



# Vision Datum

Machine Vision LED Illumination

Machine Vision  
LED Coaxial illumination

## ABOUT US

Vision Datum as leading manufacturer of machine vision products in China, have almost 20 years in this industry, and the major products cover machine vision lighting / illumination, camera, lens, machine vision algorithms and storage software.

With abundant experience in industry application and scientific research, Vision Datum Machine Vision Led Illumination offer a wide range of selections, and we provide OEM / ODM customization for various lighting solutions, including but not limited to Line Scan Lights, Telecentric Lights, Ultraviolet and Infrared Lights , Waterproof and Anti-corrosion Lighs, and Multi-spectral Lights.

Vision Datum products have been exported to almost 100 countries and regions, and in thousands of projects we have received countless affirmations and reputations. Vision Datum machine vision products are well-known as innovative, flexible, stable and easy to use, enabling reliable inspection in many applications.



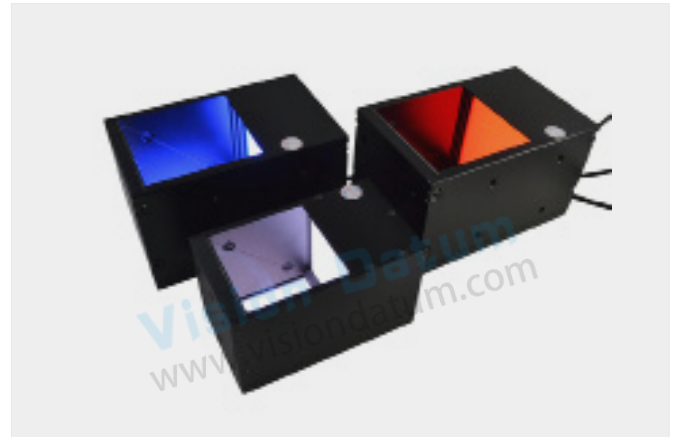
# Coaxial Illumination C Series

## Features

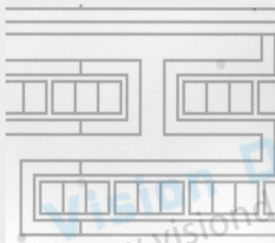
- High density LED provide high brightness light ray.
- Highly-accurate optical glass is used for the camera window and spectroscope.

## Applications

- Inspection of high reflective surface scratches, defects of chip and silicon wafer, etc..
- Mark point position, laser character detection, bar code recognition

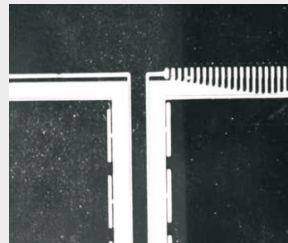


## Examples of Coaxial Light Images



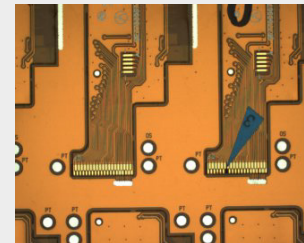
Lights: C40UV405

Checking ITO circuit in the touch screen with the new coaxial UV lighting, High brightness and uniformity.



