



Vision & Robotik

- ✓ Vision-Technologie „für das beste Bild“
- ✓ Software-Tools der führenden Hersteller
- ✓ Beraten.Liefern.Integrieren. Ihre Lösung im Fokus.
- ✓ CAD-Konstruktion in Abstimmung mit Anlagenbauern
- ✓ Partnerschaften zu internationalen Herstellern
- ✓ OEM-VisionModule für vertikale Märkte

- Über 30 Jahre Erfahrung in der Bildverarbeitung

WHEC

>ision
ON LINE

AOI CIS PRESENTATION



AOI SALES DEPT.
01/01/2026

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>ISION
ON LINE

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PART 01

Company

- Company Profile
- Company History
- Our Advantages
- Certificates & Patents
- Company Corners





- Establishment: 2003
- Main product: Contact Image Sensor (CIS)
- Employee: 407 (Jan,2025)
 - China R&D Engineer : 98
 - Japan R&D Engineer : 20
- Production capacity: 4 million pieces / year
- Website: www.w-hec.com/en/
- Location ①: Weihai, China
- Location ②: Takarazuka, Japan
- Location ③: Shizuoka, Japan

2003-2026

Office	 FAX	 MFP	 White Board	 Scanner	 Mail Scanner	 Large Scanner
Lottery	 Lottery	 POS	 Card Scanner	 ID Scanner	 Banknote Detector	 Voting Machine
Banking	 Check Reader	 Banknote Detector	 Banknote Counter	 Banknote Sorter	 Recycler	 ATM

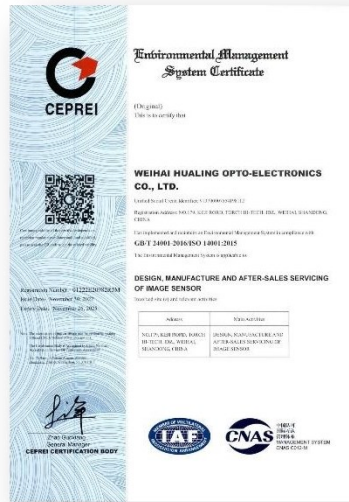
- Global market share in Banking devices: **50%**
- Chinese market share in Banking devices: **80%**



- Industrial large format CIS since 2017



ISO9001



ISO140001



ISO10002

Patents

Total Valid Patents: 314
(Invention Patents: 152)

Jan 1st ,2026



REACH
Compliance

RoHS
Compliance



Better Solution

- Professional CIS technology with 314 valid patents in worldwide
- Better service with quick response within 24 hours
- Customization with special requests



High Stability

- Continuous CIS supply for over 20 years
- Products' total NG rate from customers within 0.1%
- Parts change: no less than 6 months' prior notice



Short Lead Time

- Standard sample: 5-6 weeks
- Customized sample: 6-8 weeks
- Mass production: 6-8 weeks

Company Corners

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Production Line



Headquarter R&D Center



Japan R&D Center



Company Canteen



Staff Activity Center

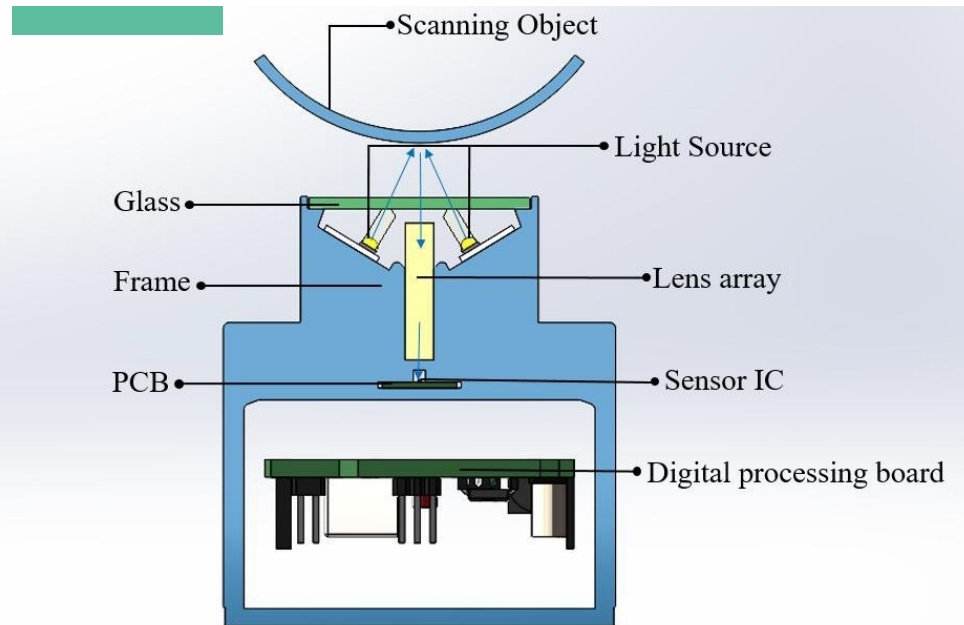
CIS

line scan camera

Focus on vision inspection for 20+ years

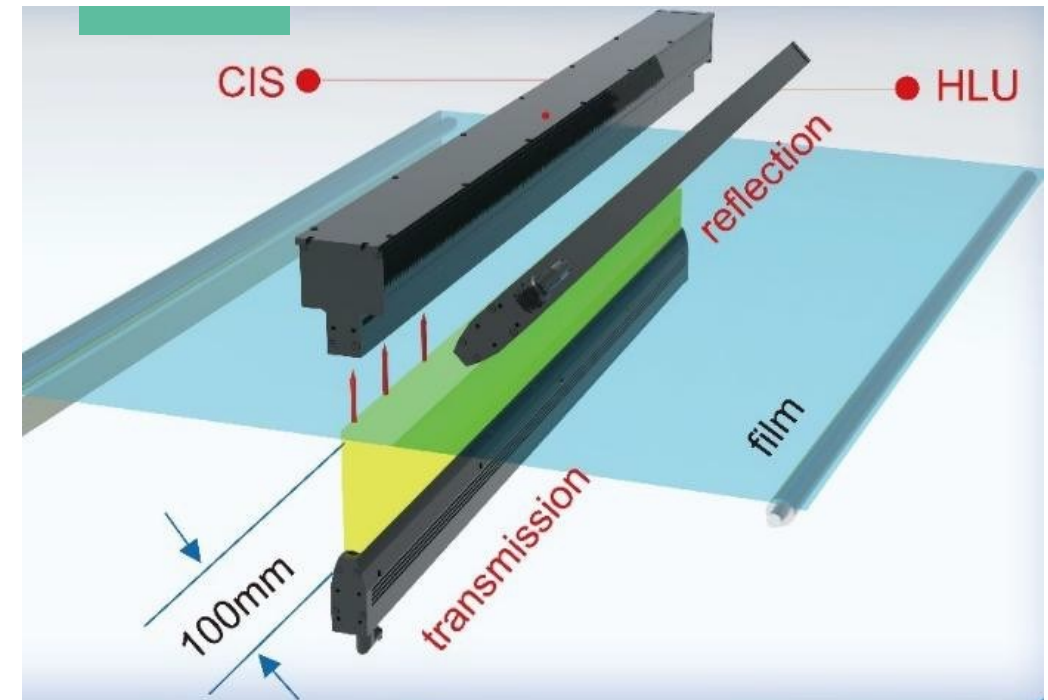
PART 02 Product

- CIS Consists
- CIS vs Cameras
- MV-CIS Roadmap
- Working Distance & DOF



What is CIS?

