	720mm × 440mm@910mm 2540mm × 1525mm@3250mm	5.2kg	Grating structured light	910mm 3250mm	± 0.1mm~ ± 1.5mm	IP65
AT-S1000-04C-W	1220mm × 200mm × 95mm	1765mm × 1645mm@1820mm 3310mm × 3020mm@3380mm	21.5kg	Grating structured light	1820mm 3380mm	± 0.1mm~ ± 1.5mm	IP65
AT-S1000-06C-S	189mm × 100mm × 55mm	284mm × 232mm@400mm 544mm × 438mm@800mm	1.0kg	Grating structured light	400mm 800mm	± 0.05mm~ ± 0.25mm	IP65
AT-S1000-07C	189mm × 101.5mm × 55mm	158mm × 89mm@200mm 220mm × 128mm@300mm	1.0kg	Grating structured light	200mm 400mm	± 0.03mm~ ± 0.2mm	IP65



AT-S1000-D Series

Suitable for loading and unloading of CNC finishing, assembly, inspection, depallizing etc.

AT-S1000-01D	250mm × 113mm × 100mm	1010mm × 660mm@800mm 1270mm × 820mm@1000mm	2.0kg	Ring light source	800mm 1000mm	± 0.2mm~ ± 0.5mm	IP65
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AT-S1000-S Series

Suitable for robot arm installation, workpiece assembly, precise grasp, free work area etc.

AT-S1000-01S	108mm × 46mm × 27mm	430mm × 330mm@400mm 1300mm × 990mm@1200mm	0.175kg	Speckle structured light	400mm 1200mm	± 5mm~ ± 10mm	IP65
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ADVANTAGES



Quick set-up



High efficiency



Friendly software interface



Affordable prices



Consummate service

FOV(Field of View):

Ultra-large FOV 2650mm*3850mm @3500mm

Fast recognition

Measurement frame rate for static object reaches 60Hz; any dynamic object at a speed less than 2000mm / s can be identified

High adaptability

Adapt to objects closely placed or with high reflection; resistant to ambient light.

Motion planning

AI analysis algorithm + optimal picking path planning + anti-collision design.

Ultra-high accuracy

The highest measurement accuracy can reach $\pm 0.05\text{mm}$.

Support service

Service centers in Shanghai, Guangzhou and Xi'an .

We serve global industrial customers

Our Mission: To be the world's leading provider of 3D vision solutions.

Our Vision: Promoting the Application of 3D Vision in Global Industry.

Core Values: Customer First , Pragmatism , Innovation , Cooperation

SUPPORT YOUR ROBOT

Our 3D vision positioning system is fully compatible with the communication protocol for a number of international brands of robots, secondary development not needed.

ABB, KUKA, FANUC, YASKAWA, UR, EPSON, DENSO, KAWASAKI, NACHI, HYUNDAI, STEP, EFFORT, ESTUN etc., customers can choose the robot based on their needs. (Alsontech 3D vision system is perfectly compatible with the communication protocol of manufacturers above)

FANUC

YASKAWA

Kawasaki

ABB

ROKAE

KUKA

STÄUBLI

HAN'S ROBOT
大族机器人

CNYD

DOBOT

HYUNDAI
HEAVY INDUSTRIES CO., LTD.

NACHI

EPSON

UNIVERSAL ROBOTS

DENSO

ESTUN
AUTOMATION

EFORT

JAKA

SIASUN 新松

STEP

GREE 格力

配天机器人

达明机器人

LINKHOU

QJAR
钱江机器人

固高科技
GOOGOLTECH

CRP

遨博智能

AT-S1000-01A-S1



Line laser sensor, long-distance, high-precision, large FOV, strong sunlight applicability.

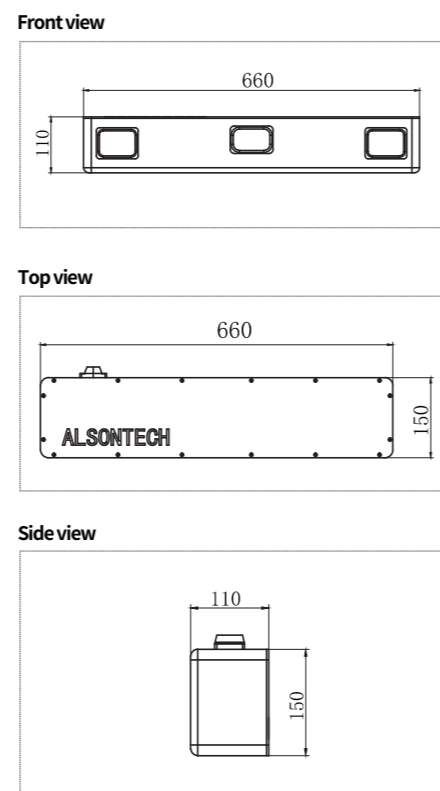
- Laser light solutions, resistant to ambient light interference.
- Applicable to long-range, large FOV, large DOV scenarios.
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Stable and reliable quality with high-level shockproof hardware.
- Flexible installation method, applicable to multi-directional target scanning and positioning scenarios.
- Adopting low-distortion lens and software optimization algorithm to minimize the distortion and maximize the accuracy;
- Resistant to outdoor ambient light.
- IP65 safety protection grade.
- Adjustable scanning speed



Technical parameters

Dimensions (LxWxH)	660mm×150mm×110 mm
Weight	6.8kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	790mm×615mm×340mm
Weight of package	12kg
Field of vision	1144×802@1050mm~3136×2464@3250mm
Working distance	1050mm~3250mm
Measuring accuracy	±0.2mm~±2mm
Scanning framerate	1s ~ 2.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size



AT-S1000-01A-S2



Line laser sensor, long-distance, high-precision, large FOV, strong sunlight applicability.

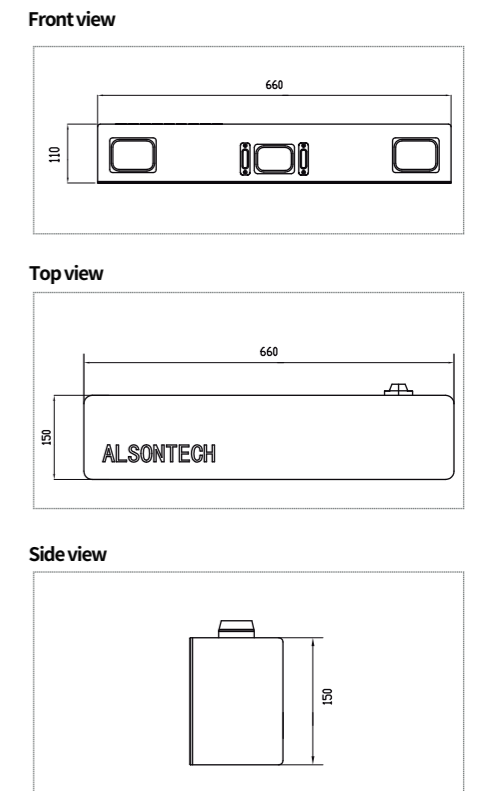
- Laser light solutions, resistant to ambient light interference.
- Applicable to the scenarios of short range, high accuracy, small volume, and outdoor environment
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Stable and reliable quality with high-level shockproof hardware.
- Flexible installation method, applicable to multi-directional target scanning and positioning scenarios.
- Adopting low-distortion lens and software optimization algorithm to minimize the distortion and maximize the accuracy;
- Resistant to outdoor ambient light.
- Applicable to 11,000LUX outdoor environment
- Intelligent image processing ability enhanced with upgraded software and hardware



Technical parameters

Dimensions (LxWxH)	660mm×150mm×110 mm
Weight	6.8kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	790mm×615mm×340mm
Weight of package	12kg
Field of vision	1144×802@1050mm~3136×2464@3250mm
Working distance	1050mm~3250mm
Measuring accuracy	±0.2mm~±2mm
Scanning framerate	1s ~ 2.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