Lights: C20R

Touch screen position alignment system



Lights: C50B

Checking the completeness of pins in FPC

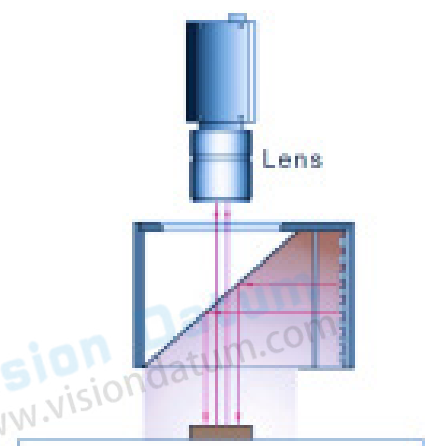
## Explanation of Model Code

VT-LT2-C	19	19	(W/B/G/R)
Series	Emitting Length	Emitting Width	Color

## Common Specifications

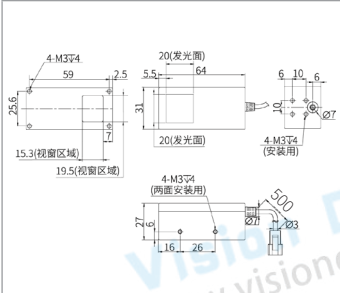
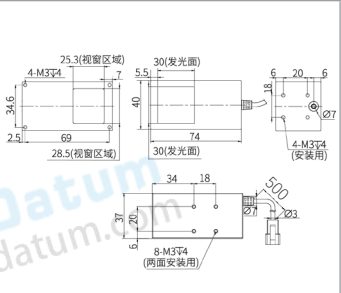
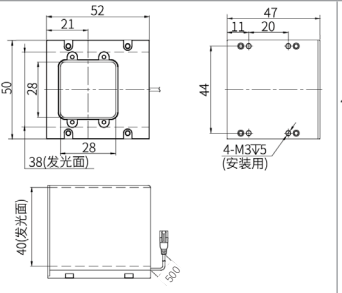
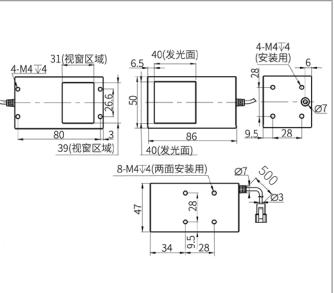
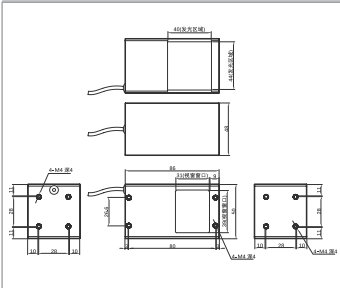
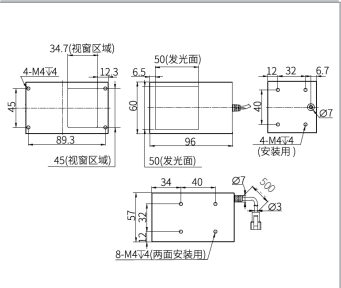
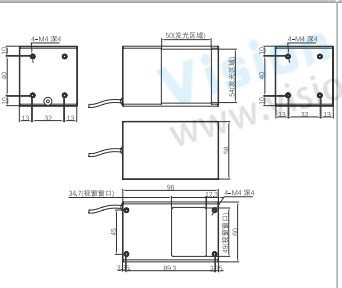
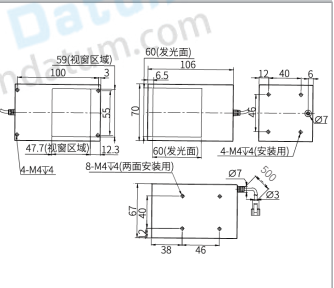
Input voltage	24 VDC
Connector	SMR-03V-B
Wavelength range	Red: 620-630nm; Blue: 460-475nm; Green: 520-530nm;
Color temperature (white)	5800-7500K
Operating environment (indoor)	Temperature: 0~40°C Humidity: 20% to 85% RH (with no condensation)
Life time	White:30,000hrs, Red: 60,000hrs (Depends on the operating environment, not a guarantee)
Case material	Aluminum alloy, Resin

## Illumination Structure



Model No.	Optical spec.		Electrical specifications (GREEN / NIR / UV Accept custom)			Dimensions		
	Light Area		Supply Voltage (v)	Power cons. (w)	Power cons. (w)	Length (mm)	Width (mm)	Height (mm)
Length (mm)	Width (mm)	●						
VT-LT2-C2020	20	20	24	2.2	2.1	64	31	27
VT-LT2-C3030	30	30	24	1.8	2.5	74	40	37
VT-LT2-C4038	40	38	24	2.7	3.3	52	50	47
VT-LT2-C4040	40	40	24	2.7	3.7	86	50	47
VT-LT2-C4440	44	40	24	4.0	5.5	86	50	48
VT-LT2-C5050	50	50	24	5.3	6.1	96	60	57
VT-LT2-C5450	54	50	24	4.0	6.5	96	60	58
VT-LT2-C6060	60	60	24	7.2	9.8	106	70	67
VT-LT2-C6460	64	60	24	7.0	10.8	106	70	68
VT-LT2-C7573	75	73	24	10.1	12.0	120	85.4	79
VT-LT2-C8583	85	83	24	13.2	17.1	130	95.4	89
VT-LT2-C100100	100	100	24	17.7	26.8	146	110	107
VT-LT2-C126126	126	126	24	12	18	165.5	134	133
VT-LT2-C134130	134	130	24	20	20	182	135	142
VT-LT2-C150120	150	120	24	14	21	166	160	127
VT-LT2-C200180	200	180	24	30	46	231.5	212	187
VT-LT2-C250190	250	190	24	37	56	264.5	262	197

