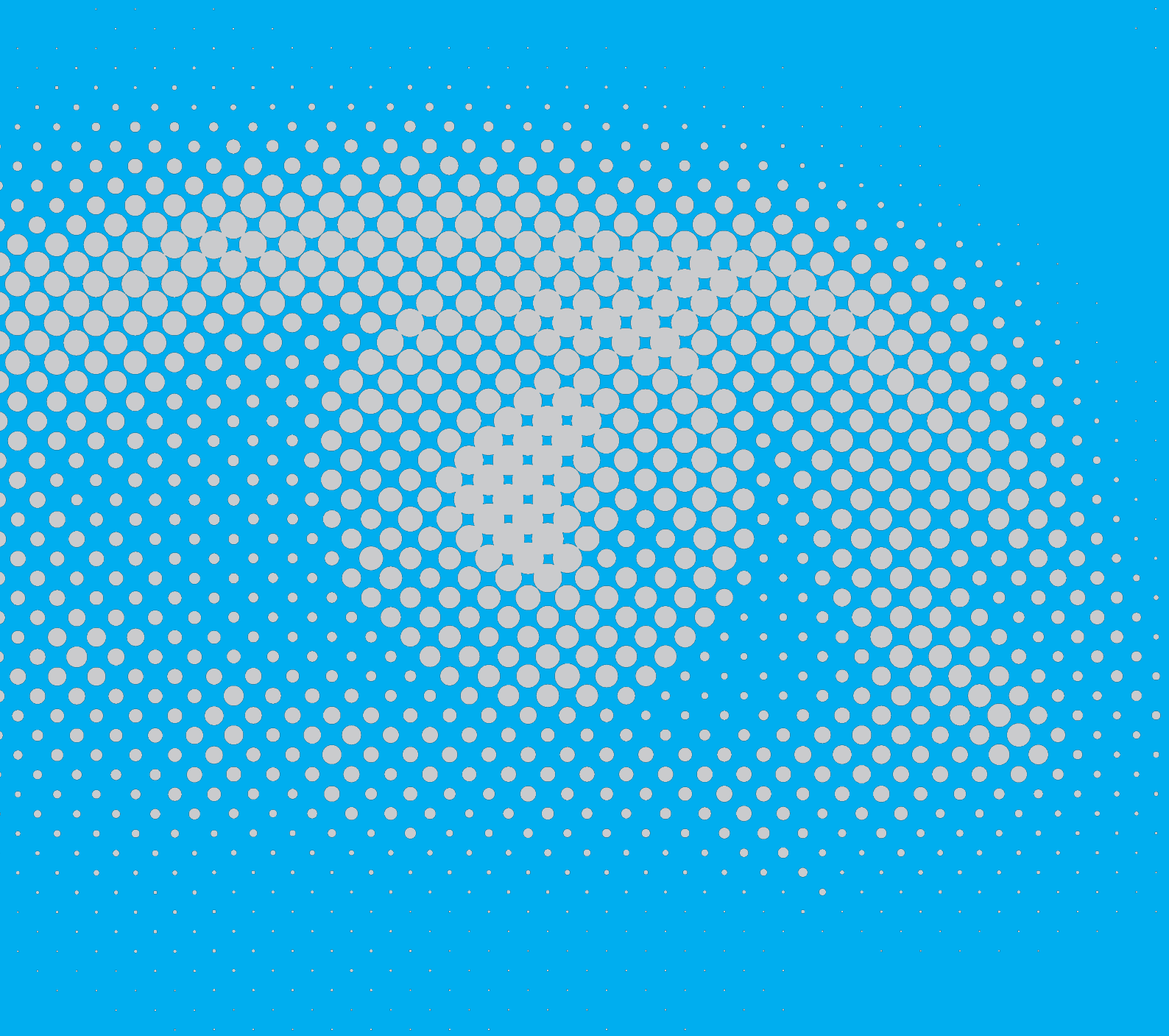
www.x-sight.com.cn

X-SIGHT

WUXI XINJE ELECTRIC CO., LTD VISION DEPARTMENT

Address 5F, Building, No.100 Dicui Road, Binhu District, Wuxi, Jiangsu
Tel +86 510 85134365

X-SIGHT



2020 VISION SOLUTION

PC-BASE | SMART CAMERA

intel IoT Solutions Alliance

X-TRAORDINARY SIGHT

X-SIGHT is an independent vision brand founded by XINJE Electric Co., Ltd. The company integrates vision product development, production, integration and sales, and is committed to the development and application of machine vision products. Our aim is to provide high-quality visual products and professional solutions for various industries.

According to the needs of different customers, a PC-base solution or a smart camera solution can be used to build a vision system. For customers with complex needs, we can rely on our strong R & D and customization capabilities to design high-quality solutions.

With more than ten years of technology accumulation, our vision products have been widely used in electronics, machinery processing, daily products, automotive parts, packaging, textile, stamping and other industries.

At present, our vision products cover IoT vision controllers, industrial smart cameras, capture cameras, vision software, lenses, light sources, etc. Our products can efficiently implement the applications such as visual positioning, high-precision measurement, robot vision guidance, character recognition, barcode recognition, and color discrimination.

OUR VISION

Powerful

Using the Intel OpenVINO framework, we can achieve hardware heterogeneous acceleration,MKL data operation acceleration and builtindeep learning frameworks such as Tensorflow and Caffe. As integrating OpenGL, We can achieve 3D display acceleration. With uniquely supported hardware architecture, We can greatly improve the accuracy and efficiency of the algorithm.

Easy to use

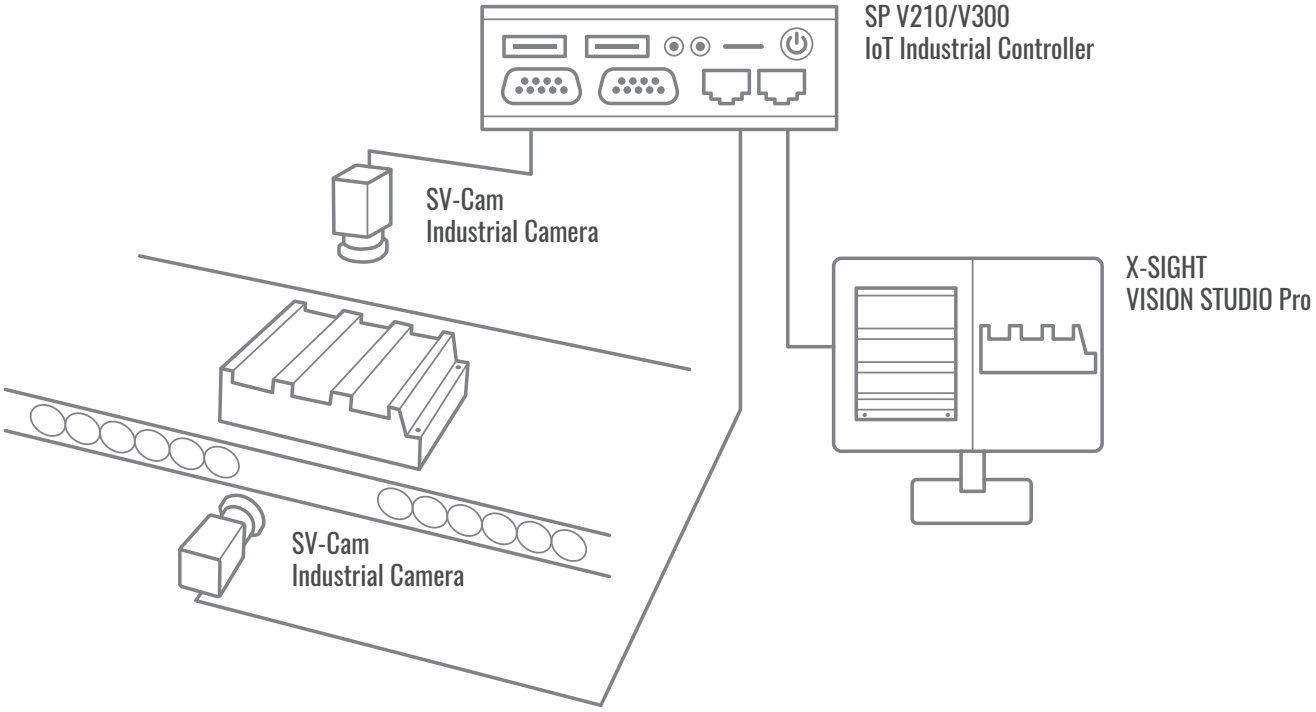
A professional R & D team can develop excellent product according to customer requirements and provide professional machine vision solutions. We have simplified the operation and made it more convenient to use.