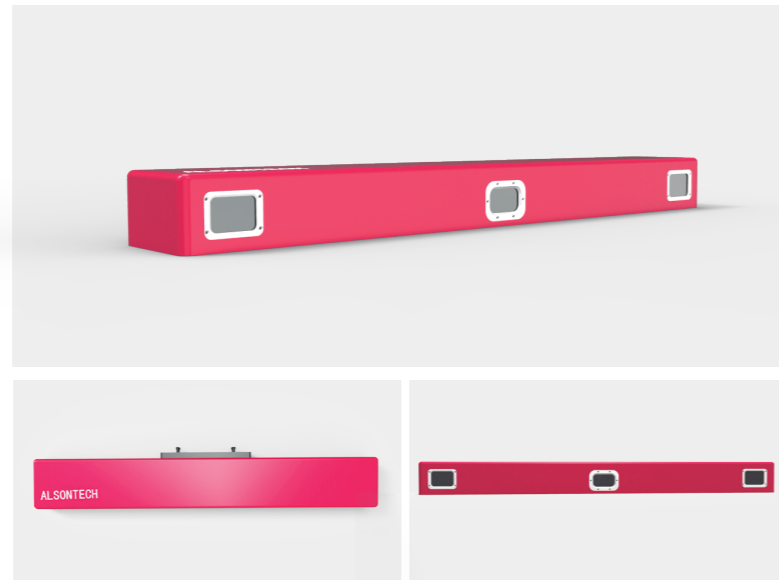


AT-S1000-02A-W



Line laser sensor, long-distance, high-precision, large FOV, strong sunlight applicability.

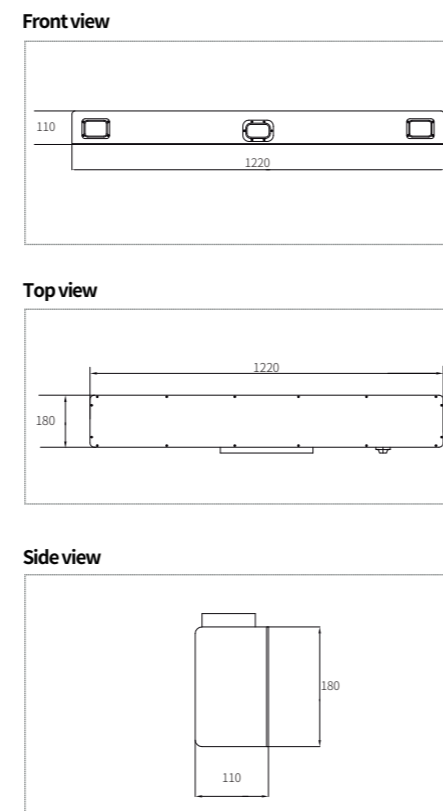
- Laser line solutions, resistant to ambient light interference.
- Applicable to long-range, large FOV, large DOV scenarios.
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Stable and reliable quality with high-level shockproof hardware.
- Flexible installation method, applicable to multi-directional target scanning and positioning scenarios.
- Adopting software optimization algorithm to assure the high accuracy of data collecting. Resistant to outdoor ambient light.
- Adjustable scanning speed



Technical parameters

Dimensions (LxWxH)	1220mm×180mm×110 mm
Weight	14kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	1390mm×365mm×250mm
Weight of package	28.6kg
Field of vision	1563×1048@1400mm~3570×2877@3900mm
Working distance	1400mm~3900mm
Measuring accuracy	±0.2mm~±2mm
Scanning framerate	1s ~ 2.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

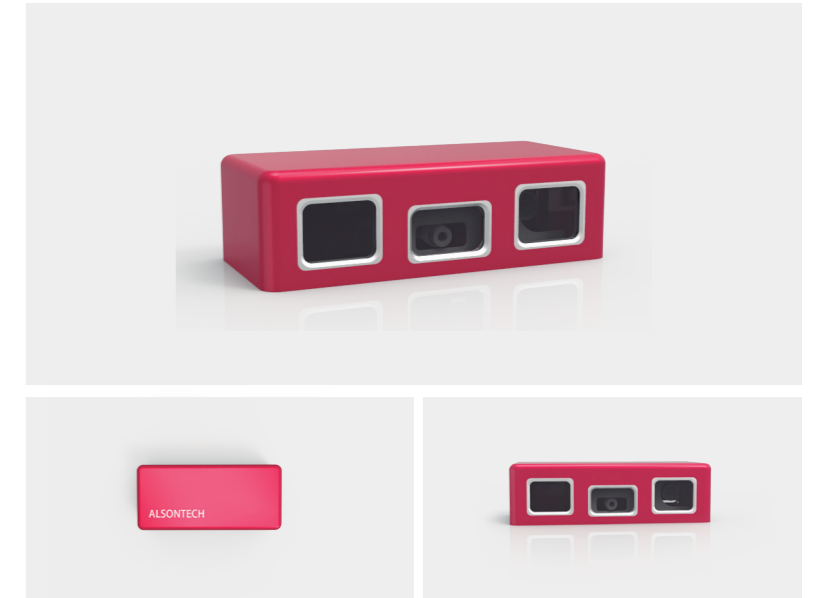


AT-S1000-04A-S1



Line laser sensor small size, close range, high precision, anti-glare.

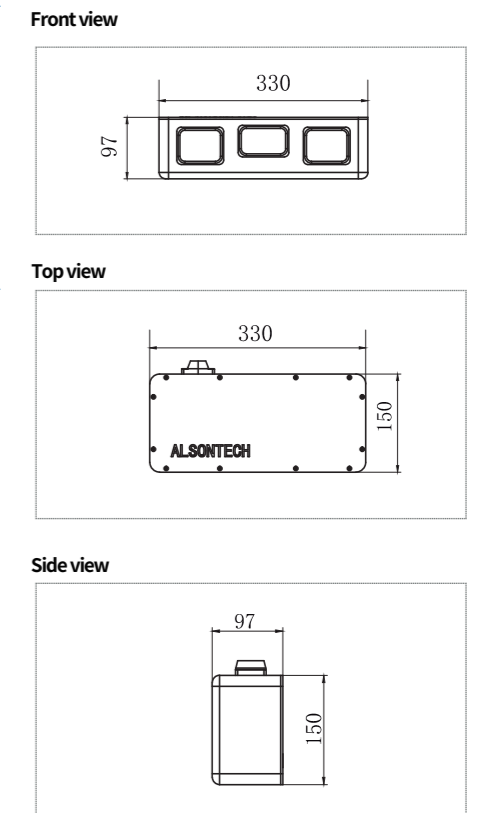
- Laser light solutions, resistant to ambient light interference.
- Applicable to the scenarios characterizing small volume, high accuracy, ultra-wide temperature and strong sunlight
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Flexible installation method, applicable to multi-directional target scanning and positioning scenarios.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- It can be used under strong light, stable performance under out-door sunlight of 110,000 LUX.
- IP65 safety protection grade.



