# IoT industrial controller SP series

#### | Naming rule

SP-XP720T-V310

- - 3 CPUtype
- 4 SSD capacity

5 RAM capacity

1 Industrial controller

6 Mechanical hard disk capacity

2 Product labeling information

Product series

#### **Introduction**

SP series scalable IOT industrial controller adopts processors with different performance, including Intel Apollo Lake, Intel Sky Lake/Kaby Lake, Whiskey lake-U series. It can provide powerful computing performance, excellent image processing capability, rich external interfaces, meet the maximum number of device connections and very low power consumption. Support extensive application development and convenient service deployment, and perform well in industrial automation and machine vision applications.



#### | Features

Multi-performance processor can be selected to meet different industrial testing requirements

**IoT** industrial controller SP series

- 300 thousand to 20 million pixel CMOS image sensor is optional
- Provide rich external interfaces to support one machine to perform multiple camera tasks
- Compatible with various standard industry software, and the upper computer software can becustomized according to the needs of the industry
- Support screen customization and provide simple, flexible and high-performance hardware combination
- Super anti-interference, stable and efficient operation in complex scenes
- Equipped with full-featured vision software X-SIGHT VISION STUDIO, real time image transmission, high speed image matching

#### | Application area





Character reading

Multi-camera operation









Contour location High precision measurement Robot visual guidance

#### Defect detection

#### | Model list

Series	Model	CPU	MEM(G)	SSD(G)	HDD(T)
V200 Carias	SP-XN620T-V210	Intel®Pentium® N4200/Intel®Celeron® J4205	4	64	0
V200 Series	SP-XN720T-V210	Intel®Pentium® N4200/Intel®Celeron® J4205	4	128	0
V310 Series	SP-XP720T-V310	Intel® Pentium® G4560	4	128	0
	SP-XS720T-V310	Intel® Core™ i3 8100	4	128	0
	SP-XC720T-V310	Intel® Core™ i5 9400	4	128	0
V222.5	SP-XP720T-V325	Intel® Pentium® G4560	4	128	0
	SP-XS720T-V325	Intel® Core™ i3 8100	4	128	0
	SP-XC720T-V325	Intel® Core™ i5 9400	4	128	0
V320 Series	SP-XP720T-V326	Intel® Pentium® G4560	4	128	0
	SP-XS720T-V326	Intel® Core™ i3 8100	4	128	0
	SP-XC720T-V326	Intel® Core™ i5 9400	4	128	0
	SP-XP720T-V335	Intel® Pentium® G4560	4	128	0
	SP-XS720T-V335	Intel® Core™ i3 8100	4	128	0
V220 C:	SP-XC720T-V335	Intel® Core™ i5 9400	4	128	0
V330 Series	SP-XS720T-V336	Intel® Core™ i3 8100	4	128	0
	SP-XC730T-V336	Intel® Core™ i5 9400	8	128	0
	SP-XM830T-V336-M	Intel® Core™ i7 9700	8	256	0

<sup>\*</sup>Note: some common models are listed above. Please consult the project engineer for detailed selection of industrial controller

## SP V210

SP V210 IoT industrial controller adopts Intel Apollo Lake processor, provides reliable I/O design, meets the maximum number of device connections. It adopts unique expansion design method to realize rich and rapid function customization through PCIe/USB/SPI/I2C/LPC signal conversion.