Adaptive

Providing professional solutions for vision projects. Based on actual customer demand, developing algorithms for individual solutions, greatly improving the adaptability of the algorithms and meeting customer requirement.

PC-BASE

HARDWARE TOPOLOGY MAP



Features

- With Intel Apollo Lake / Kaby Lake series processors, multi-task execution can be realized
- Image sensors with different resolutions can be selected: From 0.3MP to 20MP
- Rich I/O Interfce
- Support X-SIGHT VISION STUDIO Pro software platform
- Rich demos and kinds of materials
- Powerful hardware adaptability and software customization
- Excellent EMC performance

Application Area

Target location, Measurement, Robot vision guide, OCR, Barcode, Detection

SP V210

Windows 10 IoT Enterprise Copyright©

The SP V210 series of ultra-compact IoT industrial controllers use Intel® ApolloLake processors to provide reliable I/O designs to meet the maximum number of connections.

The controller adopts a unique expansion design, and can realize function customization through signal conversion such as PCIe, USB, and SPI.

The controller performs well in simple vision application deployments.

SP V210 Specifications

System	Parameter
CPU	Intel® Pentium® N4200
BIOS	AMI8Mb UEFIBIOS
Memory	4G DDR3L 1600MHz (Up to 8G)
Display	DP, Up to 4096x2160 @60Hz HDMI, Up to 3840x2160 @30Hz
Audio	Line-out, MIC-in, RealtekALC662
Ethernet	LAN1, RTL8111H GbE, Support Wake On Lan LAN2/LAN3, Intel i210 GbE
I/O	2x USB2.0 2x USB3.0 2x RS232 2x RS485
Expansion Slots	Full size mini-PCIe, Support WLAN/WWAN USIM, For 3G/4G LTE
Storage	eMMC (Up to 256GB) M.2 SSD (2242) TF SATA3.0, Support 2.5 inch HDD
Power	12~32V DC IN
OS Support	Windows 10 IoT Enterprise 64bit, Linux
Mounting	Aluminum alloy, Wall mounting
Dimension	120 x 100 x 51mm (L x W x H)
Weight	0.65kg
Operation Temperation	-20°C ~ 60°C, Airflow 0.7m/s
Storage Temperation	-40°C ~ 80°C
Relative Humidity	95% @40°C (Non-Condensing)
Anti-vibration	SSD: 3Grms, IEC60068-2-64, Random, 5~500Hz, 1hr/axis
Impact Protection	SSD: 30 G, IEC60068-2-27, Half Sine, 11ms
ESD	Contact ±4 KV, Air ±8 KV
Certification	CE/FCC Class B

SP V300/V310/V330

Windows 10 IoT Enterprise Copyright©

The SP V300 series of scalable IoT industrial controllers use Intel®Pentium® and Intel®Core™ processors, which can provide powerful computing performance and excellent image processing capabilities, and their extremely low power consumption makes them excellent in vision and motion control.

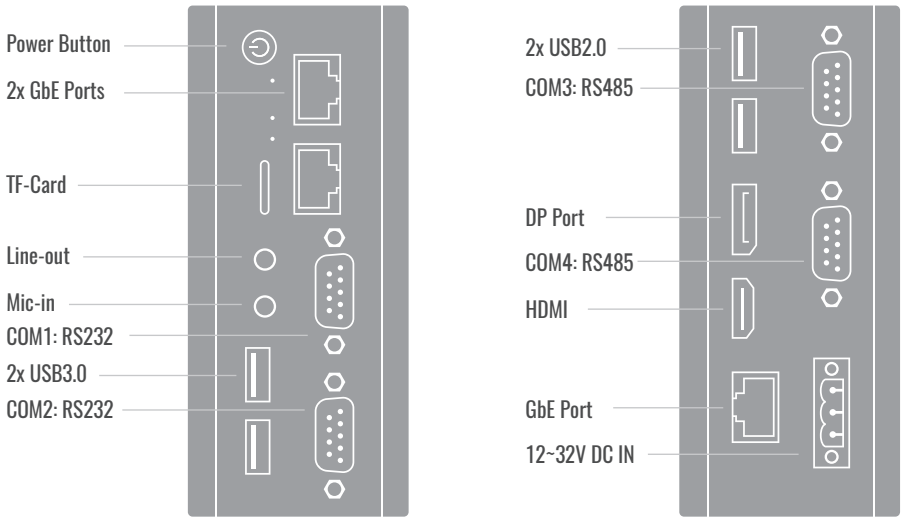
SP V300 series controllers can be divided into SP V300, SP V310, and SP V330 according to different types of external interfaces. SP V330 can provide PCI / PCIe expansion slot, can install various expansion cards to meet the needs of various applications.