Technical parameters

Dimensions (LxWxH)	330mm×150mm×97mm
Weight	3.6kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	790mm×615mm×340mm
Weight of package	6kg
Field of vision	470×330@420mm~1270×995@1300mm
Working distance	420mm~1300mm
Measuring accuracy	±0.5mm ~ ±1mm
Scanning framerate	1s~2.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0 °C~ 50°C
Storage temperature	-20°C~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65
Illuminance	110000LUX

Product Size

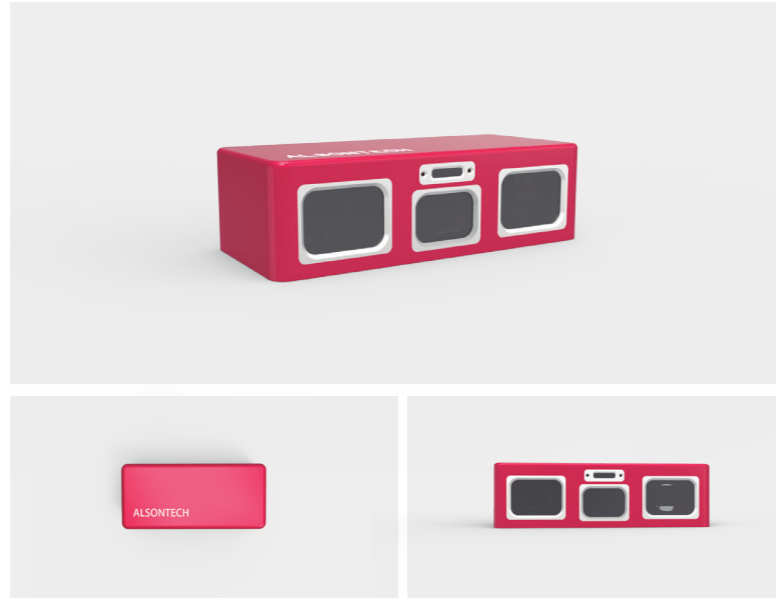


AT-S1000-04A-S2



Line laser sensor, intelligent image processing.

- Laser light solutions, resistant to ambient light interference.
- Applicable to the scenarios of short range, high accuracy, small volume, and outdoor environment
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Flexible installation method, applicable to multi-directional target scanning and positioning scenarios.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- It can be used under strong light, stable performance under out-door sunlight of 110,000 LUX.
- IP65 safety protection grade.

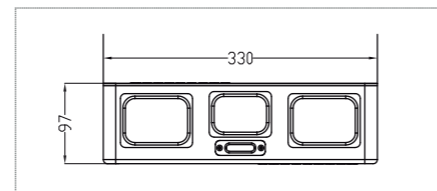


Technical parameters

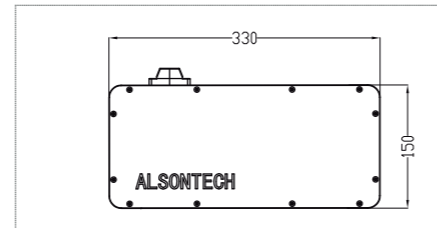
Dimensions (LxWxH)	330mm×150mm×97mm
Weight	3.6kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	790mm×615mm×340mm
Weight of package	8.8kg
Field of vision	470×330@420mm~1270×995@1300mm
Working distance	420mm~1300mm
Measuring accuracy	±0.5mm ~ ±1mm
Scanning framerate	1s~2.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0 °C~ 50°C
Storage temperature	-20°C~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65
Illuminance	110000LUX

Product Size

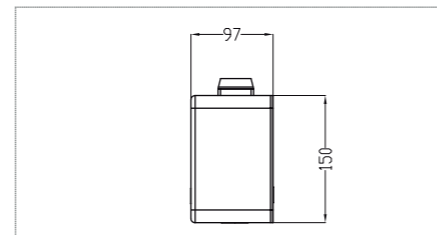
Front view



Top view



Side view



AT-S1000-04A-ET



Line laser sensor, ultra-wide temperature, high precision, strong sunlight applicability.

- Laser light solutions, resistant to ambient light interference.
- Applicable to small-body, High-accuracy, Ultra wide temperature, strong light scenarios.
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Flexible installation method, applicable to multi-directional target scanning and positioning scenarios.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- It can be used under strong light, stable performance under out-door sunlight of 110,000 LUX.
- Applicable to -20°C~55°C scenarios.

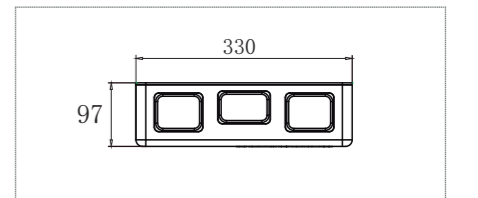


Technical parameters

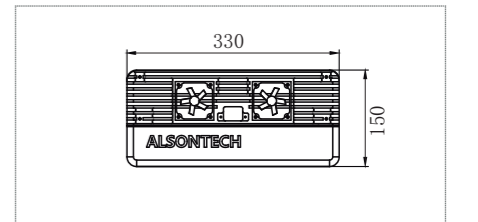
Dimensions (LxWxH)	330mm×150mm×97mm
Weight	5kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	740mm×440mm×240mm
Weight of package	8kg
Field of vision	470×330@420mm~1270×995@1300mm
Working distance	420mm~1300mm
Measuring accuracy	±0.5mm ~ ±1mm
Scanning framerate	1s~2.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	-20°C~55°C
Storage temperature	-20°C~70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP67
Illuminance	110000LUX

Product Size

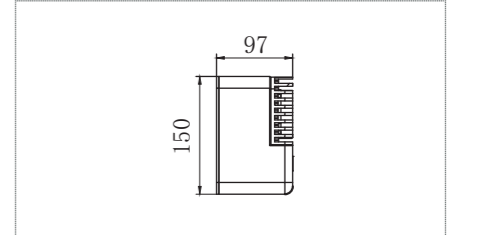
Front view



Top view



Side view



AT-S1000-02B



Line laser sensor, conveyor belt application, high accuracy.

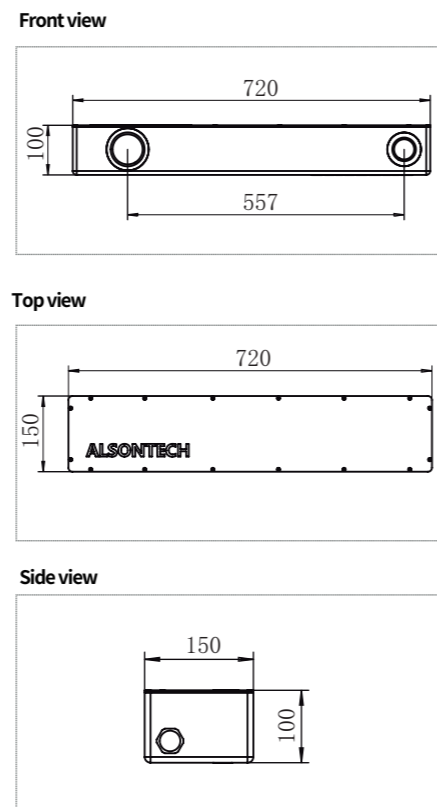
- Laser light solutions, resistant to ambient light interference.
- Applicable to medium-distance, high-precision and high-speed transmission lines scenarios.
- It is suitable for the scenes of identification, sorting and palletizing of items on the conveyor belt.
- Using hardware that is highly resistant to shock and vibration, stable and reliable.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- IP65 safety protection grade.



Technical parameters

Dimensions (LxWxH)	720mm×150mm×100mm
Weight	7kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	790mm×760mm×305mm
Weight of package	12kg
Field of vision	920×240@800mm~1730×450@1500mm
Working distance	800mm~1500mm
Measuring accuracy	±0.2mm~±1mm
Frame rate	300Hz
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size



AT-S1000-03B



Line laser sensor, conveyor belt application, high accuracy.