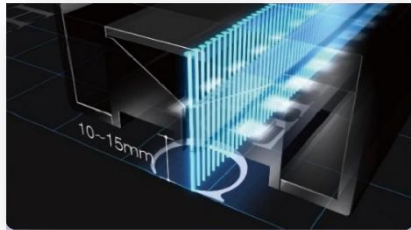
- CIS (Contact Image Sensor) consists of a row of sensor IC, a rod lens and light source, etc.
- Light source from LED reflects off the scanning object and being focused on the optical sensor element through the lens.



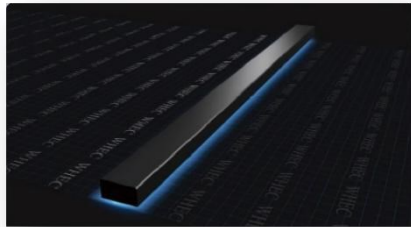
Pair CIS with different light source:

- Internal light source inside CIS.
- External light source for reflection.
- External light source for transmission (backlight).

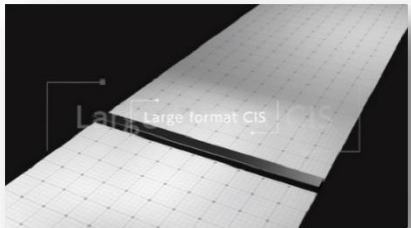
WHEC Large Format CIS



**Short work distance(max 48.4mm).
Internal light source. Save space.**



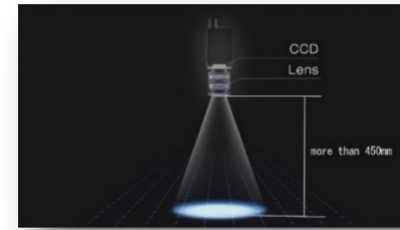
1:1 Imaging. No distortion.



**Single scanning width up to 6000mm.
Easy to integrate into machine vision system.**

VS

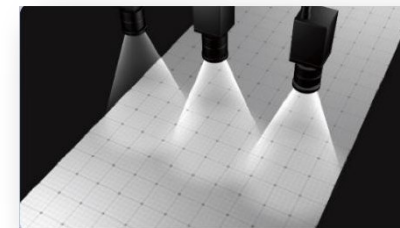
Cameras



**Longer work distance.
External light source. More space to
mount cameras and light source.**



**Distortion exists at the edge of
two cameras. Image processing is
more complicated.**



**More cameras to extend scanning
width. Complicated assembly and
adjustment.**

MV-CIS Roadmap

CIS Series	2020	2021	2022	2023	2024	2025	2026	2027
❑ Camera Link BASE		@300DPI*97.5kHz 495.6m/min @600DPI*58.1KHz 147.6m/min @1200DPI*16.7KHz 21.0m/min						
❑ Camera Link FULL		@300DPI* 97.5kHz 495.6m/min @600DPI*58.1KHz 147.6m/min @1200DPI*16.7KHz 21.0m/min						
❑ CoaxPress1.1		@300DPI* 106.0kHz 540.0m/min	@600DPI*65.0KHz 165.0m/min					
❑ CoaxPress2.0				@300DPI* 143.6kHz 729.0m/min @600DPI* 145kHz 368.0m/min @1200DPI*90.3KHz 114.6m/min		@1200DPI*114.5KH 145.4m/min @2400DPI*69.1KHz 43.8m/min		
❑ 10GigE			@300dpi* 104.0kHz 522.0m/min @600dpi*61.0KHz 150.0m/min		@300DPI*144.8KHz 735.5m/min @600DPI*148.7KHz 377.6m/min @1200DPI*90.7KHz 115.1m/min			
❑ 2.5GigE						@300DPI*93.2KHz 473.4m/min @600DPI*90.5KHz 145.5m/min @1200DPI*50.8KHz 64.5m/min		
❑ Effective width	18.3mm~940mm	~1960mm		~3000mm		~6000mm		

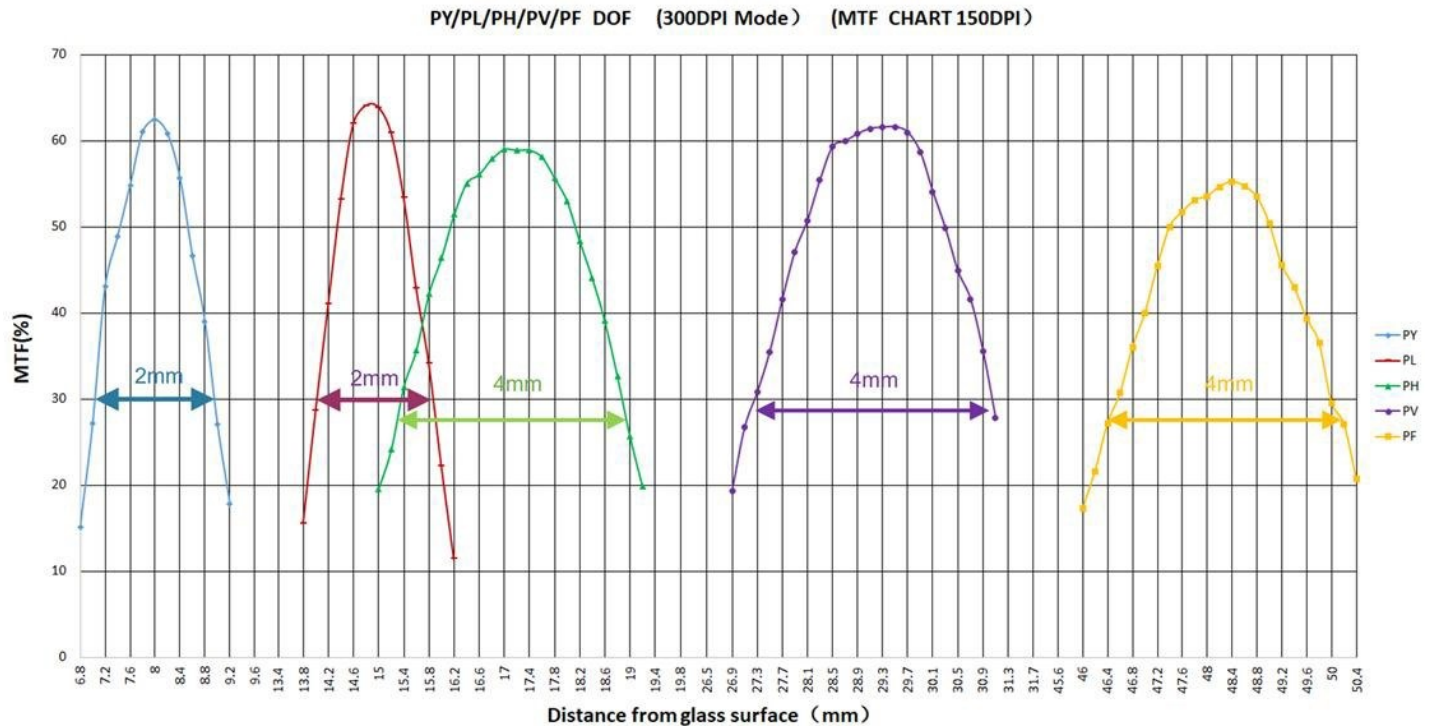
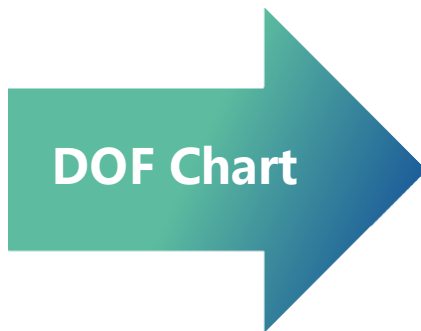
Finished development