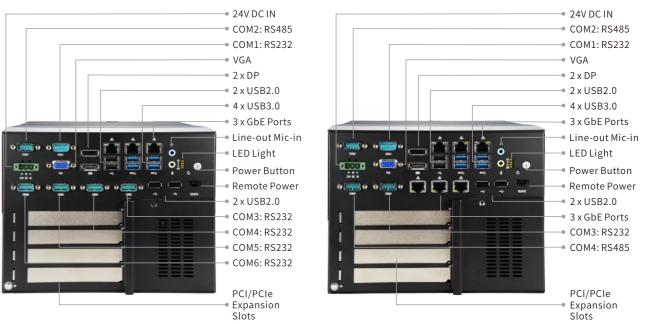


#### | Parameter specification

Attribute	SP V210
Processor system	Intel® Pentium® N4200/ Intel® Celeron® J4205
BIOS	AMI8Mb UEFIBIOS
RAM	4G DDR3L 1600MHz (max 8G)
Display	DP,resolution up to4096x2160@60Hz
Display	HDMI,resolution up to3840x2160@30Hz
Audio	Line-out,Mic-in,high-definition audio,RealtekALC662
Ethernet	1xRTL8111H GbE,support network wake-up
Ethernet	2xIntel i210/i211 GbE
Serial port	2 x RS232,2 x RS485
USBport	2 x USB2.0 , 2 x USB3.0
Expansion slots	Full-size Mini-PCIe, support WLAN/WWAN module
Expansion stots	USIM,for 3G/4GLTE communication
Memory	eMMC(max 256GB); M.2 SSD(2242);
Memory	TF card slot, SATA3.0, support 2.5" hard disk
Power supply and power consumption	12-32V DC IN / 24W
System	Windows 10 IoT Enterprise 64 bit,Linux
Dimension	120×100×51mm (length×width×height)
Installation method	Aluminum alloy, wall hanging kit
Weight	0.65kg
Working temperature	-20°C∼60°C,with 0.7m/s airflow
Storage temperature	-40°C~80°C
Relative humidity	95%@40°C (no condensation)
ESD	Contact discharge ±4KV, air discharge ±8KV
Protection level	IP30
Certification standard (EMC)	CE, FCC Class A, TUV

## SP V300

SP V310 industrial controller processing system up to Intel@ CoreTM i5 9400, provide powerful computing performance and image processing capability. It can support wide range of application development and convenient server deployment, and have excellent performance in industrial automation and machine vision applications.



\*Note: the interface difference of V310, V325, V326. V310 is marked in the above figure, V325/V326 add a row of interfaces in the middle, V335/V336 add four PCI expansions.

#### | Parameter specification

Attribute	SPV310	SPV325	SPV326	SPV335	SPV336	
CPUmodel	Intel® Pentium	® G4560/ Intel® Core	<sup>™</sup> i3 8100/ Intel® Core™ i5 9400	Intel® Core™ i3 8100/ Intel® Core	e™ i5 9400/ Intel® Core™ i7 9700	
Chipset			Hi	.10		
Memory			4G DDR4 SO-D	IMM,max32GB		
Display	2x DP,resolu	tion up to4096 x 23	04 @ 60Hz 1x VGA,resolution up	to1920 x 1080 @ 60Hz DP+DP / DP	+VGA independent dual display	
audio			Line-out,Mic-in	, Realtek ALC662		
Ethernet	1x Intel i219LM GbE, support network wake-up 2 x Intel i211AT GbE 5 x Intel i211AT GbE			1x Intel i219LM GbE,support network wake-up 2 x Intel i211AT GbE	1 x Intel i219LM GbE, support network wake-up 5 x Intel i211AT GbE	
USB interface	4 x USB3.0 2 x USB2.0					
Serial port	1 x RS232 1 x RS485	5 x RS232       2 x RS232       5 x RS232         1 x RS485       2 x RS485       1 x RS485		2 x RS232 2 x RS485		
Remote switch	/	/ 4-pin connector supporting remote power switch and indicator				
Expansion slot	1×full-size Mini-PCIe, support WLAN/WWAN module 1×USIM, for 3G/4G LTE communication			1×full-size Mini-PCIe, support WLAN/WWAN module 1×USIM, for 3G/4G LTE communication 2×PCI, PCIe (16x), PCIe (2x)		
Storage		1 x SATA 3.0 suppo	ort 2.5" hard disk	3 x SATA3.0,support 2.5" hard disk		
Storage			1 x mSATA(compat	ble with mini-PCIe)		
Power supply			24V DC IN 3	PIN Phoenix		
Power			12	0W		
Operation system			Windows 10 IoT En	terprise 64bit,Linux		
Installation method				kit installation		
Dimension	220x 226 x68mm (length×width×height)	2	20 x 226 x 75mm (length×width×height)	220 x 226  length×widt	x 176mm h×height)	
Weight	3kg		3.3kg	4kg		
Working temperature			0°C∼ 50°C with	0.7m/s airflow		
Storage temperature			-40°C	~80°C		
Relative humidity				condensation)		
ESD			Contact discharge±4	KV, air discharge±8 KV		
Protection level			IP	30		
Certification standard			CE, FCC C	ass A , TUV		

# **IoT** industrial panel PC SPT series



#### Introduction

SPT P110 series compact embedded industrial panel PC is equipped with Intel Apollo Lake/Whiskey lake-U series multicore processor. It adopts 10.1"/12.1"/15.6"/21.5 " industrial high brightness TFT LCD, supports 10-wire capacitive multi-touch. The front of the whole machine is waterproof and has strong anti-interference ability. It is suitable for CNC machinery, CNC processing, 3C, packaging, inspection and other visual inspection industries.