Dimension (mm)

VT-LT2-C2020	VT-LT2-C3030	VT-LT2-C4038	VT-LT2-C4040
			
VT-LT2-C4440	VT-LT2-C5050	VT-LT2-C5450	VT-LT2-C6060
			

Dimension (mm)

VT-LT2-C6460	VT-LT2-C7573	VT-LT2-C8583	VT-LT2-C100100
VT-LT2-C126126	VT-LT2-C134130	VT-LT2-C150120	VT-LT2-C200180
VT-LT2-C250190			

# Parallel Coaxial Illumination

## CPL Series

### Features

- Special optical system and multi lens assembly ensure homogeneity and parallelism.
- Patented products with imported spectroscopes ensure image quality.

### Applications

- Inspecting raised characters, scratches, watermarks on card.
- Inspection for surface indentation and scratches on flat hardware.



### Examples of Coaxial Light Images



Light: CPL5050W  
Highlight characters



Light: CPL6060W  
Highlight scratches

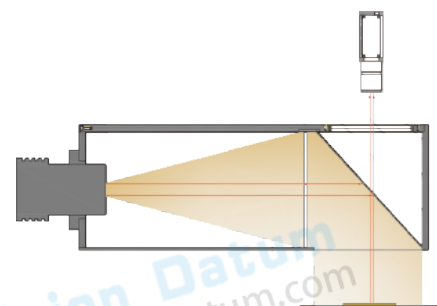


Light: CPL6060W  
Highlight watermarks

### Common Specifications

Input voltage	24 VDC
Connector	SMR-03V-B
Wavelength range	Red: 620-630nm; Blue: 460-475nm; Green: 520-530nm;
Color temperature (white)	6000-7500K
Operating environment (indoor)	Temperature: 0~40°C Humidity: 20% to 85% RH (with no condensation)
Life time	White:30,000hrs, Red: 60,000hrs (Depends on the operating environment, not a guarantee)
Case material	Aluminum alloy, Resin