SP V300/V310/V330 Specifications

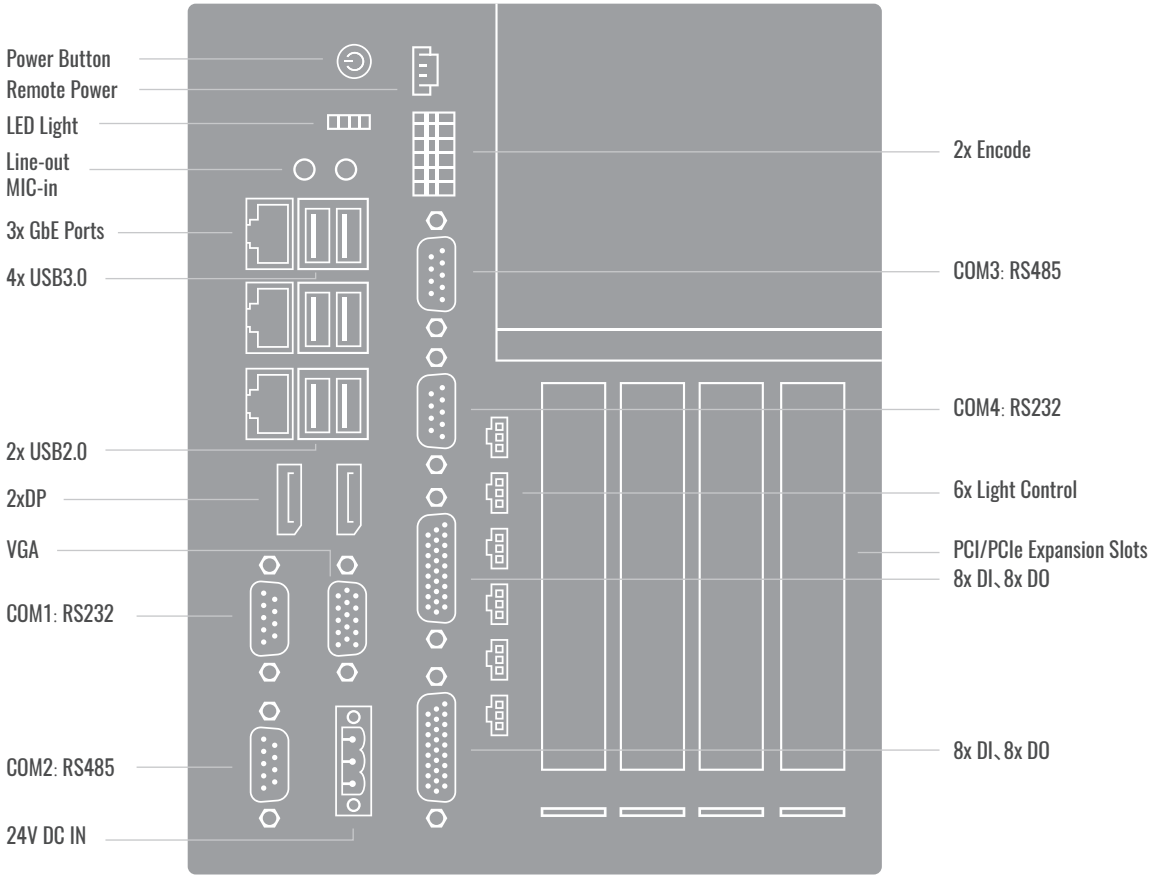
System	SP V300	SP V310	SP V330
CPU	Intel® Pentium® G4560 / Intel® Core™ i5 7500	Intel® Pentium® G4560 / Intel Core™ i5 7500+ FPGA	
Chipset	H110		
Memery	4G DDR4 SO-DIMM , Up to 32G		
Display	2x DP, Up to 4096 x 2304 @60Hz 1x VGA, Up to1920 x 1080 @60Hz DP+DP / DP+VGA		
Audio	Line-out\MIC-in, Realtek ALC662		
Ethernet	1x Intel i219LM GbE, Support Wake On Lan 2x Intel i210AT GbE		
USB	4x USB3.0, 2x USB2.0, USB2.0 Internel (TYPE A)		
Serial Port	1x RS232, 1x RS485	2x RS232, 2x RS485	
Digital IO		16 isolated DI, 16 isolated DO	
Encoder		2 Sets of Encoders	
Remote Switch		4-Pin connector supporting remote power switch and indicator	
Light source control			6x Light source control, Single channel up to 24W
Expansion Slots	Full Size Mini-PCIe, Support WLAN/WWAN USIM, For 3G/4G LTE		
			2x PCI, PCIe 3.0 (X16), PCIe 2.0 (X2)
Storage	1x SATA3.0, Support 2.5 inch HDD 1x mSATA (Compatible with mini-PCIe)		
			2x SATA3.0, Support 2.5 inch HDD
Power	24V DC IN 3PIN Phonix		
OS Support	Windows 10 IoT Enterprise 64bit、Linux		
Mounting	Wall Mounting		
Dimension	220 x 226 x 68mm (L x W x H)	220 x 226 x 77mm (L x W x H)	220 x 226 x 176mm (L x W x H)
Weight	3kg	3.3kg	4kg
Operation Temperation	0°C~ 50°C, Airflow 0.7m/s		
Storage Temperation	-40°C~80°C		
Relative Humidity	95% @40°C (Non-Condensing)		
ESD	Contact ±4 KV, Air ±8 KV		
Certification	CE, FCC Class B		

I/O Interface

SP V210



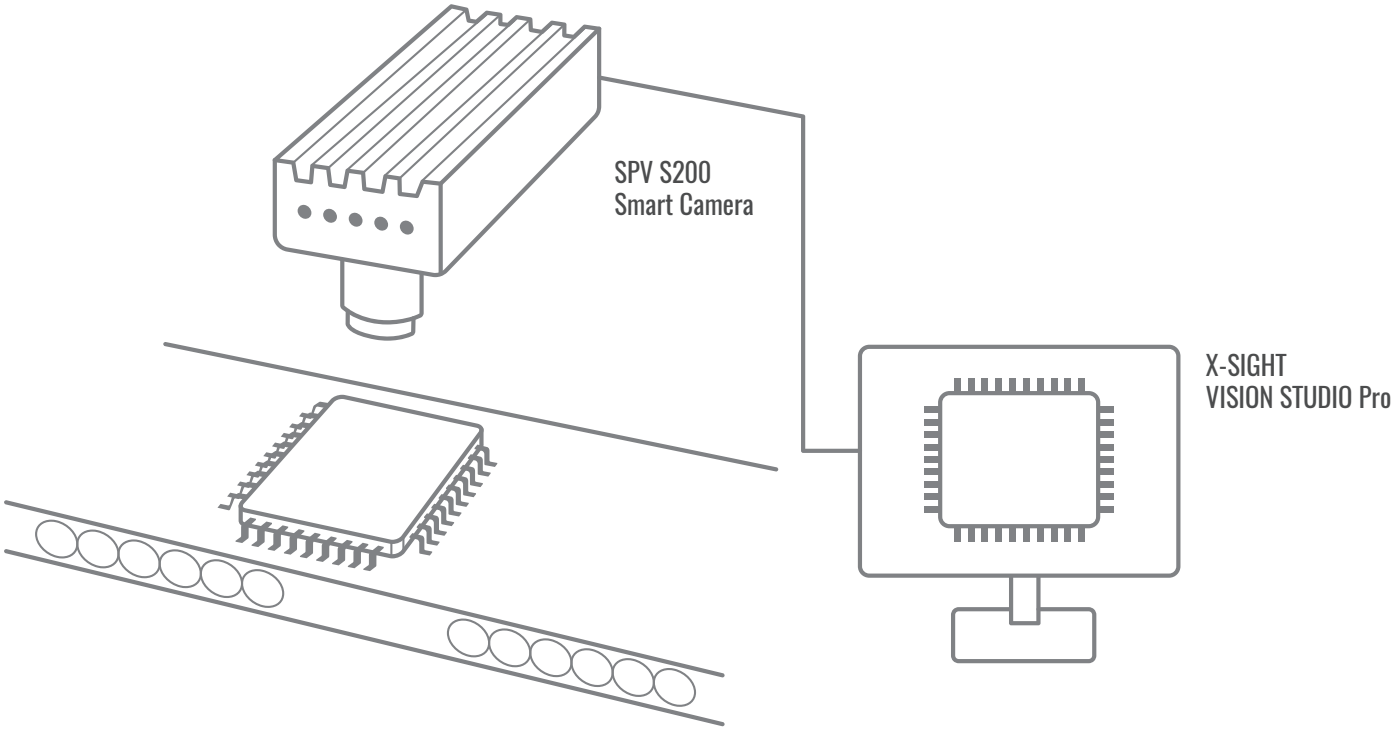
SP V330



*SP V300 / SP V310 interface description please refer to this figure.