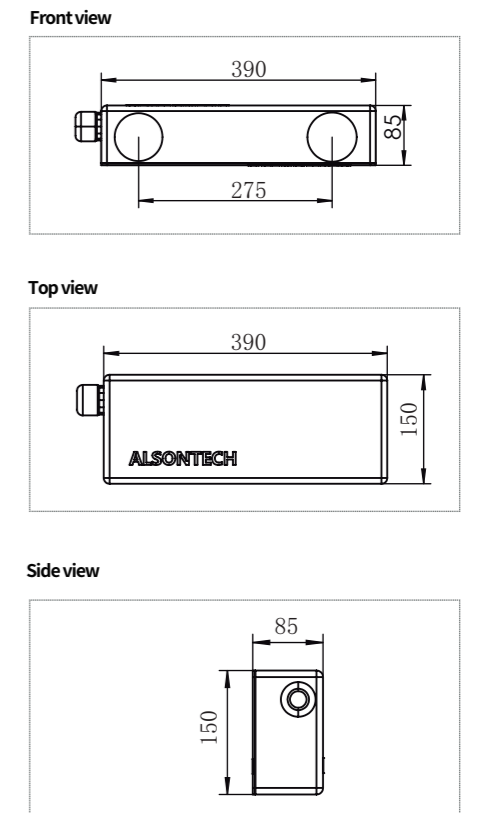
- Laser light solutions, resistant to ambient light interference.
- Applicable to medium-distance, high-precision and high-speed transmission lines scenarios.
- It is suitable for the scenes of identification, sorting and palletizing of items on the conveyor belt.
- Using hardware that is highly resistant to shock and vibration, stable and reliable.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- IP65 safety protection grade.



Technical parameters

Dimensions (LxWxH)	390mm×150mm×85mm
Weight	4Kg
Laser class	class 3R
Connector (IPC)	RS-232 USB3.0
Dimensions of package	790mm×760mm×305mm
Weight of package	10kg
Field of vision	420×150@500mm~840×300@1000mm
Working distance	500mm~1000mm
Measuring accuracy	±0.2mm~±0.5mm
Frame rate	300Hz
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size



AT-S1000-01C



Structured light sensor, applicable to high speed, large field of view .

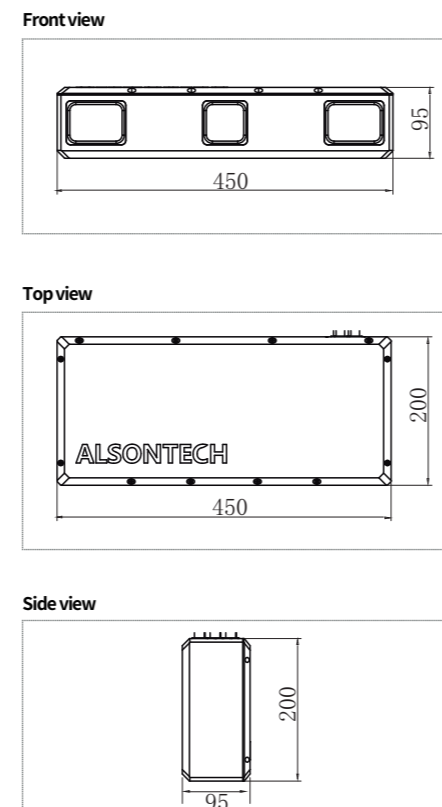
- Grating structured light scheme, fast imaging.
- Applicable to Long distance, high speed, high precision, large field of view scenarios.
- Using hardware that is highly resistant to shock and vibration, stable and reliable.
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- IP65 safety protection grade.



Technical parameters

Dimensions (LxWxH)	450mm×200mm×95mm
Weight	6.7kg
Light source	Grating structured light
Connector (IPC)	RS-232 GigE
Dimensions of package	790mm×760mm×305mm
Weight of package	12.5kg
Field of vision	720×440@910mm~2540×1525@3250mm
Working distance	910mm~3250mm
Measuring accuracy	±0.1mm~±1.5mm
Scanning time	0.6s~1s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C~ 50°C
Storage temperature	-20°C~70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

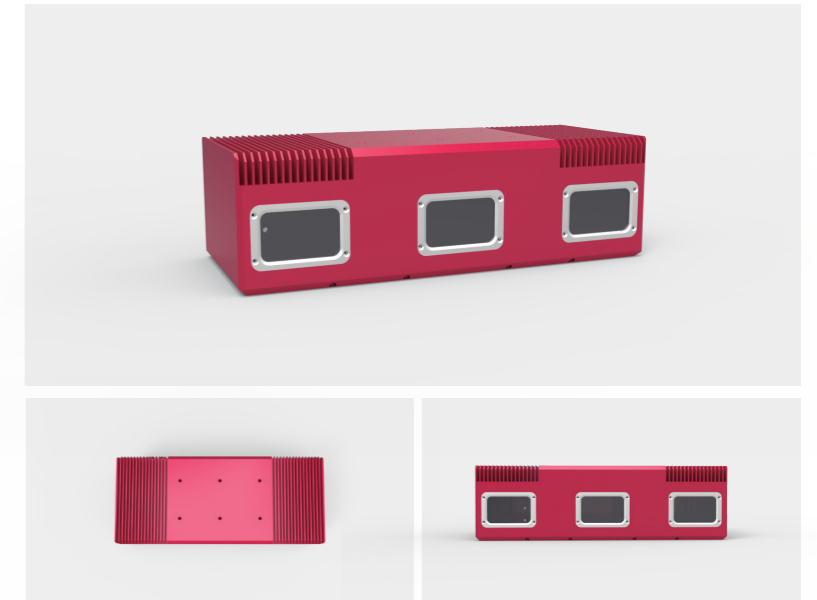


AT-S1000-01C-H



Structured light sensor, applicable to high speed, large field of view, long-distance.

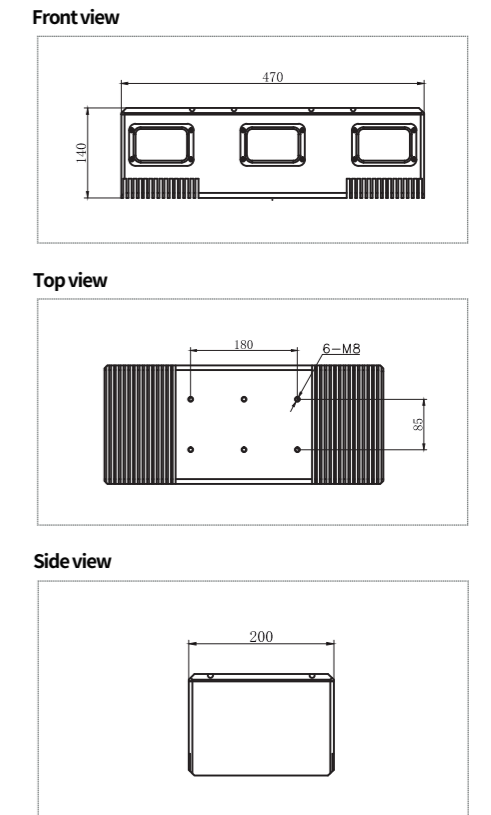
- Grating structured light scheme, fast imaging.
- Applicable to Long distance, high speed, high precision, large field of view scenarios.
- Applicable to recognition and positioning purposes of dark, black and highly reflective objects;
- Stable and reliable quality with high-level shockproof hardware
- Flexible installation method for multi-around scanning and positioning scenarios.
- Adopting software optimization algorithm to assure the high accuracy of data collecting
- IP65 safety protection grade.



Technical parameters

Dimensions (LxWxH)	470mm×200mm×140mm
Weight	13kg
Light source	Grating structured light
Connector (IPC)	RS-232 GigE
Dimensions of package	790mm×615mm×340mm
Weight of package	18kg
Field of vision	1325 ×915@1300mm~3565 × 1725@2500mm
Working distance	1300mm~2500mm
Measuring accuracy	±0.1mm~±1.5mm
Scanning time	0.6s~1s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C~ 50°C
Storage temperature	-20°C~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size



AT-S1000-04C-W



Structured light sensor, long distance, large field of view, high precision.