### Illumination Structure

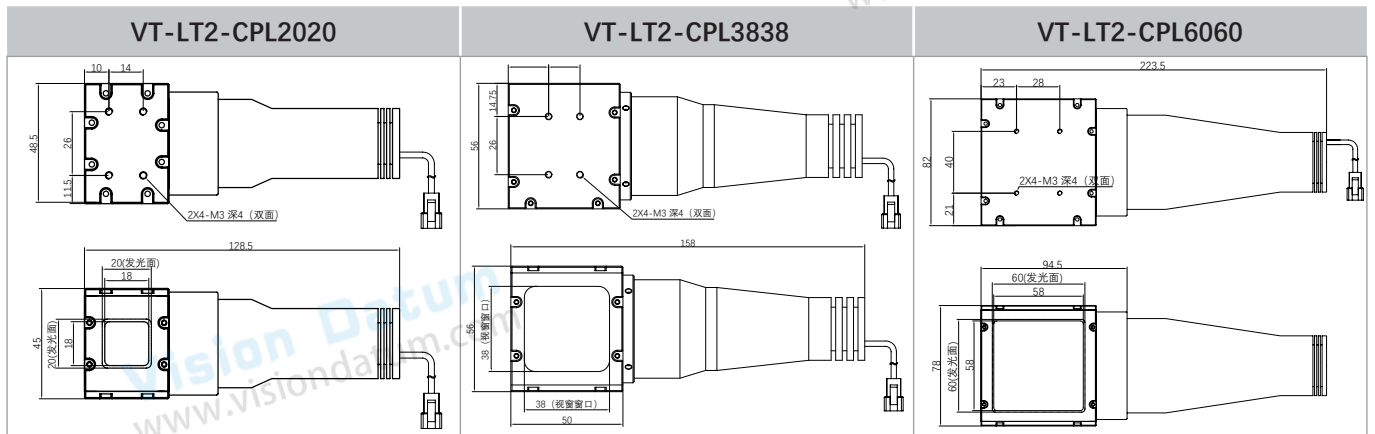


### Explanation of Model Code

VT-LT2-CPL	50	50	(W/B/G/R)
Series	Emitting Length	Emitting Width	Color

Model No.	Optical spec.	Electrical specifications (GREEN / NIR / UV Accept custom)			Dimensions		
		Light Area (mm)	Supply Voltage (v)	Power cons. (w) ●	Power cons. (w) ● ○ ●	Length (mm)	Width (mm)
VT-LT2-CPL2020	20x20	5	-	1	128.5	45	48.5
VT-LT2-CPL3838	38x38	5	-	3	158	56	56
VT-LT2-CPL6060	60x60	5	-	3	223.5	78	82

Dimension (mm)



# 90° Turning Coaxial Illumination CX Series

## Features

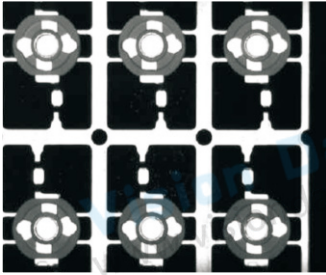
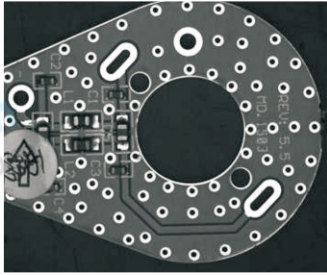
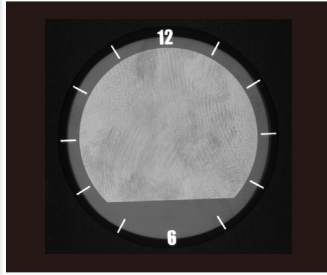
- Compact design with no fan and 90degree rotation, easy to installation.
- Special coating film on lens, providing excellent optic effects.

## Applications

- Inspection of defects, faults, scratches on highly reflective surface, such as glossy surfaces or mirrors.
- Mark point position, laser character detection, bar code recognition



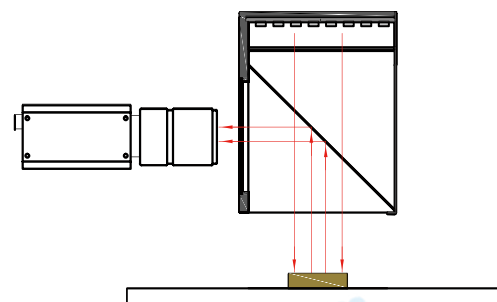
## Examples of Coaxial Light Images

 <p>Light: CX60W LED location alignment</p>	 <p>Light: CX50R Imaging of PCB copper</p>	 <p>Light: CX30R maging of scale angles on dial plate.</p>
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## Common Specifications

Input voltage	24 VDC
Connector	SMR-03V-B
Wavelength range	Red: 620-630nm; Blue: 460-475nm; Green: 520-530nm;
Color temperature (white)	6000-7500K
Operating environment (indoor)	Temperature: 0~40°C Humidity: 20% to 85% RH (with no condensation)
Life time	White:30,000hrs, Red: 60,000hrs (Depends on the operating environment, not a gurantee)
Case material	Aluminum alloy, Resin