SMART CAMERA

HARDWARE TOPOLOGY MAP



Figures

- With Intel Apollo Lake N4200 processor and LPDDR4 memory
- Image sensors with different resolutions: from 1.3MP to 1.2MP
- High-speed programmable isolated digital I/O with good protection capability according to FPGA
- Rich I/O Interfaces: Digital I/O, RS232, Ethernet. Easy for connecting to PLC/robot
- High system integration, compact structure, stable performance, low failure rate and high operation speed
- Can work without the PC, and display images and processing results
- Built-in vision programming software, can realize the rapid construction of simple vision projects
- Built-in light source controller

Application area

Location, OCR, Barcode, Counting, Color detection

SPV S200

Windows 10 IoT Enterprise Copyright©

The SPV S200 series industrial smart camera, which uses the Intel N4200 processor, is a highly integrated X86 vision processing platform. It can support 1.3MP to 12MP resolution CMOS sensors, and has excellent protection.

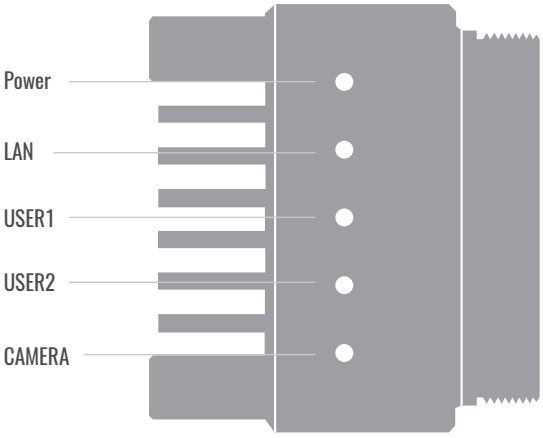
As integrating image data acquisition, processing and communication, it has smaller size, which is especially suitable for compact vision applications.

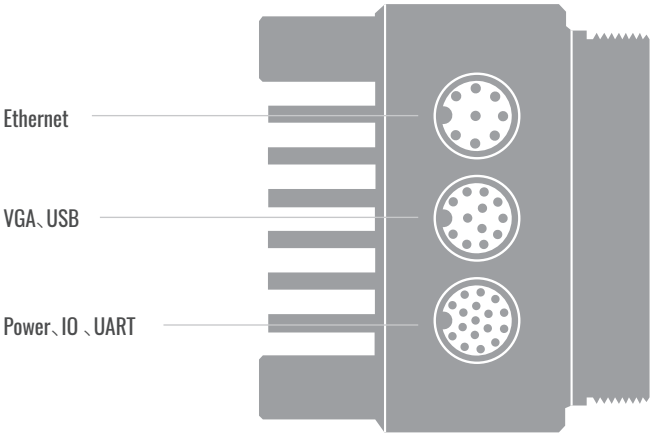
SPV S200 Specifications

System	Parameter		
Sensor Size	1/2-inch	2/3-inch	1/1.7-inch
DH	PYTHON 1300	IMX 264LLR / IMX 264LQR	IMX 226CLJ / IMX 226CQJ
Resolution	1280 (H)x1024 (V)	2448 (H) x 2048 (V)	4072 (H) x 3046 (V)
Pixel	1.3MP	5MP	12MP
Shutter	Global	Global	Rolling
Frame Rate	90.0fps	35.7fps	30fps
Processor	Intel® Pentium® N4200 2.5GHz		
Memory	4G LPDDR4		
Storage	64G		
Display	VGA Port		
Ethernet	i210 GbE		
Serial Port	RS232		
USB	1x USB IN, 3x USB2.0		
I/O	One optocoupler isolated trigger input, 4 x DI, 4 x DO		
Power Supply	24V DC IN		
TDP	12W		
Connector	M12 8pin (Female), M12 12pin (Female), M12 17pin (Female)		
Lens Mount	C-Mount / M12		
Dimension	130mm x 70mm x 58mm (L x W x H)		
Temperature	0°C~50°C		
Certification	CE, FCC Class B		

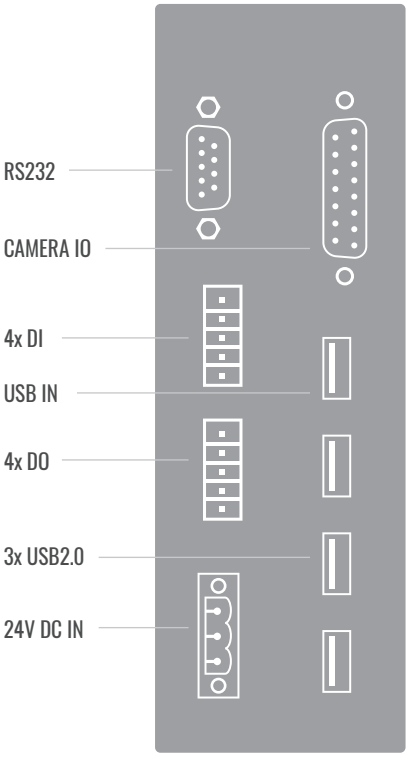
I/O Interface

SPV S200

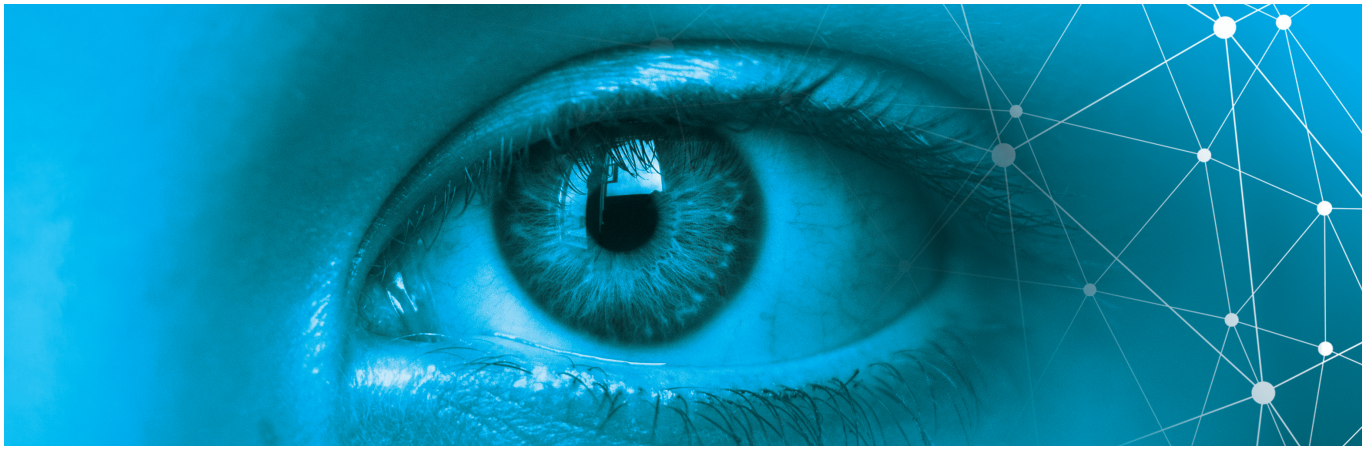




S200 IO



X-SIGHT VISION STUDIO
FLEXIBLE PROGRAMMING SOFTWARE PLATFORM



X-SIGHT VISION STUDIO Pro is a new generation of machine vision application development platform developed independently. It is based on dataflow and can provide powerful image processing tools, while also providing rich tool results output.