#### **Characteristics**

- TFT LCD screen, supporting 10-wire capacitive multi-touch
- Support EtherCAT and other TSN network communication, meet real time control needs
- Provide gigabit Ethernet port, USB3.0 port, RS232 port to realize high-speed data transmission
- It can work completely without PC and output and process images directly on the display
- TPM 2.0 encryption protection, front panel IP65 protection

### | Naming rule

SPT-XL720T15-P110 3 4 5

- 1 IOT industrial panel PC
- 2 Product labeling information
- 3 CPU type
- 4 SSD capacity

- **5** RAM capacity
- 6 Mechanical hard disk capacity
- 7 Screen size 8 Product series

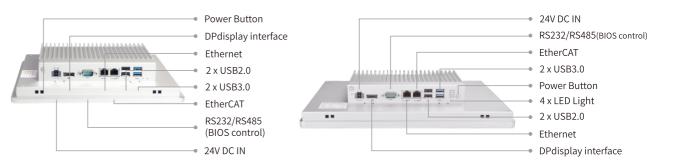
#### | Model list

Model	CPU	MEN(G)	SSD(G)	HDD(T)	Screen size (")
SPT-XN720T10-P110	Intel®Pentium®J4205	4	128	0	10.1
SPT-XS720T12-P110	Intel®Core™ i3-8145U	4	128	0	12.1
SPT-XJ720T12-P110	Intel®Celeron® J3455	4	128	0	12.1
SPT-XL720T15-P110	Intel®Celeron® 4205U	4	128	0	15.6
SPT-XS720T15-P110	Intel®Core™ i3 8145U	4	128	0	15.6
SPT-XC720T15-P110	Intel®Core™ i5 8265U	4	128	0	15.6
SPT-XS720T21-P110	Intel®Core™ i3-8145U	4	128	0	21.5
SPT-XC830T21-P110	Intel®Core™ i5-8265U	8	256	0	21.5

\*Note: some common models are listed above. Please consult the project engineer for detailed selection of industrial controller

## IoT industrial panel PC SPT series

#### | Interface description



#### | Parameter specification

Attribute	10.1"		12.1"			
Processor system	Intel®Celeron® J3455 Intel®Pentium® J4205	Intel®Celeron® J3455 Intel®Pentium® J4205	Intel® Core™ i3 8145U/8145UE			
Chipset	Intel®SOC integr	ated	Intel®WHL-U			
BIOS		AMI				
Memory	4G LPDDR4 2400MHz	(max 8G)	4G DDR4 2666MHz (max 32G)			
Storage	111. 1×M.2 me	mory (standard 128G optional), 1>	EMMC optional			
External I/O	1xRS232/485 (BIOS ) 2xUSB2.0、2xUS	2xIntel I211-AT GbE; 1xRS232/485 (BIOS control); 2xUSB2.0, 2xUSB3.0; 1xDP;1xReset				
Internal I/O		$\begin{array}{ccc} 113.1\times\text{M.2, support WLAN/WWAN module,} & & 114.1\times\text{M.2, support WL} \\ 1\times\text{USIM, for 4G/5G LTE communication} & & 1\times\text{USIM, for 4G/5G LTE} \\ & & 1\times\text{USB2.0, built-} \end{array}$				
Display type	TFT LCD (LED backlight)					
Resolution	1200x800					
Touch type	10	wire capacitive multi-touch screen				
Transmittance		90%±3%				
Interface type		USB				
Indicator light	4xindicator light (PWR/S/	ATA/RUN/ERR)	4xindicator light (LAN/PWR/USER1/USER2)			
Power supply	24V DC IN 4PIN PI	noenix	24V DC IN 3PIN Phoenix			
Power		20W~60W				
System		Windows 10 IoT LTSC,Linux				
Dimension	complete machine 265mmx185mmx51.8mm opening 251mmx171mm		e 320mmx219mmx50.8mm g 311mmx210mm			
Weight	1.8kg		2.8kg			
Working temperature		0∼50°C with 0.7m/s airflow				
Storage temperature		-20∼60°C (no condensation)				
Relative humidity	1	0~95%@40°C (no condensation)				
Front cover protection level		IP65				
Certification standard (EMC)		CE,FCC				