## Illumination Structure



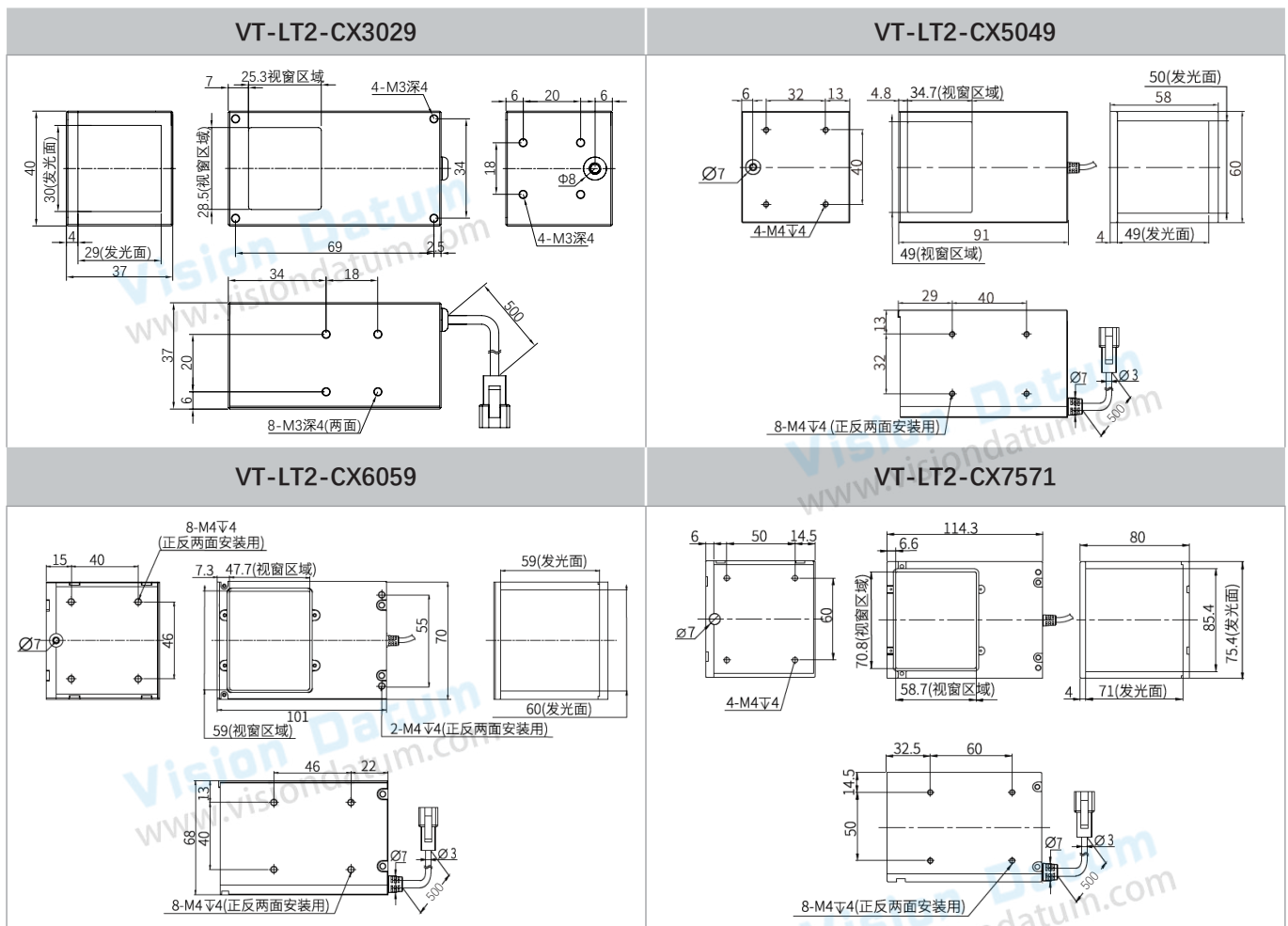
## Explanation of Model Code

VT-LT2-CX	50	50	(W/B/G/R)
Series	Emitting Length	Emitting Width	Color



Model No.	Optical spec.		Electrical specifications (GREEN / NIR / UV Accept custom)			Dimensions		
	Light Area		Supply Voltage (v)	Power cons. (w) ●	Power cons. (w) ● ○ ●	Length (mm)	Width (mm)	Height (mm)
Length (mm)	Width (mm)							
VT-LT2-CX3029	30	29	24	1.7	2.22	70	40	38
VT-LT2-CX5049	50	49	24	5.5	5.5	91	60	58
VT-LT2-CX6059	60	59	24	6.1	12.1	101	70	68
VT-LT2-CX7571	75.4	71	24	7.8	14.4	115	85.4	80

Dimension (mm)