The unique advantage of X-SIGHT VISION STUDIO Pro lies in focusing on professional customers and proving everyone with a rapid application development environment, which can greatly improve development efficiency. It can also help set up large-scale projects.

Advantages

- New generation of user-friendly operation interface that supports the rapid construction of projects
- No need to write complex code, just choose the tools you need to complete the project
- Built-in powerful machine vision algorithm library
- Follow GigEVision and support API interfaces from a large number of vendors
- All algorithm tools are optimized by SSE instruction technology and multi-core processor technology, so the processing speed is faster

Features

OS Support

Win7, Win10

Logic Structure

Branch, loop, condition

Image Acquision


Local Camera


Industrical Camera


Smart Camera

Image Processing


Smooth Image


Pixel Statistics


Convert to Mono


Threshold Extraction


Convert Color Space

Region Analysis


Create Region


Region Feature


Combine Region


Region Logic


Morph Region

Detection and Positioning


Scan Edges


Locate Objects


Check Presence


Detect Edges


Fit Shape


Read Codes


Segment Image

Communication

Modbus


Read Register


Read Input Register


Write Register

Typical Tools

Image Preprocessing

By ‘ SplitChannels’, ‘ Gauss’, ‘ ThresholdToRegion’, and ‘ ConvertColorSpace’,
irrelevant information is eliminated in the image, and useful real information is restored, thereby improving the efficiency and reliability of image detection and matching recognition.

Detect if there are missing pills in the image.

Use tools such as ‘ SplitChannels’ and ‘ Gauss’ to convert the original image into a grayscale image, making the difference in the pill-free area obvious.

SplitChannels

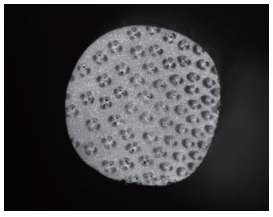
Gauss

Use ‘ ThresholdToRegion’ to extract pill-free regions.

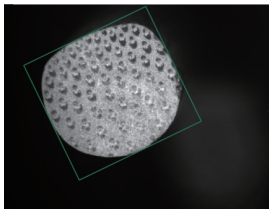
ThresholdToRegion

Region Analysis

The region analysis tool analyzes the connected domains of the same pixels in the image, including ‘ Create Region’ , ‘ Region Feature’, ‘ Combine Regions’, ‘ Region Logic’, ‘ Morph Region’, and also provides topological structures between related regions.



Determine whether the thickness of chopsticks meets the standard based on the cross-section of chopsticks.



Calculate the cross-sectional area of chopsticks.

ThreshouldTo RegionDvnamic

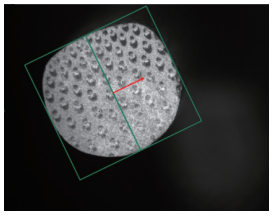
CloseRegion

FillRegion Holes

SplitRegion IntoBlobs

GetMaximum Region

RegionArea



Calculate the area of half the cross section of the chopsticks to determine whether chopsticks meet the standards.

ThreshouldTo RegionDvnamic

Region Difference

SplitRegion IntoBlobs

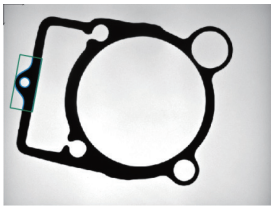
RegionMass Center

Region Intersection

RegionArea

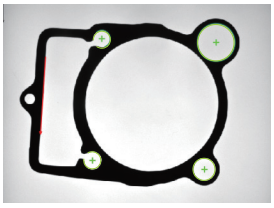
Location

Location tools can capture various features in an image accurately , such as point, line , circle, geometry and even irregular shape. Location function can output positioning object's coordination, object's relative coordinate system and other parameters. The main applications are motion guidance, target search, etc., which can also be used as a tool for inheritance before a measurement tool.



Use the ' SingleLocateObjects' to obtain the relative coordinate system of the part.

SingleLocate Objects



Locate the position of circle and arc and output center coordinates.

FitSementTo Edges

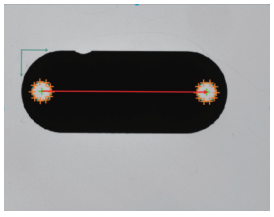
FitSementTo Stripe

FitCircleTo Edges

FitArcTo Edges

Measurement

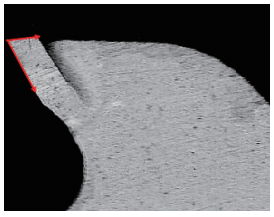
The measuring tool can calculate the distance and Angle between the objects, which includes ' PointToArcDistance', ' PointToCircleDistance', ' PointToPointDistance', ' PointToSegmentDistance' and ' AngleBetweenLines'.



Calculate the distance between the centers of two circles.

FitCircleTo Edges

PointToPoint Distance



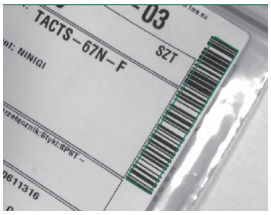
Calculate the cutter's angle.

FitSementTo Edges

AngleBetween Lines

Recognition

Detect the location of the graphic code from the image and display the text information of the graphic code.



Locate the barcode and output the barcode information.

ReadSingleBarcode

Locate the DataMatrix code and output the DataMatrix code information.

DataMatrix

Locate the QR code and output the information of the QR code.

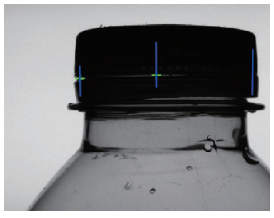
ReadSingleQRcode

Identify the character information in the image and present it in a tabular form in order.

OCR

Edge detection

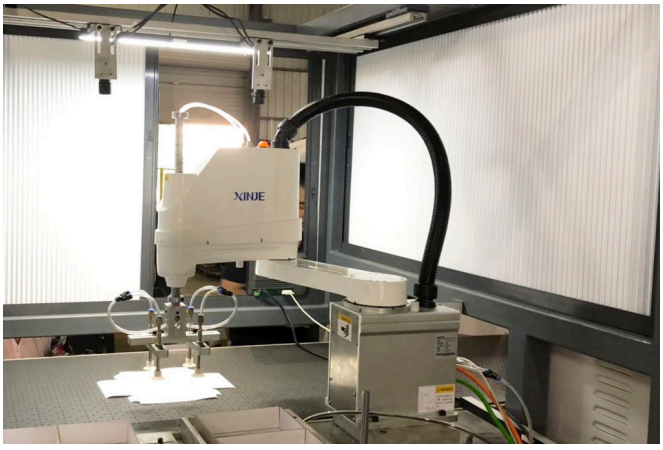
The purpose of edge detection is to identify points in the image where brightness changes significantly.
Including ‘ ScanSingleEdge’, ‘ ScanMultipleEdges’, ‘ ScanSingleRidge’ and ‘ ScanSingleStripe’.