## IoT industrial panel PC SPT series

#### | Interface description



#### | Parameter specification

Intel®Celeron® 4205U	
Processor system Intel®Core™ i3-8145U/8145UE Intel®Core™ i5-8265U	
Chipset Intel®WHL-U	
BIOS	
Memory 4G DDR4 2666MHz (max 32G)	
Storage 11×M.2 memory (standard 128G optional), 1×EMMC optiona	l
### ### ##############################	
1×M.2, support WLAN/WWAN module,  1×USIM, apply to 4G/5G LTE communication,  1×USB2.0, built-in for dongle	
Display type TFT LCD (LED backlight)	
Resolution 1366x768 1920	0x1080
Touch type 10-wire capacitive multi-point touch screen	
Transmittance 90%±3%	
Interface type USB	
Indicator light 4xindicator light (LAN/PWR/USER1/USER2)	
Power supply 24V DC IN 3PIN Phoenix	
Power 20W~60W	
System Windows 10 IoT LTSC,Linux	
	8mmx322.5mmx52.8mm .7mmx311mm
Weight 3.53kg 6.	.3kg
Working temperature 0∼50°C with 0.7m/s airflow	
Storage temperature -20~60°C (no condensation)	
Relative humidity 10~95%@40°C (no condensation)	
Front cover protection level IP65	
Certification standard (EMC) CE , FCC	

# AGV industrial special model



#### | Introduction

AGV IoT industrial controller is specially designed for AGV guided car, and on-board WiskeyLake-U series processor. The high-speed CAN interface realizes the fast interaction of torque, resolution, steering activity and other information with the control unit to ensure the smooth steering action. Multi-channel input and output interfaces realize high-speed signal transmission and provide customers with integrated and intelligent solutions.

#### | Features

- 1 On-board Intel WiskeyLake-U platform, multi-core high performance
- 2 Rich external interfaces, 4-channel Gigabit Ethernet, 16-channel input and output
- 3 2-channel high speed CAN, support CAN2.0A and CAN2.0B protocol
- 4 Built-in super capacitor, stronger anti-vibration performance, ensuring data and system safety

#### | Naming rule

### TSC-AGV10 / i5-8265U / 8G / 128G

1

2

3

4

1 AGV10 series

2 CPU type

3 Memory capacity(MEM)

4 Solid state drive capacity (SSD)

#### | Model list

Series	Model	СРИ	MEM(G)	SSD(G)
AGV Series	TSC-AGV10	Intel® Core™ i5-8265U	8G	128G

# AGV industrial special model

#### | Interface explanation



#### | Parameter specification

Attribute	Parameter
Processor system	Intel®Celeron® 4205U Intel®Core™ i3-8145U Intel®Core™ i5-8265U
Chipset	Intel®WHL-U
BIOS	AMI
Memory	DDR4 2400MHz (max 32G)
Storage	1×M.2 2280 (standard 128G), 1×EMMC optional
I/O interface	4xIntel I211-AT(10/100/1000Mbps,Ethernet); 4xUSB3.0; 1 x RS232, 3 x RS485;
Internal I/O	IO:GPI Ooptocoupler isolation, 16 inputs (NPN/PNP)、16 outputs (NPN); 4 x LED(DG/standby/SATA/WD);1xReset; 2 x CANBus2.0 A/B
Extension	$1\times$ USB2.0, built-in for dongle, $2\times$ SATA, up to 6Gb/s, $1\times$ M.2, 2280 SSD or 3042 4G LTE communication, $1\times$ M.2, 2230 support WLAN/WWAN module
Display	DVI-I, resolution up to 1920 x 1200 @60Hz
Power supply	24V DC 4PIN Phoenix, (2PIN for Remote)ACPI mangement
UPS	Built-in supercapacitor (4x300F)
Power	20W(typical)~60W(max)
System	Windows 10 IoT LTSC,Linux
Dimension	236 x 165 x 65.5 mm( Length×Width×Height)
Weight	2.0kg
Working temperature	0∼60°Cwith 0.7m/s airflow
Storage temperature	-40°C∼85°C, 60°C@90% (no condensation)
Relative humidity	10∼95%@40°C (no condensation)
Protection level	IP30
Certification standard (EMC)	CE,FCC