Under development

Note: e.g. 600dpi speed = meter/min = KHz*25.4/600*60

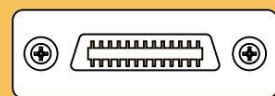
Working Distance & DOF (depth of field)

Item	PY/XPY	PL/XPL	PH/XPH	PV/XPV	PF/XPF	Note
• Working Distance (1.8mm glass) mm	8.0	14.8	17.2	29.3	48.4	X series mean no light source.
• Working Distance (no glass) mm	9.9	17.0	19.3	31.5	50.0	
• DOF mm	±1.0	±1.0	±2.0	±2.0	±2.0	

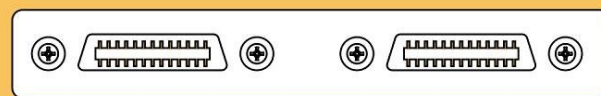


PART 03

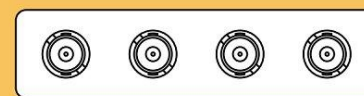
Specification



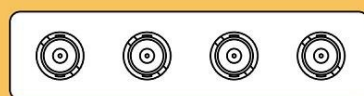
CameraLink
Base



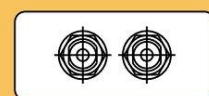
CameraLink
Full



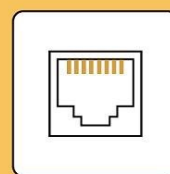
CXP1.1



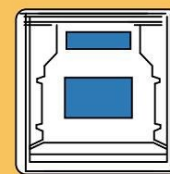
CXP2.0



10GigE



2.5GigE



USB3.0

- Camera Link
- CoaXPress
- 10GigE
- USB3.0
- External Light Source
- Special Reflection Light Source

Technical Parameters <PY/PL/PH/PV Series>						Customization	
Scanning width(mm)	54/108/200/345/450/650/800/940/1300/1700/1960/2200/3000					scanning width: 18mm ~ 6000mm	
Resolution (DPI)	-	100	200	300	600		
Precision (mm)	-	0.25	0.125	0.084	0.042		
Scanning speed (8bit,full output)	Mono	m/min	2646.0	948.0	495.6		147.6
		KHz	173.90	125.0	97.50		58.10
	Color	m/min	882.0	317.4	165	49.2	
		KHz	57.90	41.60	32.50	19.30	
Clock frequency (MHz)	32.0MHz						
Inner light source	R/G/B, IR/UV (optional)					External light source	
Output format	Camera link						
Working Distance(mm)	8.0(PY), 14.8(PL), 17.2(PH), 29.3(PV)					0.45 ~ 48.4mm	
Glass thickness(mm)	1.8					Special glass	
Dimension (mm)	386*74*115(e.g. PL6R310)					Customized outline	
Weight (kg)	2.3(e.g. PL6R310)						
Camera link ports quantity (max speed)	310mm	650mm		940mm	1500mm	Recommended cable length ≤ 7m (max 10m)	
	1pcs	2pcs		3pcs	5pcs		

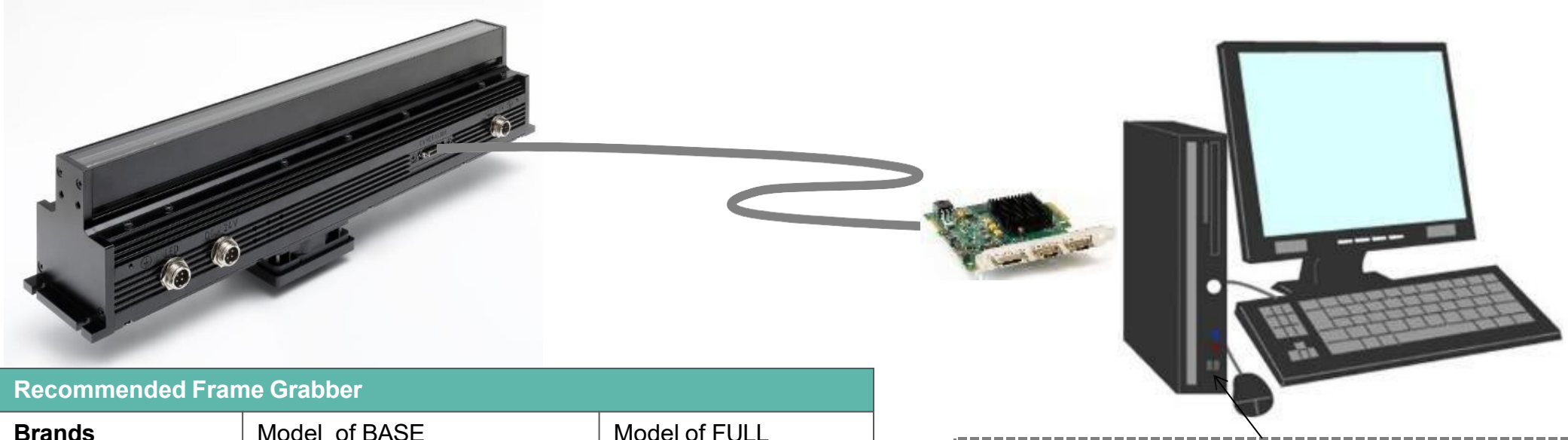
Basic Specifications of PY/PL/PH/PV Series					Customization	
Scanning width(mm)	54/108/200/345/450/650/800/940/1300/1700/1960/2200/3000					
Resolution (DPI)	-	100	200	300	600	
Precision(mm)	-	0.25	0.125	0.084	0.042	
Scanning speed (8bit,full output)	Mono	m/min	2646.0	948.0	495.6	147.6
		KHz	173.90	125.00	97.50	58.10
	Color	m/min	882.0	317.4	165	49.2
		KHz	57.90	41.60	32.50	19.30
Clock frequency(MHz)	32.0MHz					
Camera link Ports quantity(max speed)	310mm	650mm	940mm	1500mm	Recommended Cable Length ≤ 7m (max 10m)	
	2pcs	4pcs	4pcs	6pcs		

Interface- Camera Link FULL Tri-Linear sensor



Basic Specifications of PY/PL/PH/PV Series				Customization	
Scanning width(mm)	54/108/200/345/450/650/800/940/1300/1700/1960/2200/3000			scanning width: 18mm ~ 6000mm	
Resolution (DPI)	-	300	600		
Precision(mm)	-	0.084	0.042		
Scanning speed (8bit,full output)	Mono	m/min	486		150
		KHz	95		59
	Color	m/min	486		150
		KHz	95	59	
Clock frequency(MHz)	35.0MHz				
Camera link Ports quantity(max speed)	360mm		580mm	Recommended Cable Length ≤ 7m (max 10m)	
	2pcs		4pcs		

Interface- Camera Link System



Recommended Frame Grabber		
Brands	Model of BASE	Model of FULL
Euresys	Euresys Grablink DualBase	Grablink Full
BitFlow	Axion-xB Series Axion-xE Series	Axion-xE Series
Basler	microEnable 5 marathon VCL	
Teledyne Dalsa	Xtium-CL-MX4	Xtium-CL-MX4
Matrox	RADEV5MCLDB	RADEV1GCLSF
Aval Data	PX-3302MDR	APX-3323
Note: when use other kinds of grabber cards, please confirm with us.		