- Double grating structured light solution with swift imaging process and large FOV.
- Applicable to long range, super large FOV, large DOV and high accuracy scenarios.
- Adopting high resolution industrial camera to make sure high accuracy.
- Applicable to recognition and positioning purposes of dark, black and highly reflective objects.
- Stable and reliable quality with high-level shockproof hardware.
- Flexible installation method for multi-around scanning and positioning scenarios.
- Adopting software optimization algorithm to assure the high accuracy of data collecting.
- IP65 safety protection level.

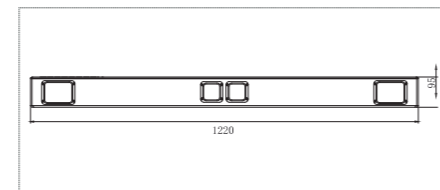


Technical parameters

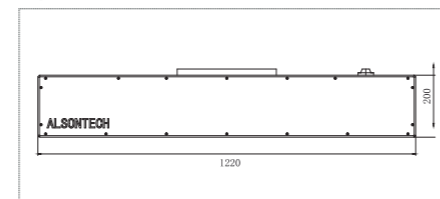
Dimensions (LxWxH)	1220mm×200mm×95 mm
Weight	21.5kg
Light source	Grating structured light
Connector (IPC)	RS-232 USB3.0
Dimensions of package	1390mm×365mm×250mm
Weight of package	36.1kg
Field of vision	1765×1645@1820mm-3310×3020@3380mm
Working distance	1820mm~3380mm
Measuring accuracy	±0.1mm~±1.5mm
Scanning framerate	3s ~ 5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

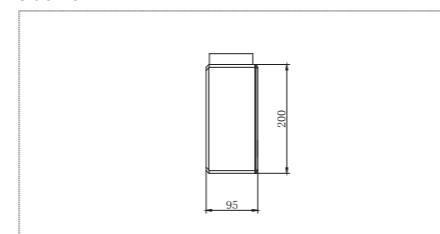
Front view



Top view



Side view

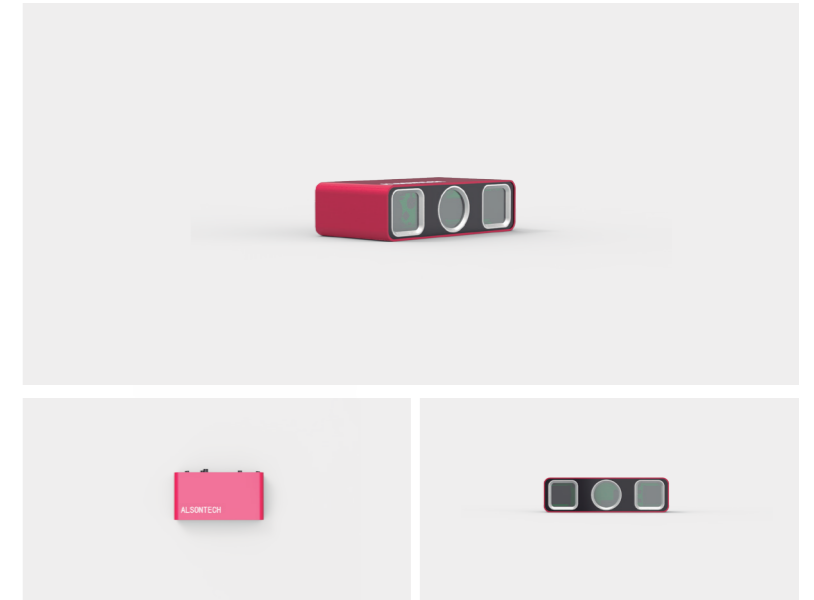


AT-S1000-06C-S



Structured light sensor, applicable to high speed, small field of view .

- Grating structured light scheme, fast imaging.
- Applicable to Close range, small field of view, high precision scenarios.
- Using hardware that is highly resistant to shock and vibration, stable and reliable.
- Applicable to identification & positioning scenarios of dark, black and highly reflective objects.
- Small size, to meet the needs of use in a small space.
- Software optimization algorithm erases the lens distortion and assures the data acquisition accuracy.
- IP65 safety protection grade.

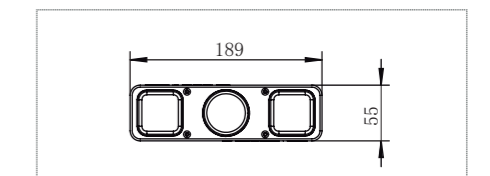


Technical parameters

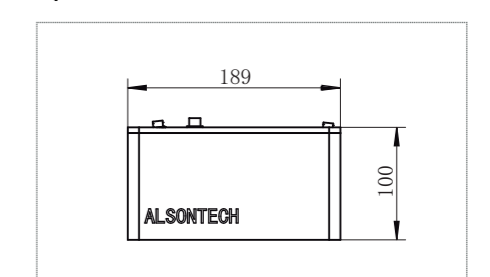
Dimensions (LxWxH)	190mm×100mm×55mm
Weight	1.0kg
Light source	Grating structured light
Connector (IPC)	RS-232 GigE
Dimensions of package	600mm×400mm×180mm
Weight of package	6kg
model	AT-S1000-06C-S (2300000px) AT-S1000-06C-S2 (1300000px)
Field of vision	284×232@400mm-544×438@800mm
Working distance	400mm~800mm
Measuring accuracy	±0.05mm~±0.25mm
Scanning time	0.6s~1s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

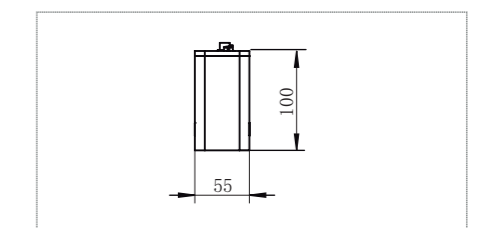
Front view



Top view



Side view

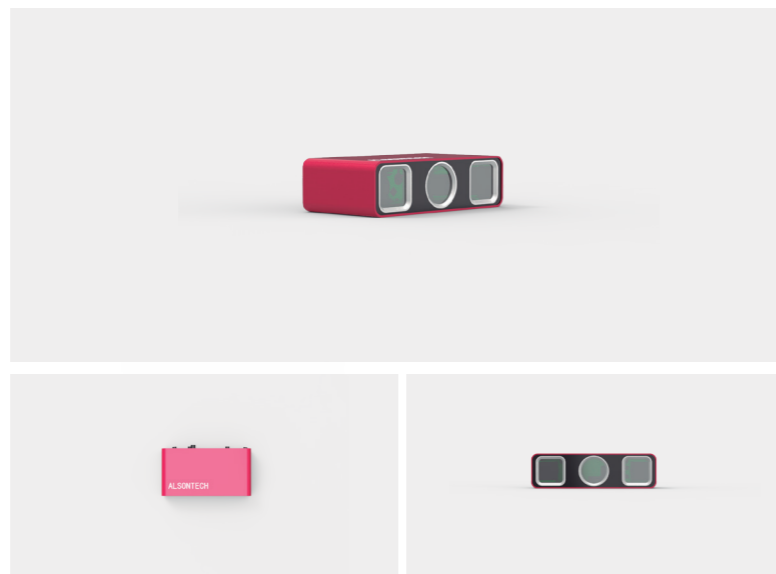


AT-S1000-06C-S1



Structured light sensor, ultra-small size, close range, high speed, high precision.

- Grating structured light solution with swift imaging process.
- Applicable to short range, small FOV, and high accuracy scenarios.
- Stable and reliable quality with high-level shockproof hardware.
- Applicable to recognition & positioning scenarios of dark, black and highly reflective objects.
- Smaller dimension, less weight, and more suitable for light mechanical arm and narrow installation place.
- Flexible installation method for multi-around scanning and positioning scenarios.
- Adopting software optimization algorithm to assure the high accuracy of data collecting.