# **4U** shelf-mounted industrial controller

#### Introduction

T4U-A series industrial controller adopts Intel Kaby/Coffee/SkyLake processor, and the chassis is a standard 4U rack-mounted industrial chassis, which is formed by high-quality steel plate mold and has ultrahigh stability and scalability. With its powerful industrial computing performance and image processing capability, T4U-A series can be widely used in industrial automation, machine vision, power and other industrial scenarios.



#### | Advantage

- Support Intel generation 6/7/8/9 CoreTM/Pentium/Celeron series CPU, up to generation 10
- Up to 5 PCIE expansion slots are provided with strong spatial scalability
- Industrial-grade memory, large storage capacity, up to 128G memory
- Built-in 600W ATX power supply ensures stable operation of the machine
- Compatible with 4 3.5-inch disk drives

#### | Naming rule

## T4U-B10 / H170 / i5-6500 / 4G / 128G / 1T

1

2

**(3** 

4

3 CPU type

(5)

4 MEM capacity

T4U-B10 series
 (SSD)capacity

6 HDD capacity

2 MOBO

#### I Model list

Model	МОВО	CPU	MEM(G)	SSD(G)	HDD(T)	
	H170	Intel® Core™ i5-6500 Intel® Core™ i7-6700/7700	4G/8G/16G/32G			
T4U-B10	H310C	Intel® Core™ i5-6500/9400 Intel® Core™ i7-6700/7700/9700	4G/8G/16G/32G	128G/256G/512G(mSATA)	1T/2T/4T	
140-610	Q170	Intel® Core™ i5-6500/9400 Intel® Core™ i7-6700/7700/9700	4G/8G/16G/32G/64G			
	Q470	Intel® Core™ i5-10500 Intel® Core™ i7-10700	4G/8G/16G/32G/64G	128G/256G/512G(M.2)		

### 4U shelf-mounted industrial controller

#### | Interface explanation



#### | Parameter specification

Attribute	T4U-B10/H170	T4U-B10/H310C	T4U-B10/O170	T4U-B10/O470	
Processor system	Intel 6-7th Generation Core/Pentium/ Celeron Desktop CPU	Intel 6/7/8/9th Generation Core/Pentium/ Celeron Desktop CPU	Intel 6/7/8/9th Intel 10th Generation Core/Pentium/ Celeron Desktop CPU Celeron Desktop		
Chipset	H170			Q470	
BIOS	AMI UE	FI BIOS	AMI UEFI BIOS(Suod	pprt Watchdog Timer)	
Memory	DDR4 U-DIMM,24	00MHz (max 32G)	DDR4 U-DIMM,2400/266	66/2933MHz (max 128G)	
Display	1 x HDMI, resolution up 1 x VGA, resolution up 1 x DVI, resolution up	to1920 x 1200 @60Hz	1 x HDMI, resolution up to4096 x 2160 @60Hz 1 x VGA, resolution up to1920 x 1200 @60Hz 1 x DVI, resolution up to1920 x 1200 @60Hz		
Audio	Line-out,Mic-in, HD Audio, Realtek ALC662	Line-out,Mic-in, HD Audio, Realtek ALC897	Line-out,Mic-in, HD Audio, Realtek ALC662	Line-out,Mic-in, Realtek HDA Codec	
Ethernet	1 x Intel i219LM GbE,       1 x Intel i219LM GbE,       1 x Intel i219LM GbE,         1 x Intel i211AT GbE,       1 x Intel i225-V GbE,       1 x Intel i211AT GbE,         100/1000 Mbps       100/1000 Mbps       10/100/1000 Mbps				
Serial port	Rear I/O: $1 \times RS232$ Rear I/O: $1 \times RS232$ Internal: $3 \times RS232$ Internal: $3 \times RS232$ /485(jumper) $1 \times RS232$ /485(jumper), $1 \times RS232$ /485(jumper), $1 \times RS232$ /485(jumper), $1 \times RS232$ /485(jumper)				
USB port	Real I/O: 4 x USB3.0、2 x USB2.0 Header: 2 x USB2.0 Internal: 1 x USB2.0				
Other interfaces		1×1	PS/2		
Extension slot	1 x PC 1 x PC 4 x 2 x Min 1 x	1 x PCle 16X       1 x PCle 16X         1 x PCle 4X       1 x PCle 8X         1 x PCle 1X       3 x PCle 1X         4 x PCl       2 x PCl         2 x Mini PCl-E       1 x Mini PCl-E         1 x SIM       1 x SIM         8 x GPIO       8 x GPIO			
Storage			SD optional (mSATA) 0 interface		
Power supply		600V	V ATX		
System			oT LTSC,Linux		
Dimension	176 x 430		epth(with handle 176×430×50	9.4mm)】	
nstallation method			nelf mounted		
Norking temperature			-60°C		
Storage temperature			-75°C		
Relative humidity		95%@40°C (no	condensation)		