Software:

- Computer software is supported by frame grabber maker.
- WHEC supports GUI software for operating CIS.

Basic Specifications of PY/PL/PH/PV Series				Customization	
Scanning width (mm)	54/108/200/345/450/650/800/940/1300/1700/1960/2200/3000			Scanning Width 18 ~ 6000mm	
Resolution (DPI)	-	300	600		
Precision(mm)	-	0.084	0.042	Resolution 300DPI, 600DPI	
Scanning speed (8bit/10bit,full output)	Mono	m/min	540		166
		KHz	106.3		65.6
	Color	m/min	486		150
		KHz	95.8	59.4	
Clock frequency (MHz)	35.0MHz				
Inner light source	R/G/B or White			External light source	
Output format	4* CXP-6 (CXP1.1) (GenICam compliant) 4* CXP-10 (CXP2.0) (GenICam compliant)				
Working distance (mm)	8.0mm (PY),14.8mm(PL),17.2mm(PH),29.3mm(PV)*			0.45 ~ 48.4mm	
Glass thickness (mm)	1.8			Special glass	
Dimension(mm)	506*74*91.8(e.g. PL6R414)			Customized outline	
Weight(kg)	3.0(e.g. PL6R414)				
CXP system quantity (color, CXP2.0)	414mm	828mm	1242mm	Recommended cable length ≤ 25m	
	1pcs	2pcs	3pcs		
CXP system quantity (mono, CXP1.1)	930mm	1860mm	2790mm		
	1pcs	2pcs	3pcs		

Interface- CoaxPress (CXP2.0)



Basic Specifications of PY/PL/PH/PV Series				Customization	
Scanning width (mm)	54/108/200/345/450/650/800/940/1300/1700/1960/2200/3000			Scanning Width 18 ~ 6000mm	
Resolution (DPI)	-	300	600		
Precision(mm)	-	0.084	0.042		
Scanning speed (8bit/10bit,full output)	Mono	m/min	685	223	Resolution 300DPI,600DPI
		KHz	135	93	
	Color	m/min	685	223	
		KHz	135	93	
Clock frequency (MHz)	50MHz				
Inner light source	White			External light source	
Output format	4* CXP-12 (CXP2.0) (GenICam compliant)				
Working distance (mm)	8.0mm (PY),14.8mm(PL),17.2mm(PH),29.3mm(PV)*			0.45 ~ 48.4mm	
Glass thickness (mm)	1.8			Special glass	
Dimension(mm)	706*66*91(e.g. PL6R622)			Customized outline	
Weight(kg)	3.0(e.g. PL6R414)				
CXP system quantity	622mm		1244mm	Recommended cable length ≤ 25m	
	1pcs		2pcs		

Interface- CoaxPress (CXP2.0-New sensor)



Basic Specifications of PY/PL/PH/PV Series				Customization	
Scanning width (mm)	54/108/200/345/450/650/800/940/1300/1700/1960/2200/3000			Scanning Width 18 ~ 6000mm	
Resolution (DPI)	-	600	1200		
Precision(mm)	-	0.042	0.021	Resolution 600DPI,1200DPI	
Scanning speed (8bit/10bit,full output)	Mono	m/min	350		110
		KHz	140		88
	Color	m/min	116		36
		KHz	46		29
Clock frequency (MHz)	50MHz				
Inner light source	White			External light source	
Output format	4* CXP-12 (CXP2.0) (GenICam compliant)				
Working distance (mm)	8.0mm (PY),14.8mm(PL),17.2mm(PH),29.3mm(PV)*			0.45 ~ 48.4mm	
Glass thickness (mm)	1.8			Special glass	
Dimension(mm)	561*74*115(e.g. PL6R490)			Customized outline	
Weight(kg)	3.0(e.g. PL6R414)				
CXP system quantity	980mm		1960mm	Recommended cable length ≤ 25m	
	1pcs		2pcs		

Interface- CoaxPress System



Sample: 4*CXP-12 CIS (414)



Recommended Frame Grabber		
Brands	CXP1.1	CXP2.0
Euresys	Coaxlink Quad G3	Coaxlink Quad CXP12
Bitflow	Claxon-CXP2/CXP4	Claxon-CXP2/CXP4
Basler	imaWorx CXP-12 Quad	
Teledyne Dalsa	OR-Y8X0-XPX400	OR-A8X0-XPX40
Matrox	RAP 4G 4C6	RAP 4G 4C12
Aval Data	APX-3664G3	
Note: when use other kinds of grabber cards, please confirm with us.		

- Software:**
- Computer software is supported by frame grabber maker.
 - GenIcam is compliant.

Technical Parameters <PY/PL/PH/PV Series>						Customization	
Scanning width(mm)	310mm					310mm ~ 1960mm	
Resolution (dpi)	-	100	200	300	600	Resolution 100dpi ~ 600dpi	
Precision (mm)	-	0.25	0.125	0.084	0.042		
Scanning speed (8bit)	Mono	m/min	2970	1030	522		150
		KHz	195	136	104		61
	Color	m/min	990	344	175		50
		KHz	65	45	34	20	
Clock frequency (MHz)	Max 32.0MHz						
Inner light source	Mono (white LED), Color (R/G/B LED)						
Output format	Optical fiber (GenICam compliance)						
Working distance(mm)	8.0(PY), 14.8(PL), 17.2(PH), 29.3(PV)					0.49 ~ 48.4mm	
Glass thickness(mm)	1.8					Special glass	
Dimension (mm)	620*54*132.8(e.g. PL6R450)					Customized outline	
Weight (kg)	3.9(e.g. PL6R450)						
Minimum network-card quantity	310mm	450mm		800mm	1800mm	Cable length max 100m	
	1pcs	1pcs		1pcs	1pcs		

CIS Spec-10GigE [Effective width vs Max Speed]