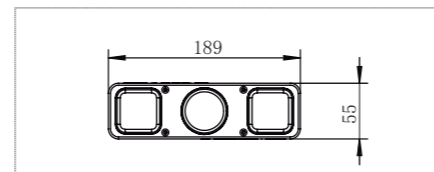


Technical parameters

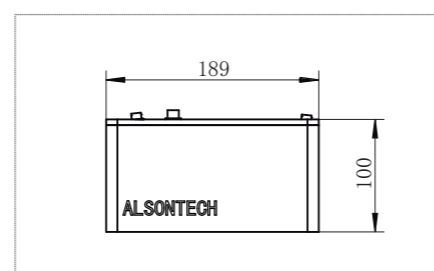
Dimensions (LxWxH)	190mm×100mm×55mm
Weight	1.0kg
Light source	Grating structured light
Connector (IPC)	RS-232 GigE
Dimensions of package	600mm×400mm×180mm
Weight of package	6kg
Field of vision	284×232@400mm-544×438@800mm
Working distance	400mm~800mm
Measuring accuracy	±0.05mm~±0.25mm
Scanning time	0.6s~1s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

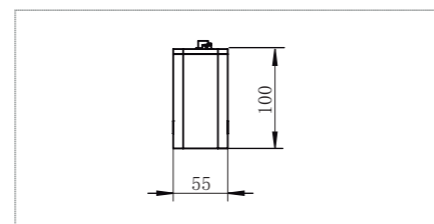
Front view



Top view



Side view

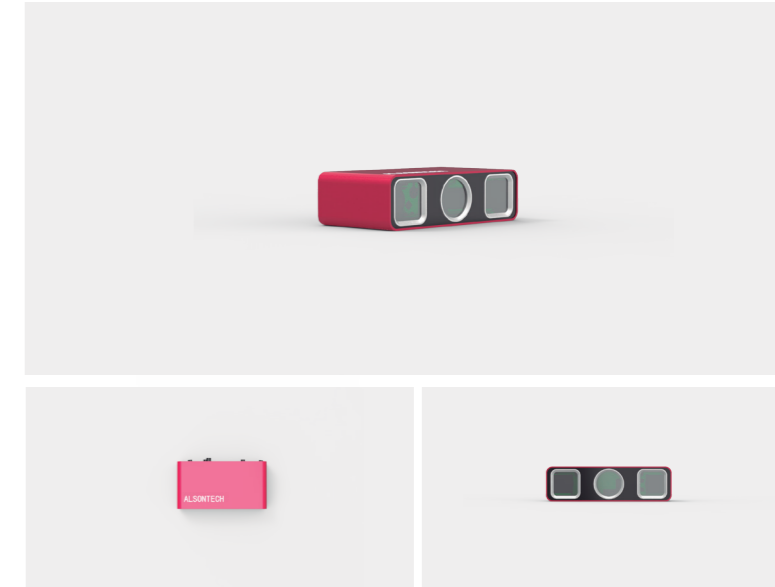


AT-S1000-07C



Structured light sensor, applicable to mini design, close range, high precision.

- Grating structured light solution with swift imaging process.
- Applicable to short range, small FOV, and high accuracy scenarios.
- Stable and reliable quality with high-level shockproof hardware.
- Applicable to recognition & positioning scenarios of dark, black and highly reflective objects.
- Smaller dimension, less weight, and more suitable for light mechanical arm and narrow installation place.
- Flexible installation method for multi-around scanning and positioning scenarios.
- Adopting software optimization algorithm to assure the high accuracy of data collecting.

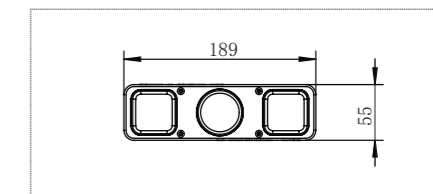


Technical parameters

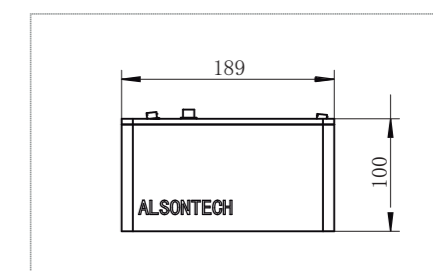
Dimensions (LxWxH)	189mm×101.5mm×55mm
Weight	1.0kg
Light source	Grating structured light
Connector (IPC)	RS232 USB3.0
Dimensions of package	600mm×400mm×180mm
Weight of package	6kg
model	AT-S1000-07C-250(Best working distance 250mm) AT-S1000-07C-350(Best working distance 350mm)
Field of vision	AT-S1000-07C-250 (158 ×89@200mm~220×128@300mm) AT-S1000-07C-350 (187×124@300mm~222×163@400mm)
Working distance	200mm~400mm
Measuring accuracy	±0.03mm~±0.2mm
Scanning time	0.6s~1s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

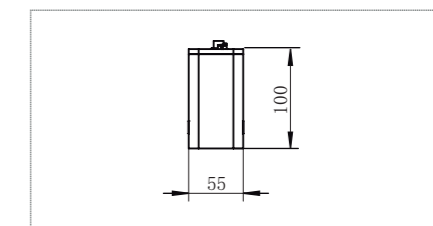
Front view



Top view



Side view

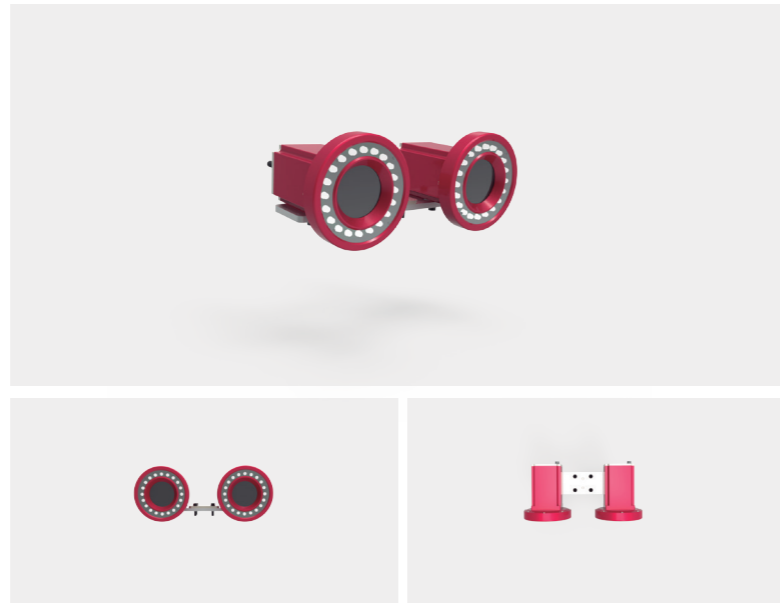


AT-S1000-01D



Binocular sensor, dedicated for arm loading, small size, close range, high speed.