# X-SIGHT VISION STUDIO 3.0

### **Designed for machine** vision engineers

X-SIGHT VISION STUDIO 3.0 is a new generation of machine vision development platform based on Dataflow independently developed by Xinje. It can provide powerful image analysis tools, rich tool structure output and detailed feature details to facilitate user-defined operation, speed up the project development process and shorten the project cycle.

The unique advantage of X-SIGHT VISION STUDIO 3.0 is to focus on professional users and provide a rapid application development environment, which can easily establish typical applications and highly customized large-scale projects.



5 years Concentrate on research Industry solutions and development Execution speed Hundreds of millions Millisecond Stable operation of times

#### | Advantage

- No need to write code, drag and use, and instructions can be connected to each other to easily create projects
- Support mainstream industrial camera, manipulator, PLC, Modbus, TCP/IP and other communication modes
- Built-in powerful machine vision algorithm library, can customize functions as required, and provide user-defined interface
- The software provides a large number of engineering case references and detailed user manuals
- Comply with GigE Vision standards, support GenTL interface and a large number of vendor-related API
- All tools are optimized for SSE technology and multi-core processors, and the algorithm processing speed can reach millisecond level
- It can process various image areas, paths, geometry, sections and histograms
- It can process various image areas, paths, geometry, sections and histograms



No programming



Drag icon

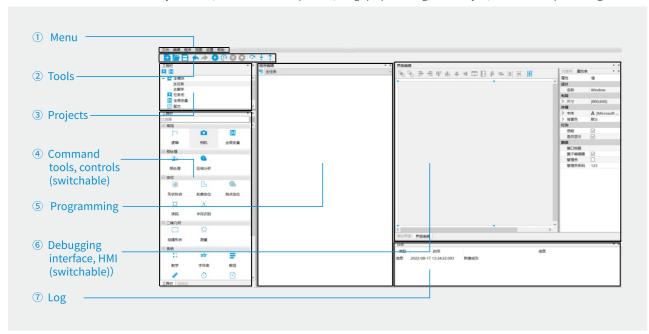


Easy to create

### X-SIGHT VISION STUDIO 3.0

#### | Software interface

X-SIGHT VISION STUDIO 3.0 has many functions, such as camera acquisition, image preprocessing, area analysis, detection and positioning.



#### | Tool type

Image preprocessing



Image

smoothing















Color recognition

#### Regional analysis







morphology



operation

reading

matching





conversion

characteristics Create area Detection and positioning





location











recognition



detection



Measurement

■ Basic calibration

















Hand-eye calibration coordinates







Free serial port format

### Accessories

#### Camera

SV series industrial cameras, as the components of image acquisition in machine vision system, not only directly determine the resolution and image quality of all collected images, but also directly related to the operation mode of the whole system. Camera selection is an important link in the design of machine vision system.

SV series industrial camera resolution includes 0.3MP ~ 20MP, has powerful ISP algorithm, supports FPN, SPC correction. and is compatible with GigE Vision protocol, USB3.0 Vision protocol and GenlCam standard.