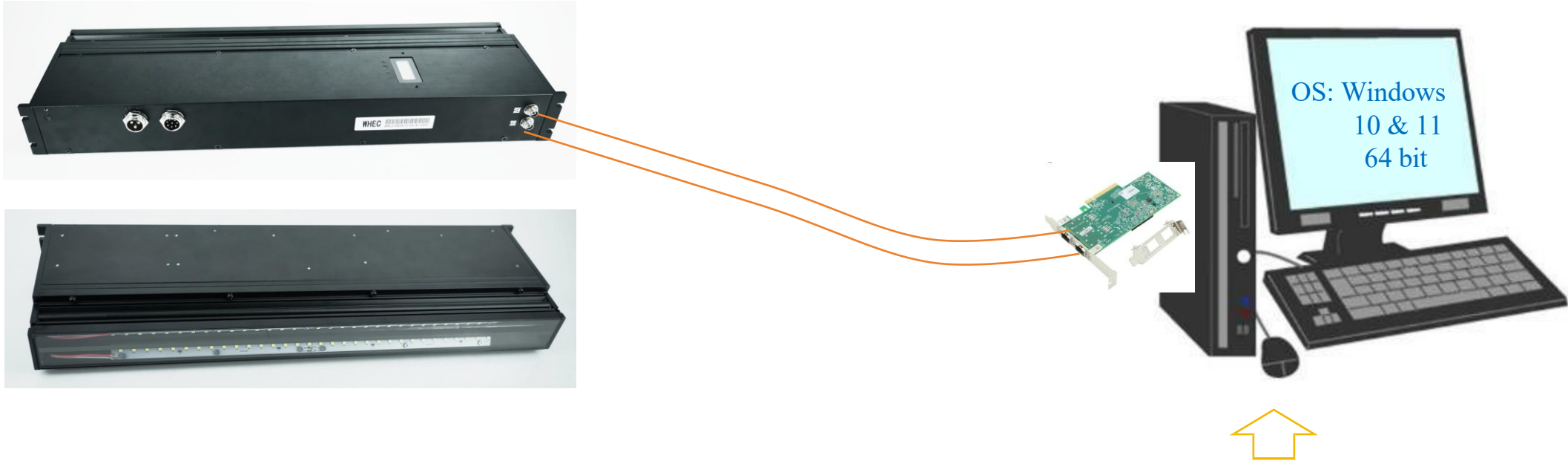
450mm (max 32MHz)					
Resolution (dpi)		100	200	300	600
Mono	m/min	2970	1030	522	150
	KHz	195	136	104	61
Color	m/min	990	344	175	50
	KHz	65	45	34	20

1800mm (max 32MHz)					
Resolution (dpi)		100	200	300	600
Mono	m/min	2060	558	249	61
	KHz	135	73	49	25
Color	m/min	680	185	83	20
	KHz	45	24	16	8

800mm (max 32MHz)					
Resolution (dpi)		100	200	300	600
Mono	m/min	2970	1030	522	140
	KHz	195	135	104	57
Color	m/min	990	344	175	48
	KHz	65	45	34	19

1960mm (max 32MHz)					
Resolution (dpi)		100	200	300	600
Mono	m/min	2060	518	228	56
	KHz	135	68	45	23
Color	m/min	680	172	76	18
	KHz	45	22	15	7

CIS Spec- 「10GigE CIS System」



Recommended network card	
Brands	Model
Mellanox	MCX4121A-XCAT
Note: when use other kinds of network card, please confirm with us.	

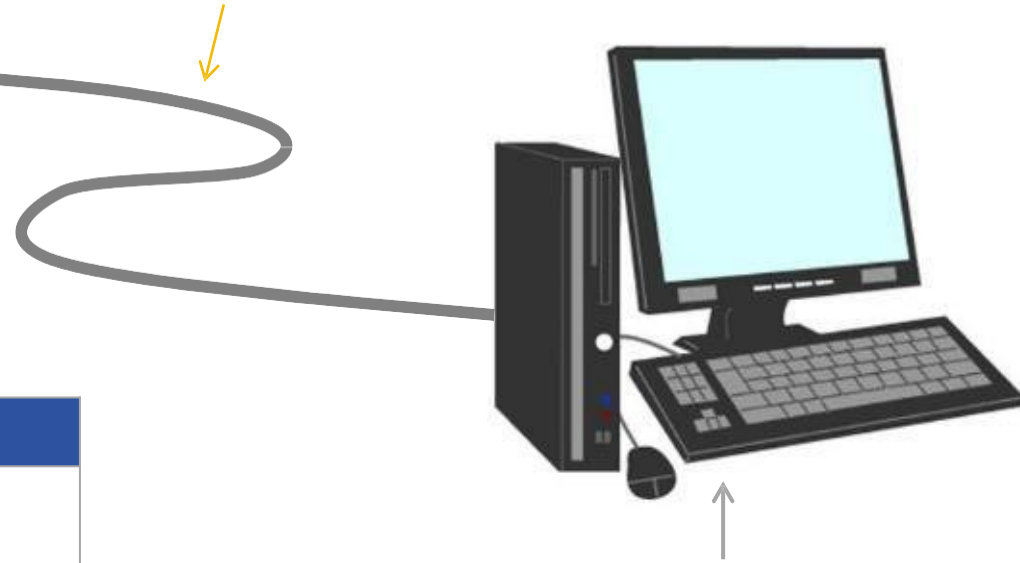
Software:

- Computer software is supported by WHEC.
- WHEC supports GUI software for operating CIS.
- D disk of computer is necessary.

Basic Spec of PYL/PL/PH/PV Series											Customization
Scanning width	108mm		216mm		310mm		650mm		940mm		18mm ~ 940mm
Resolution (DPI)	300	600	300	600	300	600	300	600	300	600	100DPI~1200DPI
Line frequency speed (kHz)	73.05	42.93	42.93	23.53	30.4	16.2	16.2	8.38	11.0	5.65	
Scanning speed (mono) m/sec	6.18	1.81	3.63	0.99	2.57	0.68	1.37	0.35	0.93	0.23	
Clock frequency	22.5MHz										Data Rate: Max 130Mbyte/s
Internal light source	Red, Green, Blue (or without light source)										External light
Output format	USB3.0										
Working distance	8.0mm (PY),14.8mm(PL),17.2mm(PHL),29.3mm(PV)										0 ~ 48.4mm
USB cable length	3~5m										



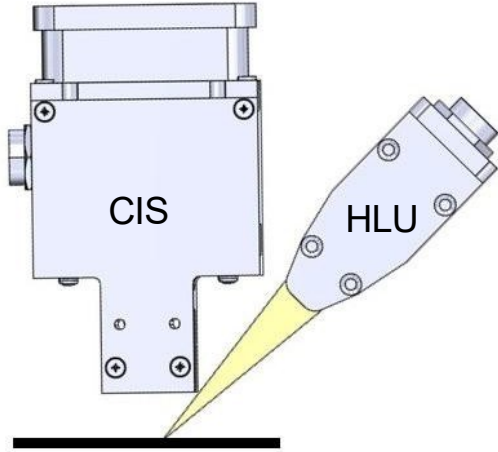
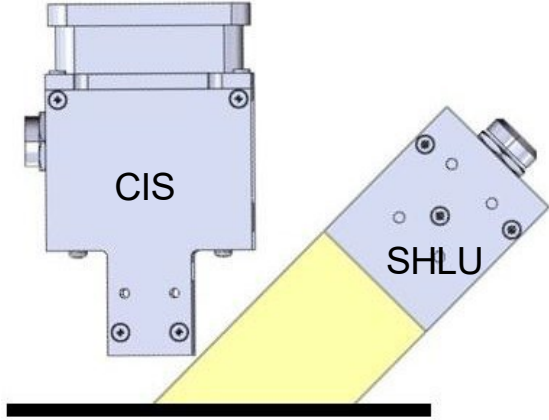
USB3.0 Cable