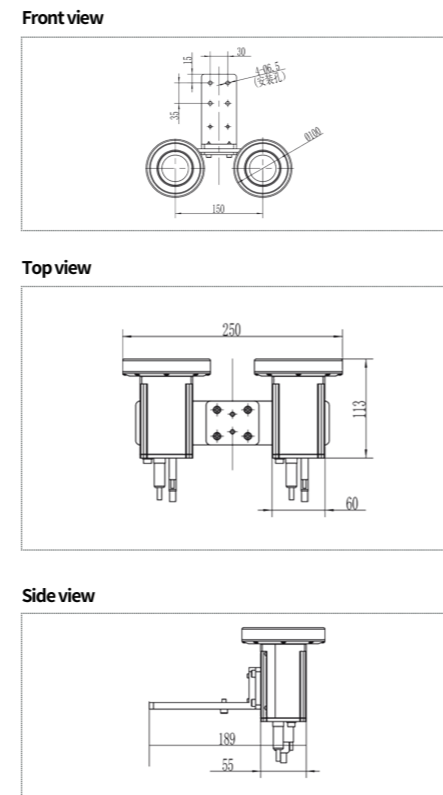
- Small body and light weight, perfect for installation
- Perfect for the positioning of reflective workpieces with regular geometric features, especially good at positioning round holes
- Fast imaging, extremely high positioning efficiency, positioning within 1s
- Main communication protocol, no necessary second development
- Eliminate lens distortion and ensure data acquisition accuracy
- User-friendly software interface, easy to operate
- IP65 safety protection grade.



Technical parameters

Dimensions (LxWxH)	250mm×113mm×100mm
Weight	2kg
Light source	Ring light
Connector (IPC)	RS-232 USB3.0
Dimensions of package	300mm×150mm×120mm
Weight of package	6kg
Field of vision	1010×660@800mm~1270×820@1000mm
Working distance	800mm~1000mm
Measuring accuracy	±0.2mm~±5mm
Scanning time	0.5s
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size

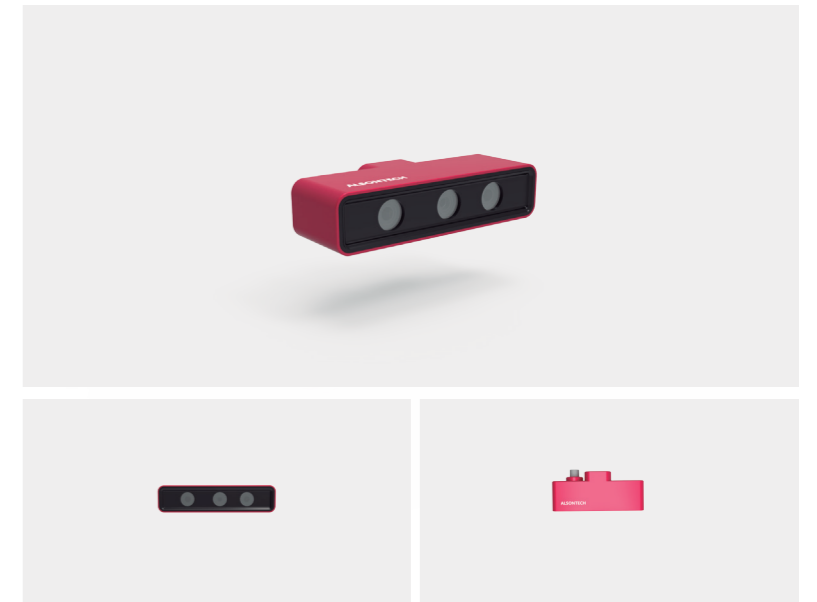


AT-S1000-01S



peckle structured light, ultra-small & ultra-light, short range, extremely high-speed.

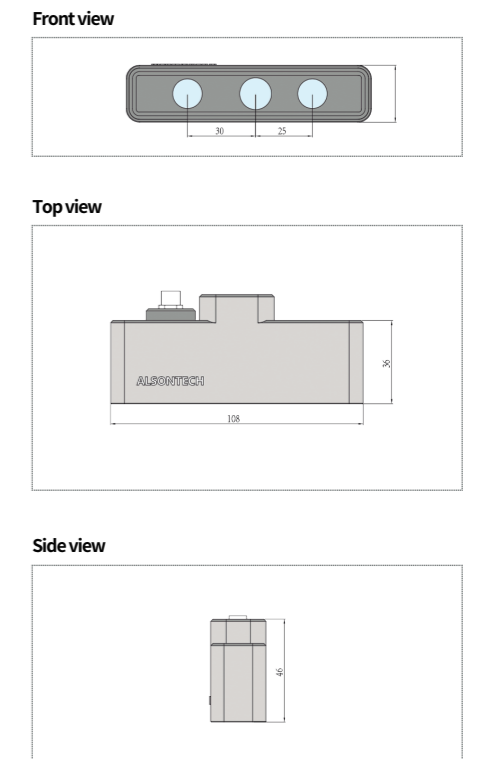
- Small body and light weight, perfect for installation at the end of the robot arm
- Real-time point cloud, rapid matching and positioning of data and design model
- Main communication protocol, no necessary second development
- Eliminate lens distortion and ensure data acquisition accuracy
- User-friendly software interface, easy to operate.
- Integrated aluminum casing, stable and reliable.
- IP65 safety protection grade.

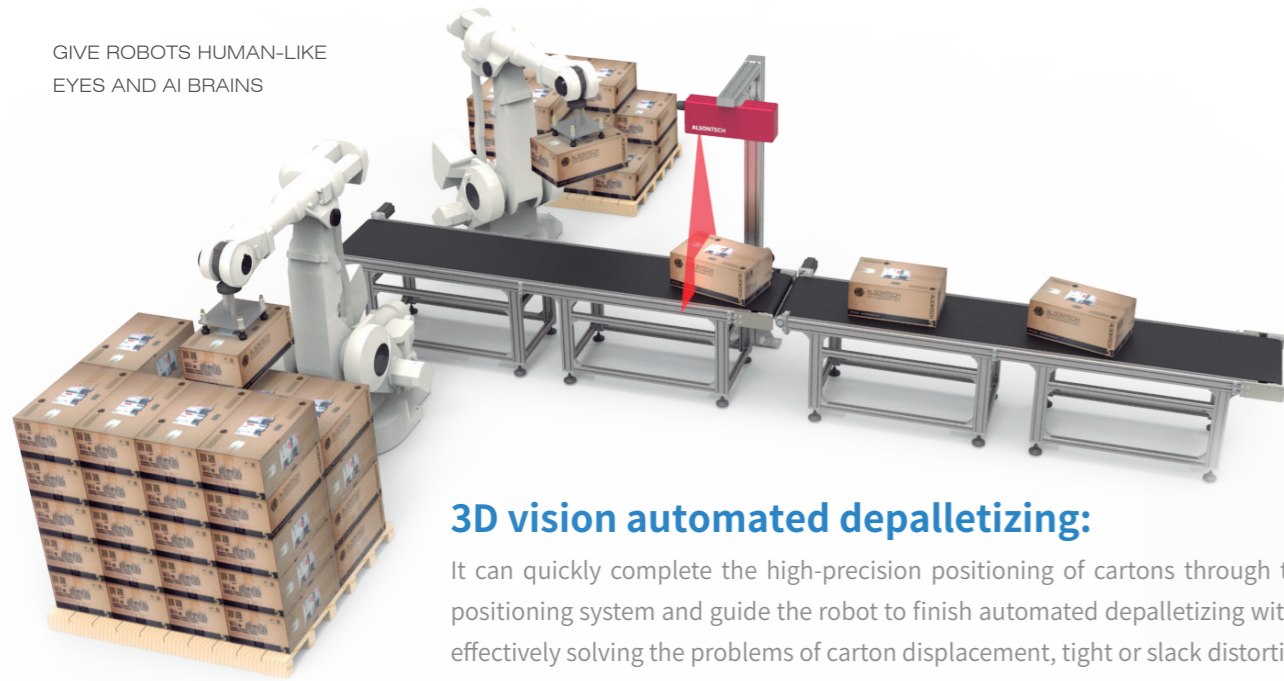


Technical parameters

Dimensions (LxWxH)	108mm×46mm×27mm
Weight	0.175kg
Light source	Speckle structured light
Connector (IPC)	USB2.0
Dimensions of package	255mm×155mm×55mm
Weight of package	0.8kg
Field of vision	430×330@400mm~1300×990@1200mm
Working distance	400mm~1200mm
Measuring accuracy	±5mm~±10mm
Scanning framerate	25Hz
Output result	3D coordinates and posture information (X,Y,Z,a,b,c)
Working temperature	0°C ~ 50°C
Storage temperature	-20°C ~ 70°C
Humidity	20% ~ 90% RH (No condensation)
Protection grade	IP65

Product Size





3D vision automated depalletizing:

It can quickly complete the high-precision positioning of cartons through the robot 3D vision positioning system and guide the robot to finish automated depalletizing without teaching, thus effectively solving the problems of carton displacement, tight or slack distortion during shipping, and half-full stack in sorting. Used in warehouse systems of all kinds of industries, and logistics for medicine, food, e-commerce etc. Aimed to solve depalletizing problems for soft bags, turnover boxes and pallets.