#### Parameter specification

Product model	Pixel	Color	Resolution	Cmos dimension(")	Max frame rate (fps)	Exposure mode
SV-H30M300-C	300 thousand	Monochrome	640x480	1/4	300	Global
SV-H50C-C	500 thousand	Color	800x600	1/3.6	120	Global
SV-H120M-C	1.2 million	Monochrome	1280x960	1/3	30	Global
SV-H130C-C	1.3 million	Color	1280x1024	1/2	60	Global
SV-H200M-C	2.3 million	Monochrome	1920x1200	2/3	50	Global
SV-H300M-C	3.1 million	Monochrome	2048x1536	1/1.8	36	Global
SV-H500C-C	5 million	Color	2448x2048	2/3	23	Global
SV-H500M-C1	5.3 million	Monochrome	2592x2048	1	20	Global
SV-H600M-C	6.3 million	Monochrome	3072x2048	1/1.8	23	Roller shutte
SV-HA00C-C	10 million	Color	3840x2748	1/2.3	10	Roller shutte
SV-HA20C-C03	12 million	Color	4000x3000	1/1.7	9	Roller shutte
SV-HB00M-C	20 million	Monochrome	5472x3648	1	5.8	Roller shutte

Note: some common models are listed above. Please consult the project engineer for detailed selection.

#### I Camera lens

The main function of SL series industrial lens is to image the target on the photosensitive surface of the image sensor. The important parameters of lens selection are resolution, focal length, aperture size, depth of field, interface form, etc. Reasonable selection and installation of lens is an important link in the design of vision system.

FA fixed focus lens has no focal segment and only with one fixed focal length. It is the most complete and widely used type of industrial lens. It has the advantages of fast focusing speed, accurate photometry and stable imaging quality.



#### ■ Common lens model list

Lens series	Product model	Focal length (mm)	Distortion rate (%)	Resolution	Inductive size	Interface
	SL-DF12-C	12	-0.8	5 million	2/3	C Interface
	SL-DF16-C	16	-0.1	5 million	2/3	C Interface
Fixed focus lens	SL-DF35-C	35	-0.8	5 million	2/3	C Interface
	SL-DF08-C10M	8	-0.1	10 million	2/3	C Interface
-	SL-DF35-C20M	35	-0.04	10 million	1.1	C Interface

Note: some common models are listed above. Please consult the project engineer for detailed selection.

### Accessories

#### | Light source

SI series light source is an important part of machine vision system. It has the advantages of fast response speed, long service life and strong anti-interference ability. Its main function is to improve the brightness and image contrast of the device to be detected, ensure the stability of the image, reduce the pressure of algorithm processing and improve the accuracy of visual recognition.



#### Ring light source



PCB substrate detection, microscope illumination, liquid crystal correction

#### Backlight



Mechanical part size, electronic components, IC shape, film stain detection

#### Parallel backlight



Circuit board component detection and identification, transparent dimension measurement, LED bad point detection

#### Hole type parallel backlight



Circuit board component detection and recognition, electronic component character recognition, mark point positioning

#### Strip light source



Metal surface detection, image scanning, surface crack detection, LCD panel detection

### Spherical integral light source



Curved surface, surface concave convex, arc surface detection, object surface detection with strong reflection

#### Coaxial light source



Surface scratch detection, chip and silicon wafer damage detection, packaging bar code identification

#### Point source



Used with telecentric lens, mark point positioning, lens and liquid crystal glass correction

#### ■ Common light source model list

Light source series	Product model	Dimension (mm)	Angle(°)	LED rows	Color
Ring light source	SI-JD54A00-W	External diameter 54	0°		White
	SI-JD70A45-W	External diameter 70	45°		White
	SI-JD100A60-R	External diameter 100	60°		Red
Backlight	SI-JB100100-W	100x100 (length×width)			White
Parallel backlight	SI-JPB050050-W	50x50 (length×width)			White
Hole type backlight	SI-JHB200200-W	200x200 (length×width)			White
Strip light source	SI-JL050R3-W	Length 50		3	White
	SI-JL300R6-R	Length 300		6	Red
Spherical integral light source	SI-JS70-W	Diameter 70			White
	SI-JS262-W	Diameter 262			White
Coaxial light source	SI-JC50-R	50x50 (length×width)			Red
	SI-JC150120-W	150x120 (length×width)			White
Point source	SI-JP30W03-R	Diameter 30			Red
	SI-YTP400W30-W	Diameter 400			White

 $<sup>{\</sup>color{red}^*} \textbf{Note:} \ \ \textbf{some common models are listed above. Please consult the project engineer for detailed selection.}$ 

#### | Light source controller

SIC series light source controller is mainly used to supply power to the light source, control the brightness and lighting state (on and off) of the light source, and realize the stroboscopic of the light source by triggering the signal to the controller, so as to prolong the service life of the light source.