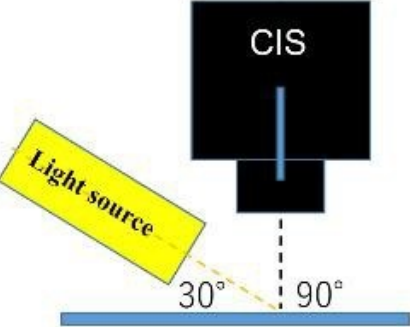
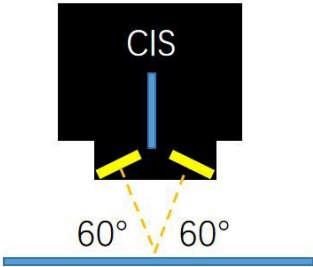
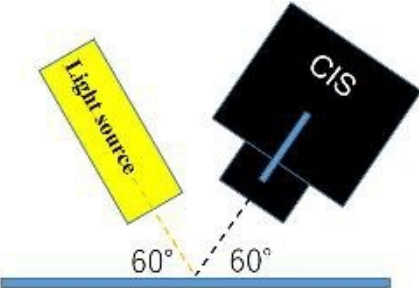
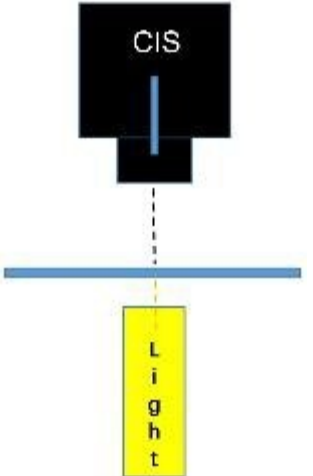
Connector			
1	Power	+5V	System power
		+24V	Light source power
2	Interface	USB3.0	
3	External Sync	RS422	

Software:

WHEC will supply SDK and Demo for operating CIS and customer's system development.


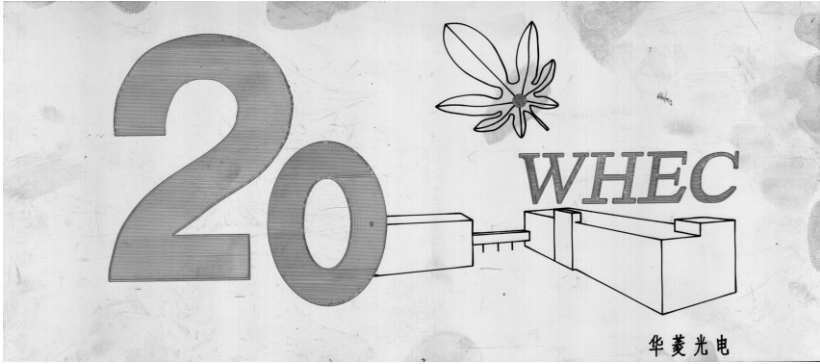
	External HLU series	External SHLU series
Structure		
Features	<ul style="list-style-type: none"> • Emitting width 100~2500mm • R/G/B/RGB/White/IR/UV • Linear irradiation • High luminance/uniformity • Enable to be mounted in narrow space • Fan-less cooling (optional) 	<ul style="list-style-type: none"> • Emitting width 90~2000mm • R/G/B/White/IR • Area irradiation, easy to adjust irradiation angle • Highest luminance/uniformity, supports high speed applications • Fan-less cooling

Light Source Types

<p>① Dark field illumination</p>	<ul style="list-style-type: none">• Battery film• Ceramic tile• Printed metal 	<p>③ Integrated light</p>	<ul style="list-style-type: none">• Printed paper/label• Wood panel 
<p>② Bright field illumination</p>	<ul style="list-style-type: none">• Film scratch• Metal surface defect 	<p>④ Back light</p>	<ul style="list-style-type: none">• Glass inspection• PCB measurement 

Special Reflection Light Source

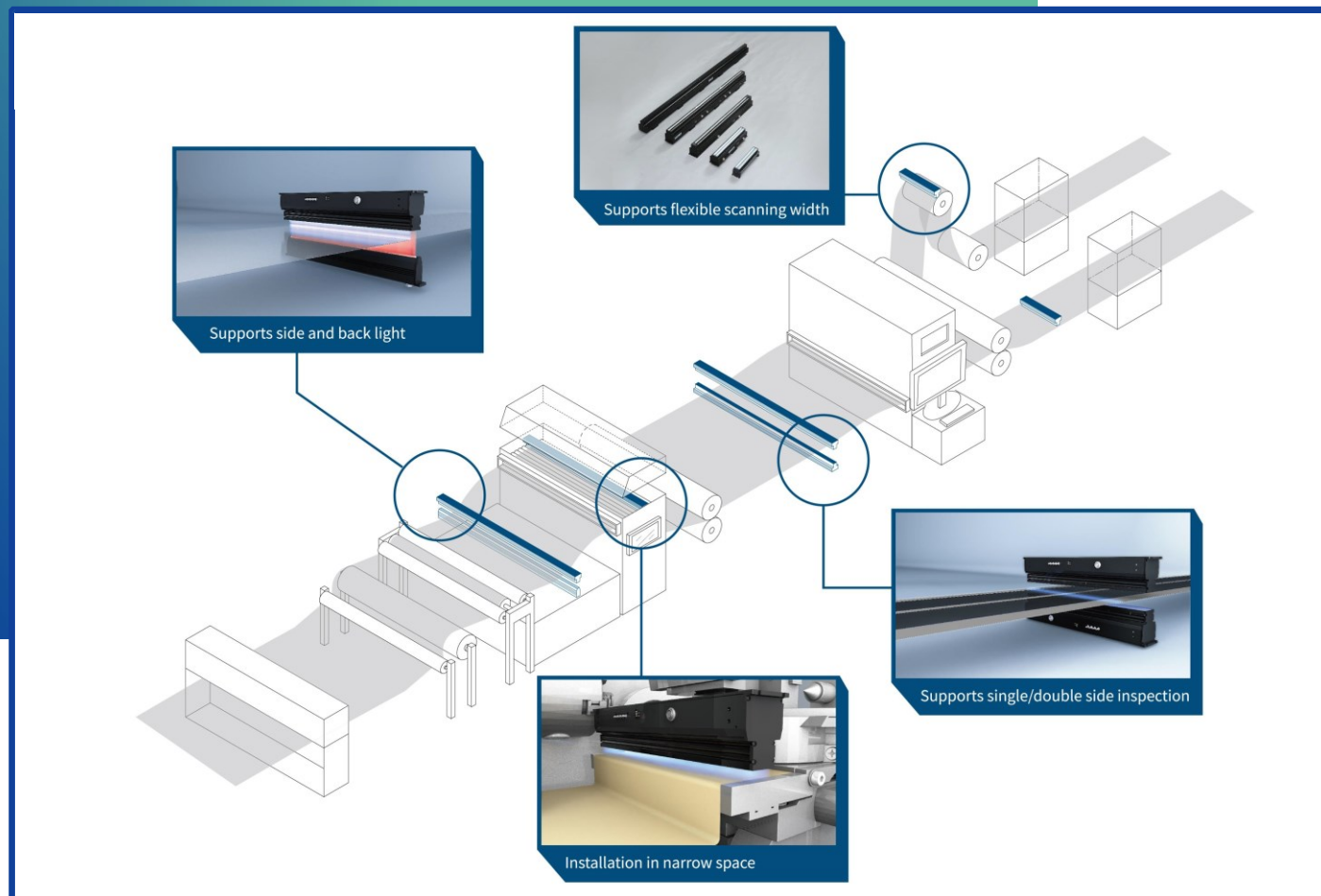
Types	Product Characteristics	GPL Series photos
⑤ Special Angle	 <p>The diagram shows a cross-section of a CIS sensor. A light source is positioned at a 90-degree angle to the sensor's surface. The light path is labeled 'Internal light'. The sensor is labeled 'CIS'. Two 90-degree angles are indicated at the bottom.</p>	 <p>A photograph of a long, black, rectangular light fixture. It has a glowing white strip in the center. The fixture is mounted on a wooden surface.</p>

Photos	Scanned Images of GPL
 <p>A photograph of a sign with the number '20' and the letters 'WHEC' and a logo. The sign is dark and has a bright, irregular reflection on its surface, making the text difficult to read.</p>	 <p>A scanned image of the same sign. The text '20 WHEC' and the logo are clearly visible and sharp, with no glare or reflection.</p>

- Normal integrated light, image not OK.
- GPL overcome the irregular reflection and capture the clear image.