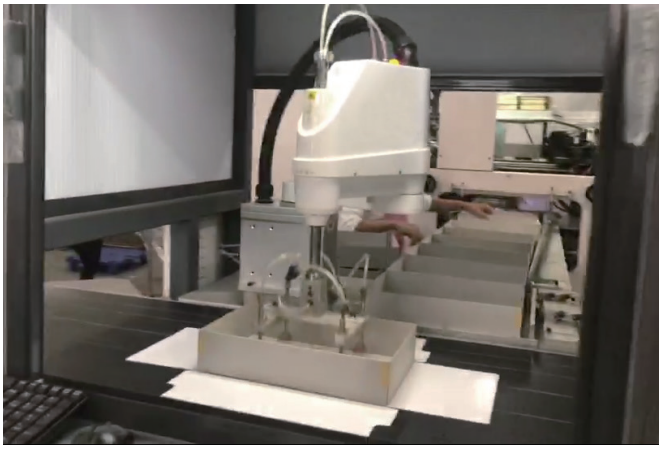


Use the edge detection tool to check whether the cap is tightened.

ScanSingleEdge

SCARA DUAL CAMERA LID AND TRAY LAMINATING SYSTEM





The SCARA dual-camera lid and tray laminating system mainly consists of dual-camera, industrial controller and SCARA manipulator system.When the photoelectric sensor detects the target in position (or the belt is in position with a fixed length), the belt stops running.The visual system fetches images according to external signals, and the controller identifies the current target position by the image contour positioning technology. Once the calibration calculation finished, the target position is transmitted to the SCARA manipulator system to achieve the static laminating.

This system has strong adaptability, high universality, convenient product replacement, automatic deviation compensation, one-key calibration and other functions.

Advantages

01 Extensive Applicability

At present, almost all the lid and tray laminating system from other manufacturers uses single camera, which has limited identification template and poor applicability. However, SCARA lid and tray laminating system guided by dual cameras can adapt to almost any size of boxes.

02 Convenient Replacement

This system saves all terminal products in the form of formula folder.For products with different size, there will be a number of separate corresponding feeding points, and for the products that have been saved , simply open the corresponding file when replacing.

03 Simple And Fast Calibration

At present, lid and tray laminating system in the market needs manual point correction, but our system only requires the operator to perform simple operation on the manipulator to complete the hand-eye calibration, and the whole binocular hand-eye calibration process only takes 1-2min.

04 Automatic Deviation Compensation

Our system will automatically calculate the deviation compensation value of the template when learning the new product, which avoid operators to calculate the compensation value on their own. The whole processing is more straight and the result is more accurate.

05 Strong Adaptability

When the size of the box is within 800mm in length and 600mm in width, the system can learn product storage directly, no need to adjust any camera height position, or to repeat the hand-eye calibration process, which can improve production efficiency.

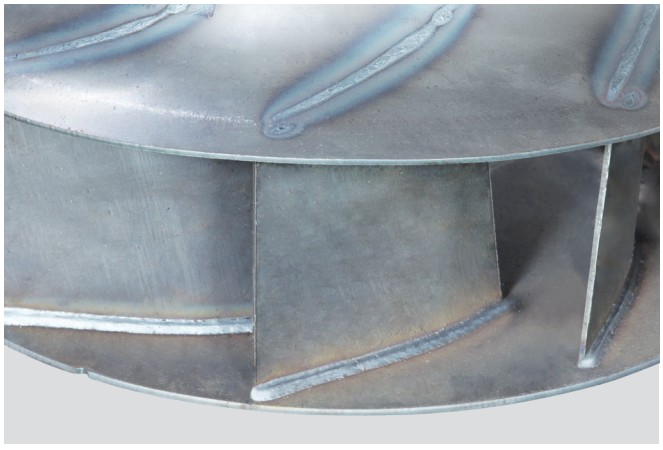
06 Autonomous Research And Development

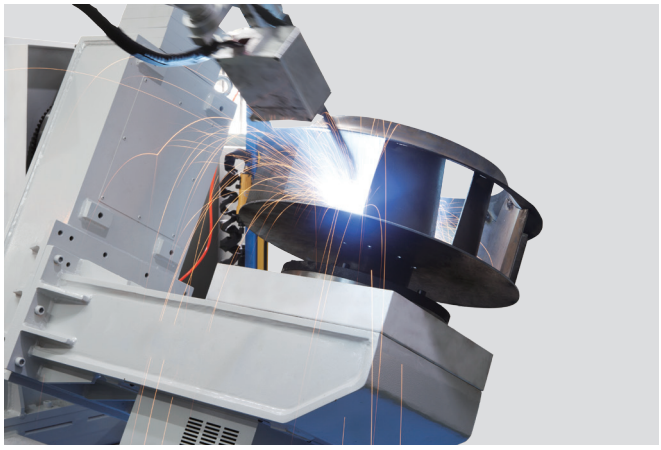
The system functions, such as single and dual cameras switch, dual camera positioning algorithm, dual camera fusion algorithm, SCARA manipulator controller of motion control system, SCARA robot, servo system and PC software, are all independently developed by our company.

System Features

Scara	1 Set
Camera	2 Set
System speed	28-32 /min
Camera calibration time	2min/per
Product replacement time	1-2min
Product dimension	800mm x 600mm (L x W)
Accuracy	±0.1mm
Angle accuracy	±0.1°
Payload	3 kg

CENTRIFUGAL FAN IMPELLER WELDING SYSTEM



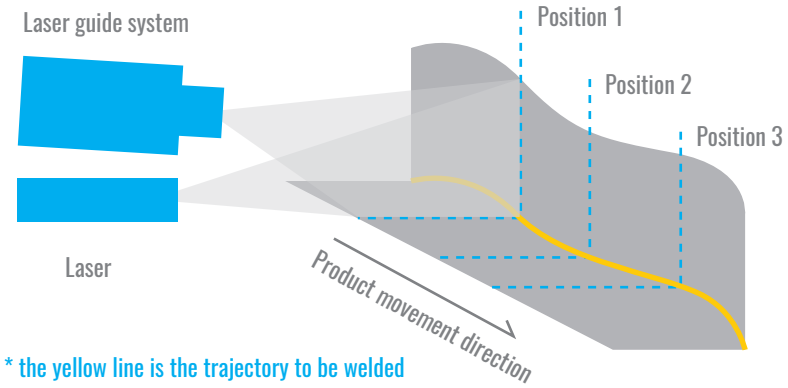


The automatic impeller welding system consists of welding robot system (support ABB), biaxial position changer, laser vision guidance system, welding system,cleaning system, safety protection system, etc.

The laser vision guidance system fits the welding trajectory, shows 3D coordinates and welding posture, identifies the welding seam simply and quickly, and adjusts to the best capturing angle. The system automatically recognizes the deviation value of blade welding spot and gives the best trajectory compensation.During the welding process, the welding offset can be adjusted in time and take effect in the next welding seam to achieve the best performance.