Applications



Warehouse



Medicine



E-commerce



Logistics



Loading & unloading of parts

It can quickly complete the positioning of parts through the robot 3D vision positioning system and guide the accurate loading of robots. Robot arm installation can expand the camera FOV through the robot arm spread, which can guarantee high precision positioning while covering a large FOV. Super adaptability, adaptable to reflective objects, highly resistant to ambient light interference, fast modeling, and efficient new product introduction.

Applications



Heavy machinery



Automotive & Parts



Casting



Welding



Home appliances



3C



Random bin picking

The robot 3D vision system can locate the scattered, stacked and disordered objects and guide the robot to pick accurately; point cloud recognition, ROS anti-collision processing, and multiple picking position setting ensures an 100% picking rate. The system replaces manual work and positioning tools, and effectively solves the problems of frequent replacement of tools in today's multi-variety and small batch production pattern through flexible positioning of the objects.

Applications



Military Medicine



Medicine



Food



Automotive & Parts



Casting



Home appliances



3C



3D vision-guided AMR robot/unmanned scenarios

The AMR robot integrates the AGV and robot, which can replace the traditional AGV and conveyor line to complete the last step of loading and production, with advantages of high efficiency and flexibility. ALSONTECH MINI 3D vision system, featuring small size and light weight, is the optimal selection for the AMR robot solution. Thanks to its super high precision and fast positioning, the unmanned robot can replace manual work in complicated and high-risk scenarios.

Applications



Automatic EV charging



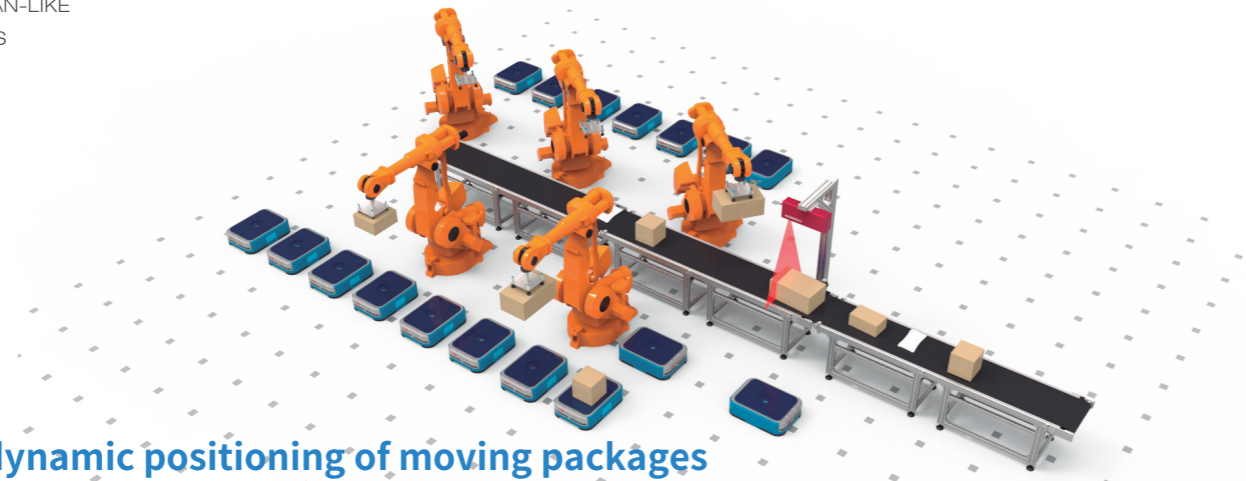
Automatic refueling



Automatic patrolling



Nuclear waste recycling

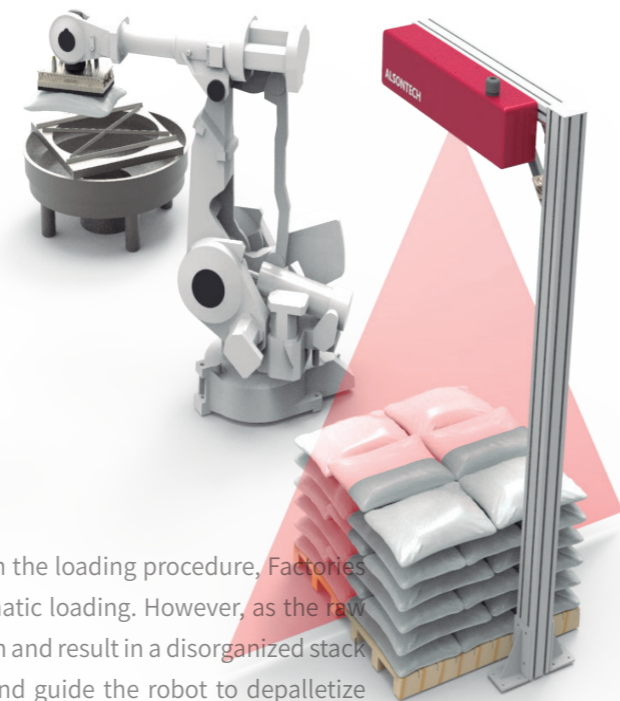


3D vision dynamic positioning of moving packages

With the development of e-commerce, the increasing e-commerce promotion campaigns every year pose big test for the logistics industry. The logistics industry cries out for the automation reform to reduce costs and improve efficiency. The 3D vision system could position moving packages on the conveyor belt, and guide the robot to pick the moving packages, which greatly improves the work efficiency.

Applications

- 
E-commerce
- 
Logistics
- 
Industrial logistics



3D vision depalletizing of soft bags

To solve the problems of heavy manpower and sanitary security in the loading procedure, factories are planning to replace manual work with robots to realize automatic loading. However, as the raw materials are mostly packed with soft bags which are easy to deform and result in a disorganized stack shape. The 3D vision system could position the bag accurately and guide the robot to depalletize automatically without the need of teaching, effectively solving the problems of bag deformation and stack disorganization due to squeezing and displacement during transportation.

Applications

- 
Manufacturing
- 
Warehouse
- 
E-commerce
- 
Logistics



3D vision sorting

The 3D vision system can help the robot realize the flexible positioning and sorting of goods. Modelling is not required for simple geometric objects, easy and direct positioning and sorting, compatible with various SKUs.



Applications

- 
Manufacturing
- 
Warehouse
- 
E-commerce
- 
Logistics



Multiple bin picking for CNC

The track link is the connecting part of the track used in construction machinery such as excavators and bulldozers and military machinery such as tanks, with a unit weight of 15-30kg. The loading cycle time is 10s/piece, which is hard for manual work. 3D vision positioning system specializes in solving the problems of positioning of disordered and stacked workpieces. One set of 3D sensor installed on a sliding rail or mounted on a robot arm could help the robot position and load the workpieces in multiple bins for CNC machine tool.

- 
Medicine
- 
Food
- 
Auto & Parts
- 
3C
- 
Welding
- 
Military
- 
Home appliances