PART 04

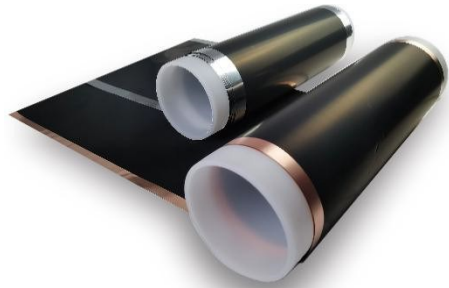
Applications



- Application Examples
- Case Study

• Battery Foil

Coating, Slitting,
Notching, Lamination



• Printing •

Label, Narrow web
Metal sheet, Carton



• Plastic Film

Package



• Glass •

Automotive glass
Building glass



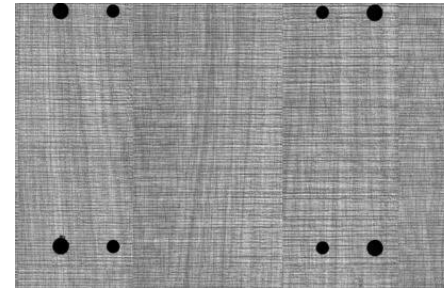
• Ceramic

Surface, Crack



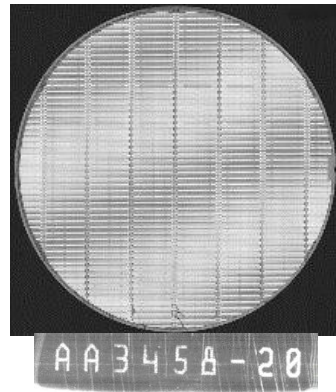
Panel •

Surface, Dimension, Hole



• Wafer

Pattern, Serial number,
Crack, Dust, etc.



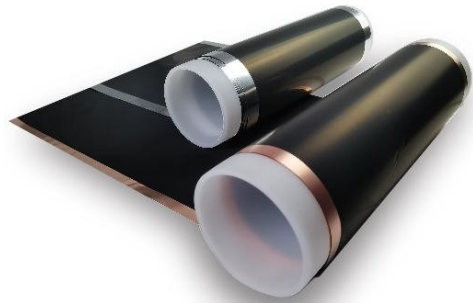
Textile •

Leather quality
Cloth color/quality

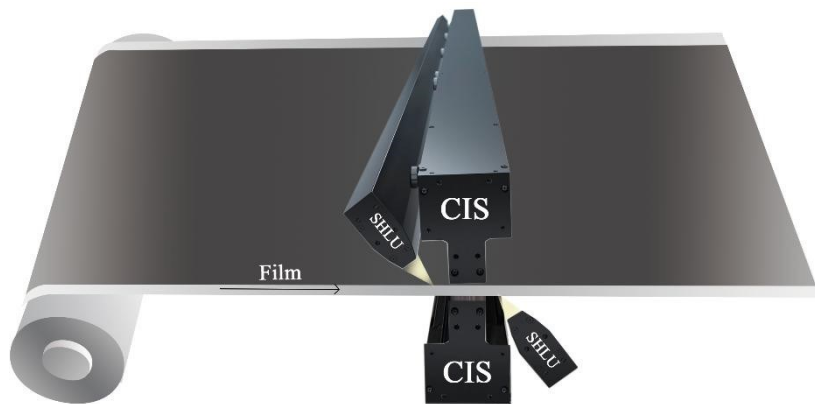


Case Study-Li-ion battery foil

- Process: coating, slitting
- Typical defect: mismatch, bubbling, coating voids, wrinkle, dimension measurement



Typical parameters	
• Scanning width:	740/800/1440/1500/1700mm
• Pixel size:	42.3 μ m
• Resolution:	600DPI
• Scanning speed:	max 147m/min(600DPI, mono)
• Light:	external white light(SHLU series)



CIS advantages:

- ① Very compact so can be easily mounted both above and below double coated battery film.
- ② 1:1 imaging brings constant defect image with telecentric view, easy to trace defect in different process steps.
- ③ Just one unit to cover a format up to 1700mm without multi cameras and lens alignment issue.



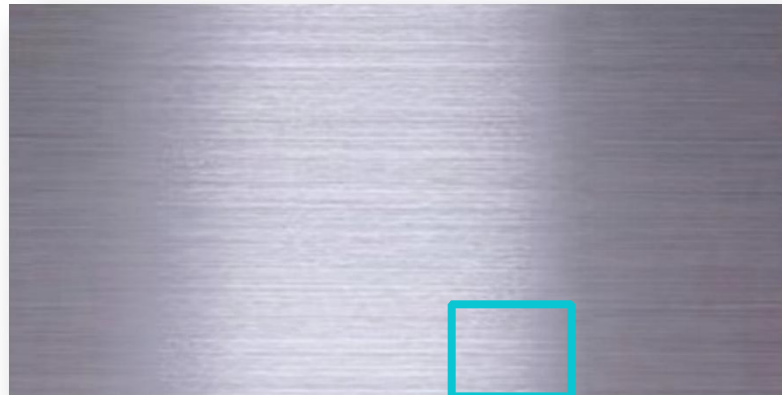
Typical parameters

- Scanning width: 1240mm
- Pixel size: 127 μ m
- Resolution: 200DPI
- Scanning speed: max 106m/min (200DPI, color)
- Light: external RGB light (HLU series)

CIS advantages:

- ① Can be placed inside printers.
- ② Reduced the need of image preprocessing to mitigate barrel effect, inspection performance maintained even at image edge.
- ③ No need to align light and camera, no alignment issue of multi cameras and lens.

Case Study- Metal panel inspection

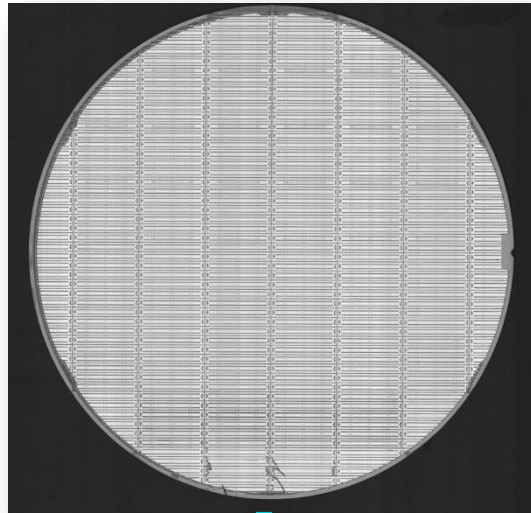


Typical Parameters

- Scanning width: 800mm
- Pixel size: 84 μ m
- Resolution: 300DPI
- Scanning speed: max 78m/min(300DPI, mono)
- Light: integrated coaxial light(GPL series)

CIS advantages:

- ① Very compact so can be easily integrated on production line and cutting machines.
- ② 1:1 image and no distortion, easy to check the external profile, surface scratch and contamination effectively.