# Overview

## Light Controller Collection



Model	Drive Mode	Input Voltage	Output Voltage	Power	Output Current	Channel	Output Port	Adapt to line light
<b>Digital Controller</b>								
VT-LT4-0506PWDC-2	Constant Current	88V-264V	5V	Total:6W/Single :3W Expandable: Total:12W/Single:6W	/	2	SMP-03V	
VT-LT4-2420PWDC-2	Constant Voltage	88V-264V	24V	Total:20W Single:20W	/	2	SMP-03V	
VT-LT4-2460PWDC-4	Constant Voltage	88V-264V	24V	Total:60W Single:25W	/	4	SMP-03V	
VT-LT4-24150PWDC-4	Constant Voltage	88V-264V	24V	Total:150W Single:70W	/	4	SMP-03V	
VT-LT3-24240PWDC-2	Constant Current	100V-120V(Ver.A) 200V-240V(Ver.B)	24V	240W	Total:10A Single:10A	2	19M-5	✓
VT-LT3-24500PWDC-2	Constant Voltage	100V-240V	24V	480W	Total:20A Single:light 9A, fan 1A	2	19M-2E	
VT-LT4-48300PWDC-1	Constant Current	90V-264V	48V	300W	0-6A	1	-	
<b>Stroboscopic Controller (With Brightening Module)</b>								
VT-LT3-PLU24120-4	Constant Voltage	100V-240V	48V	120W	10A(Instantaneous Value)	4	SMP-03V-BC	
VT-LT3-PLU24200-2	Constant Voltage	100V-240V	48V	200W	50A(Instantaneous Value)	2	12M-2	
VT-LT3-PLU24200-4	Constant Voltage	100V-240V	48V	200W	25A(Instantaneous Value)	4	SMP-03V-BC	
<b>Line Source Stroboscopic Controller (With Brightening Module)</b>								
VT-LT3-PLU481000LI-6	Constant Voltage	100V-240V	48V	1000W	Total:25A Single:25A	6	16M-2	✓
<b>Line Source Controller</b>								
VT-LT3-24300PWLI-1	Constant Voltage	100V-240V	24V	≤ 300W	12.5A	1	AM20K4Z	✓
VT-LT3-48600PWLI-2	Constant Current	100V-120V(Ver.A) 200V-240V(Ver.B)	48V	600W	Total:12A Single:6A	2	19M-6	✓
VT-LT3-48600PWLIN-1	Constant Current	100V-120V(Ver.A) 180V-240V(Ver.B)	48V	≤ 600W	Total:12A Single:6A	1	19M-6	✓
VT-LT3-48300PWLIN-2	Constant Current	100V-240V	48V	≤ 300W	Total:6A Single:6A	2	16M-6	✓
VT-LT3-48600PWLIN-2	Constant Current	180V-240V	48V	≤ 600W	Total:12A Single:6A	2	19M-6	✓
VT-LT3-48800PWLIN-1	Constant Current	100V-240V	48V	< 800W	14A	1	19M-6	✓
VT-LT3-48800PWLIN-2	Constant Current	100V-240V	48V	≤ 800W /Single ≤ 400W	14A	2	19M-6	✓
VT-LT3-481200PWLIN-1	Constant Current	100V-240V	48V	≤ 1200W	Total:24A Single:12A	1	19M-6	✓
<b>Analog Controller</b>								
VT-LT4-0506PWAC-2	Constant Current	88V-264V	5V	Total:6W Single:3W	/	2	SMP-03V	
VT-LT3-2460PWAC-4	Constant Voltage	100V-240V	24V	60W	Total:2.5A Single:2.5A	4	SMP-03V-BC	

Note: Default -Ver.B version voltage

# 2024

HOT PRODUCTS

## Infrared Series Camera

- ◇ Near-Infrared(NIR) Industrial Cameras: 300-1100nm
- ◇ Short-Wave(SWIR) Industrial Cameras: 900-1700nm
- ◇ Cooled Mid-Wave Infrared(MWIR) Cameras: 1500-5200nm
- ◇ Long-Wave Infrared(LWIR) Industrial Cameras: 8000-14000nm



NIR



SWIR



MWIR



LWIR

## High-Speed Camera

- ◇ 10GigE, SDI
- ◇ 1000 ~ 1000000 FPS

iSpeedy SE Series •



• iSpeedy Series

# Vision And More Available

让工业更智能，让视觉更简单！



SWIR Camera  
Industrial Camera



Macro Lens  
Industrial Lens



Microscope



System Solution  
No-programming Software



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