Theory

According to the principle of triangular ranging, the laser system can get the distance and height of the product welding point. Data from multiple shots were used to fit a 3D trajectory.



* the yellow line is the trajectory to be welded

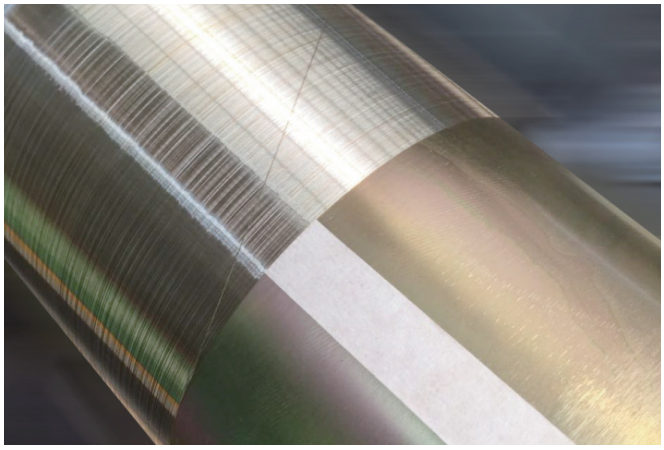
Advantages

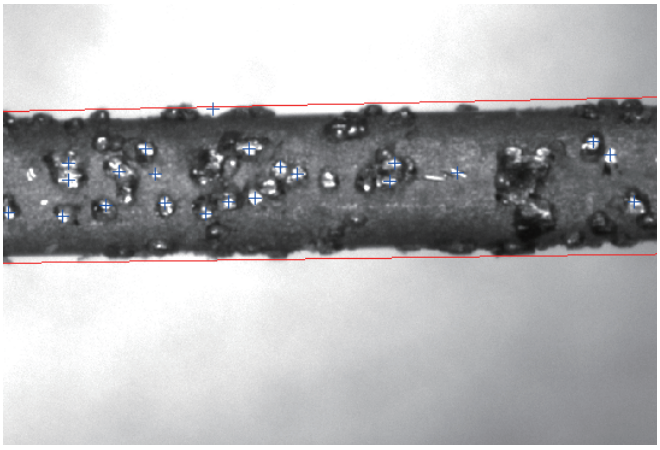
- High efficiency, save labor costs
- High welding quality and no need to polish
- Laser vision has strong adaptability
- Open system, allow importing new products continuously, set welding parameters flexibly
- The welding mode of equipment can be adjusted flexibly according to the process requirements and ensure no deformation in the welding process
- Simple operation, easy to change product

System Features

Adjusting time	20s
Welding speed	Adjustable, generally set to 8-12mm/s
Positioning accuracy	<0.5mm
Weldable material	Aarbon steel, cold-rolled steel, stainless steel
Support impeller size	Radius of 150-900mm and radius of 750-1600mm
Equipment dimension	1.6x2m for standard machine
Alarm and protection	Failure alarm and failure protection functions

SILICON CARBIDE
VISION DETECTION SYSTEM

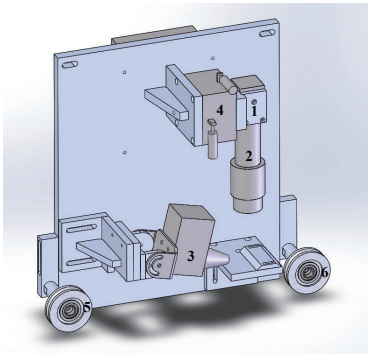




Emery wire is made by inserting diamond particles into the wire to make diamond cutting line. With the continuous development of solar wafer and sapphire cutting technology, the demand of emery line is increasing. Compared with the traditional cutting liquid, it has the characteristics of fast response, stable performance, small fluctuation and full automation.

Theory

The vision inspection system of emery mainly consists of IoT industrial controller, camera, light source, light source controller, lens and pulley. The emery wire is sent to the bottom of the lens through the left and right fixed pulleys to ensure that the emery wire is in the field of vision and has no jitter. The inner and outer diameters and particle number of emery are determined by the specific detection algorithm to ensure the quality consistency of the emery wire and meet the production requirements.



1 Camera
2 Lens
3 Light source
4 Position adjusting device
5 Left set pulley
6 Right set pulley

Advantages

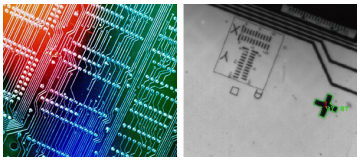
- It can modify the number of emery particles, the number of images, exposure time and other parameters in real time, making the operation more convenient
- It can meet the testing requirements of different types of emery line, with higher applicability
- Establish a database to record the production data of each time period to facilitate the tracking of production data in the future
- Draw real-time trend chart to facilitate customers to observe the change trend of particle number
- Special guidance optical element is used to make the image more three-dimensional

System Features

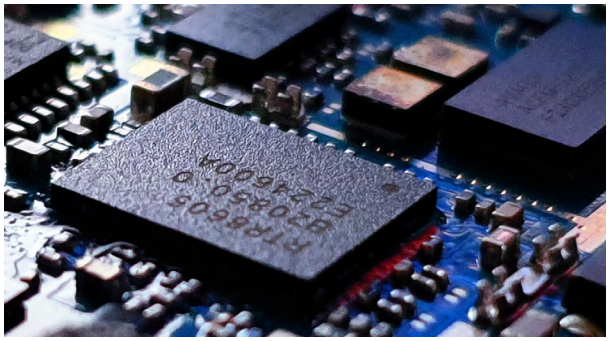
Detection speed	60m/min
Line diameter	0.08mm~0.4mm
Detection accuracy	±0.002mm
Minimum exposure time	4μs
Detection type	less sand, pile sand, gravel number
Camera support (Max)	4 channels

DETECTION OF ELECTRONIC SEMICONDUCTOR INDUSTRY

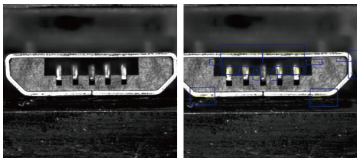
Mark Location Of PCB



In industries such as PCB printed circuits, the mark point provides a common measurable point for all steps of the mount process and is critical to SMT production. The positioning algorithm can stably identify the position of the current mark point and ensure the industrial reliability.

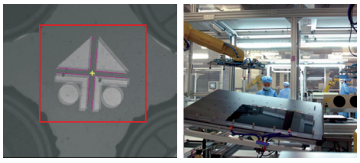


Electronic Connector Detection



According to the characteristics of electronic product connectors, a new generation of optical detection method is introduced. Use X-SIGHT visual positioning and measurement tools to accurately detect PIN height, width, degree and spacing with accuracy up to 10μm. Which is widely used in digital products, mobile phones and notebook computer assembly production.

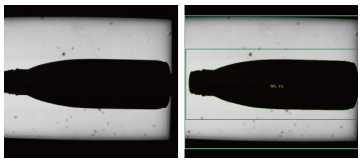
LCD Panel Module Alignment System



Before pressing the liquid crystal panel module, X-SIGHT vision positioning tool can precisely position the ark point and guide the motion device to correct the position, so as to make each layer plate fit with high precision, reduce labor cost and provide high quality guarantee for subsequent pressing and cutting process.