AA345A-20

Typical parameters-OCR/Notch Recognition Module

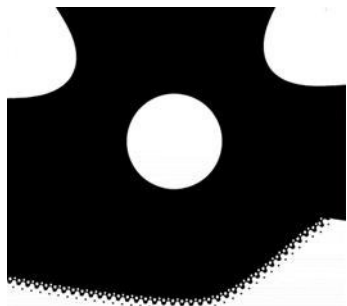
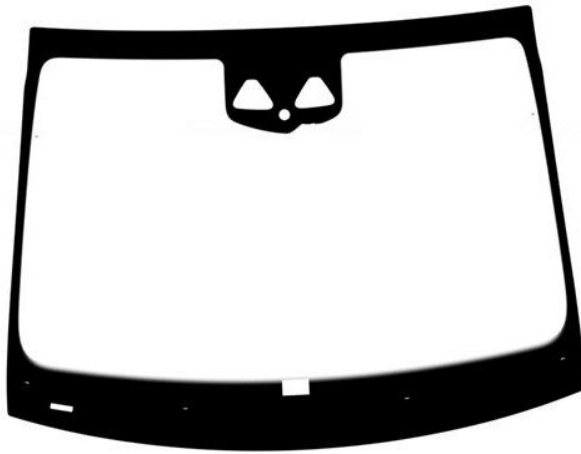
- Scanning width: 108mm
- Pixel size: 42.3 μ m
- Resolution: 600DPI/1200DPI/2400DPI
- Scanning speed: max 76m/min(600DPI, mono)
- Light: external white light(MHLU series, up to 5pcs)

Typical parameters-Wafer Inspection

- Scanning width: 330mm;
- Pixel size: 42.3 μ m
- Resolution: 600DPI/1200DPI/2400DPI
- Scanning speed: max 76m/min(600DPI, mono)
- Light: integrated coaxial white light(GPL series)

CIS advantages:

- ① Very compact so can be mounted in wafer processing machine and wafer test machine.
- ② Multiple lighting angles, easy to read different kinds of wafer ID.
- ③ 1:1 imaging bring constant defect image with telecentric view.
- ④ Filter is also optional to eliminate the parasitic light.



Note: inspection before bending glass

Typical Parameters

- Scanning width: 1300/1500/1960mm
- Pixel size: 84 μ m
- Resolution: 300DPI
- Scanning speed: max 78m/min(300DPI, mono)
- Light: external white light(HLU series, up to 3pcs)
backlight & reflection light

CIS advantages:

- ① Very compact so can be mounted in glass printing production line.
- ② 1:1 imaging with telecentric view detect printing graphics quality and surface damage effectively.
- ③ No need to align light and camera, one unit can cover up to 1960mm, no alignment issue of multi cameras and lens.
- ④ Single CIS supports reflection light and back light.

Case Study- Ceramic tile inspection

>ISION
ON LINE

WHEC



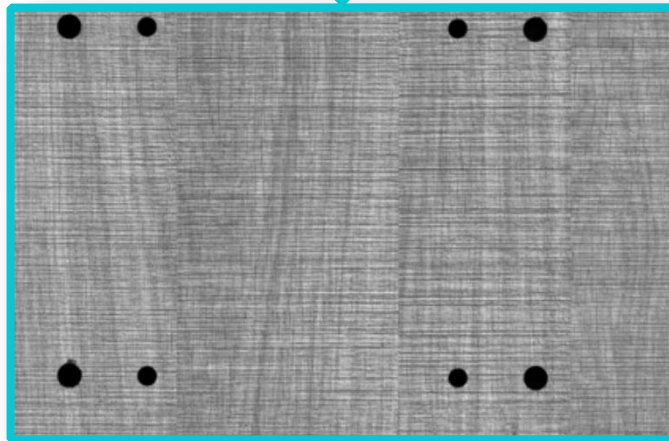
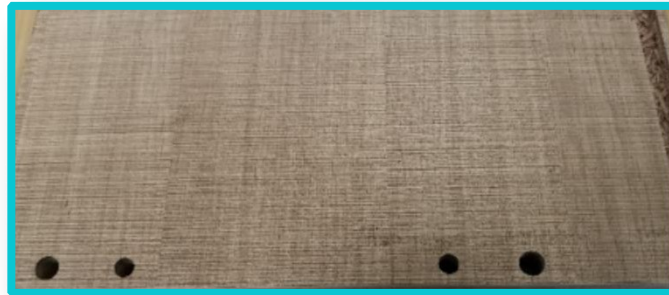
Typical Parameters

- Scanning width: 800/1300/1700mm
- Pixel size: 42 μ m
- Resolution: 600DPI
- Scanning speed: max 21m/min(600DPI, mono)
- Light: external white/IR light(HLU series, up to 3pcs)



CIS Advantages:

- ① Very compact so can reduce the volume of inspection system.
- ② No need to align light and camera, one unit can cover up to 1700mm, no alignment issue of multi cameras and lens.



Typical Parameters

- Scanning width: 1300/1700/1960mm
- Pixel size: 84 μ m
- Resolution: 300DPI
- Scanning speed: max 78m/min(300DPI, mono)
- Light: external white light(HLU, SHLU series)

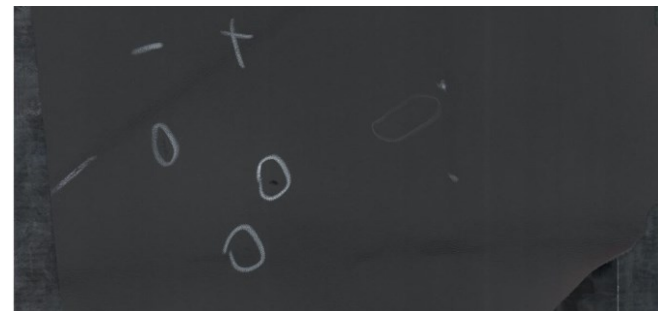
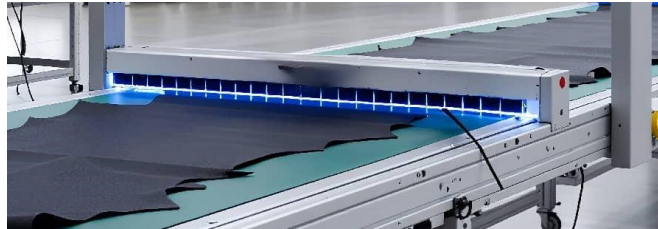
CIS advantages:

- ① Very compact so can be mounted in CNC machining center, beam saws and drilling machines.
- ② 1:1 imaging and telecentric view brings accurate size measurement and center location for holes.
- ③ One unit can cover up to 1960mm, no alignment issue of multi cameras and lens.

Case Study- Leather/textile inspection

>ISION
ON LINE

WHEC



Typical Parameters

- Scanning width: 1300/1600/1960/3000mm
- Pixel size: 127 μ m,84 μ m
- Resolution: 200DPI/300DPI
- Scanning speed: max 87.6m/min(300DPI, color)
- Light: integrated light (R/G/B) or external light

CIS advantages:

- ① Very compact so can be easily integrated on production line and machines.
- ② 1:1 image and no distortion, easy to inspect the pattern and surface defect
- ③ Flexible external light angle allows inspecting more defects, such as small holes.
- ④ One unit can cover up to 1960mm, no alignment issue of multi cameras and lens.

Global Market



THANK YOU.

WHEC

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