X-SIGHT visual controller is divided into analog controller and digital controller. The digital controller can be remotely controlled by PC. Users can select different types of controllers according to different production conditions.



#### Common light source controller model list

Product model	Regulation mode	Input voltage (V)	Channel	Output power (W)
SIC-J241-A	Analog	24	1	Total power not exceeding 24W
SIC-J242-A	Analog	24	2	Single channel 24W, total not exceeding 48W
SIC-J244-A	Analog	24	4	Single channel 15W, total not exceeding 60W
SIC-XY241-D	Digital	24	1	Total power not exceeding 24W
SIC-XY242-A	Analog	24	2	Single channel 24W, total not exceeding 48W
SIC-XY244-D	Digital	24	4	Single channel 15W, total not exceeding 60W

\*Note: some common models are listed above. Please consult the project engineer for detailed selection.

### Typical applications of vision system

 Hose positioning deviation correction and cutting system



In view of the problems that the traditional pipe cutting scheme cannot accurately cut the deformed hose, X-SIGHT launched the hose positioning and deviation correction cutting system, which automatically compensates the cutting point offset to ensure the accuracy of knife dropping, with an accuracy of up to 0.05mm.

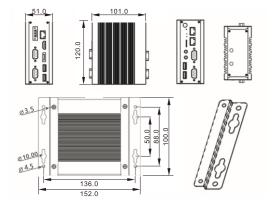
 Door panel texture classification system based on AI recognition



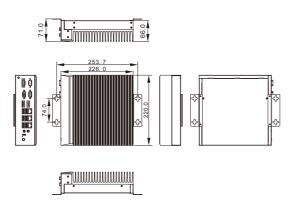
The door panel texture detection project launched by X-SIGHT innovatively introduces the deep learning detection method to finely identify the features such as color, texture and edge line, so as to realize the independent training and recognition of thousands of door panels. It is widely used in door panel, floor, ceramic tile and other large panel classification projects.

# Dimension (Unit: mm)

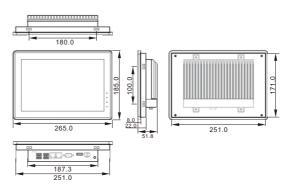
#### SP V210



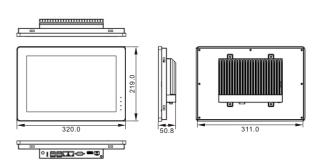
#### SP V310



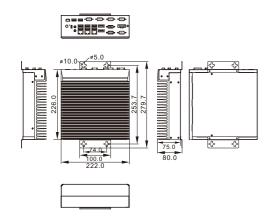
#### SPT P110 10.1"



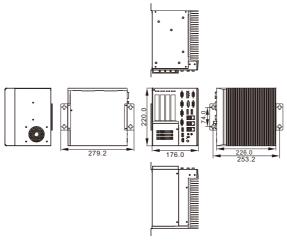
#### SPT P110 12.1"

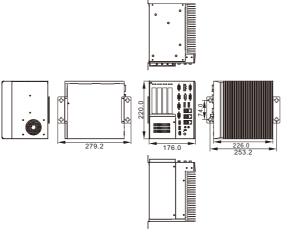


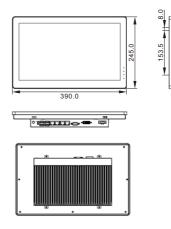
#### SP V325 / SP V326



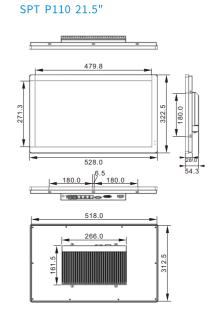
SP V335 / SP V336







SPT P110 15.6"



#### AGV industrial special model