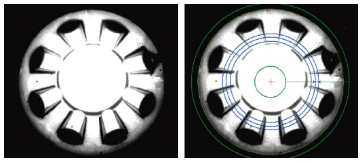
MECHANICAL PROCESSING AND ASSEMBLY INDUSTRY

Vacuum Cup Polishing System



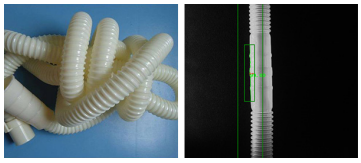
The vacuum cup vision polishing system adopts PLC and camera mode to intelligently identify the contour information of the vacuum cup and carry out automatic segmentation. Suitable for many kinds of stainless steel vacuum cup on the market, easy to operate, no need of G code programming, convenient maintenance and upgrade.

Bearing Production Assembly Detection



We have successfully detected the following cases: needle roller bearing missing needle, deep groove ball bearing missing bead, positive and negative identification, lack of cage, lack of rivets, lack of grease, unidirectional bearing missing spring, lack of cage, assembly ball distribution, bearing surface character detection, etc.

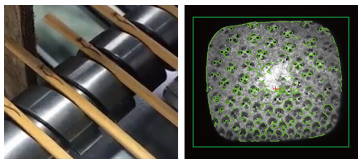
Plastic Hose Cutting System



Due to the toughness of the hose, the cutting point cannot go right to the cutting knife every time, X-SIGHT visual positioning system can compensate the offset of the tangential point and ensure that the cutter cuts at the feature point. The advantage of the system lies in the larger field of view shooting, accuracy within 0.2mm, easy to operate and easy to use.

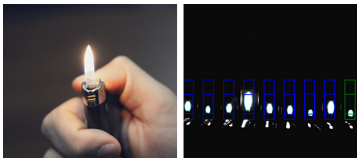
DAILY RETAIL INDUSTRY

Chopsticks Marking Detection System



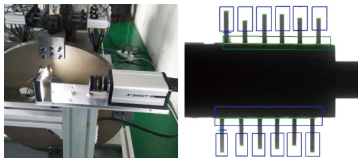
Chopsticks marking detection system is used to measure the density of chopsticks in the process of chopsticks production, which is convenient for laser marking, marking trademark or writing on the side with high density to ensure the quality of chopsticks, so as to realize automatic online detection and meet the production requirements.

Lighter Flame Height Detection



Lighter adjustment and detection is an important link in the lighter production process.The X-SIGHT visual inspection system can accurately measure the flame height information, improving the accuracy and consistency of the flame height of lighters.

Key Coding Information Detection System



In the assembly process of the key and the lock core, the code information of the key should be accurately identified to assemble the corresponding lock core.The adoption of X-SIGHT vision recognition system is more accurate than the traditional infrared identification, more convenient to change the shape, and easier to operate.

PHARMACEUTICAL INDUSTRY

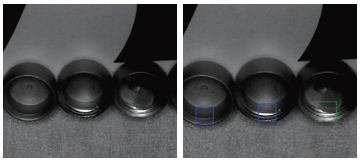
Pharmaceutical Production

The pharmaceutical industry has high requirements on the production environment, and strives to realize unmanned production. The X-SIGHT vision detection system can be introduced into the pre-encapsulation quantity detection, positive and negative detection of tablets, post-encapsulation shell damage and indentation detection to easily achieve 100% high reliability detection.

Detection Of Syringe Needle Cap

In the production process, medical syringes have very high requirements on the sealing of their appearance. The installation and testing of the syringe needle rubber cap requires a sterile and non-contact environment. Through X-SIGHT contour and angle positioning, it can be detected whether the rubber cap is in the correct place and angle, etc.

Medical Aluminum Cover Thread Detection



Medical aluminum cover involves thread sculpture, due to technical problems will produce no thread or thread chip remain in the cover and the probability of defective goods. Introducing vision to judge whether there are thread chips, can control product consistency and improve production reliability.This function can be used for the quality inspection of various aluminum covers.

SELECTION GUIDE

SV-Cam

Product Model	Color	Resolution	Optical Size	Frame Rate(fps)	Shutter Mode
SV-H30M300-C	Mono	30MP (640×480)	1/4”	300	Global
SV-H30C300-C	Color	30MP (640×480)	1/4”	300	Global
SV-H130M-C	Mono	130MP (1280×1024)	1/2”	60	Global
SV-H130C-C	Color	130MP (1280×1024)	1/2”	60	Global
SV-H200M-C	Mono	200MP (1920×1080)	2/3”	50	Global
SV-H200C-C	Color	200MP(1920×1080)	2/3”	50	Global
SV-H500M-C	Mono	500MP (2448×2048)	2/3”	23	Global
SV-H500C-C	Color	500MP (2448×2048)	2/3”	23	Global
SV-HA00M-C	Mono	1000MP (3840×2748)	1/2.3”	10	Rolling
SV-HA00C-C	Color	1000MP (3840×2748)	1/2.3”	10	Rolling
SV-HB00M-C	Mono	2000MP (5472×3648)	1”	5.8	Rolling
SV-HB00C-C	Color	2000MP (5472×3648)	1”	5.8	Rolling

Lens

Lens Series	Product Model	Focal Length / Mag.	Aperture	Resolution	Sensor Size(Max)	Mount
FA Lens	SL-LF08-C	8mm	F1.4-F16	100MP	1/1.8”	C-Mount
	SL-LF12-C	12mm	F1.6-F16	100MP	2/3”	C-Mount
	SL-LF16-C	16mm	F1.6-F16	100MP	2/3”	C-Mount
	SL-LF25-C	25mm	F1.8-F16	100MP	2/3”	C-Mount
	SL-LF35-C	35mm	F2.0-F16	100MP	2/3”	C-Mount
	SL-LF50-C	50mm	F2.5-F16	100MP	2/3”	C-Mount
Zoom Lens	SL-CZ0310-C	0.3X-1.0X	F4.5-F22	100MP	2/3”	C-Mount

Light Source

Light Source Series	Product Model	Size	Angle	Lamp bead Row Number	Color
Ring Light	SI-JD70A00-□	70/30mm	0°	\	□Light color
	SI-JD120A00-□	120/50mm	0°	\	R red
	SI-JD120A30-□	120/60mm	30°	\	B blue
	SI-JD120A90-□	120/90mm	90°	\	W white
Surface Light Source	SI-JB050050-□	78*60.5mm	\	\	G green
	SI-JB100100-□	128*109mm	\	\	IR infrared
Parallel Light Source	SI-JPB200200-□	234*234mm	\	\	UV ultraviolet
Bar Light Source	SI-JL050R3-□	50*19mm	\	3	
	SI-JL200R3-□	220*25.5mm	\	3	
	SI-JL150R6-□	162*33.5mm	\	6	
Dome Light Lource	SI-JS70-□	70/12mm	\	\	
	SI-JS175-□	175/35mm	\	\	
Coaxial Light Source	SI-JC50-□	96*60*57mm	\	\	
	SI-JC150120-□	166*160*127mm	\	\	

For more details, please call 0086 510 85134365