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Hangzhou Hikrobot Technology Co.,Ltd.

Hangzhou Hikrobot Technology Co., Ltd. (Hikrobot) is a global manufacturer and supplier of mobile robot and machine vision products. It is committed to continuously promoting the intelligent level of robots and leading the intelligent manufacturing process.
Hikrobot has more than 1,000 employees across the world (by Aug. 2019), of which about 800 are R&D engineers. Supported by its accumulated technology in image sensing, AI, and big data analysis, Hikrobot develops business areas including Mobile Robot, Machine Vision, and Industrial Unmanned Aerial Vehicle (UAV).

Machine Vision

With efforts in industrial vision sensing application and hardware technology, the company provides customers with leading machine vision products. The products cover industrial camera, lens, vision box, industrial smart camera and related accessory. All products are tested according to the EMVA1288 standard to ensure the image quality. Through rigorous EMC, safety and reliability tests, and relying on mature DFMEA technology, Hikrobot guarantees the high precision, high efficiency and high environmental performance of each product. The machine vision products are widely used in industrial automation sectors such as consumer electronics, semiconductors and logistics, as a part of the vision applications like positioning guidance, measurement, quality inspection, code reading, OCR, etc. They help users improve productivity, accuracy and stability greatly.

Area Scan Camera

CE Series GigE Area Scan Camera

Key Features

- Adopt high cost-performace ratio sensors, ideal image quality
- Rolling Shutter cameras support Global Reset mode: work with LED strobe light to acquire images of fast-moving object without distortion
- Support adjustment of gain, exposure time, white balance, gamma correction, LUT, etc.
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI to improve frame rate by reducing resolution, and support mirror output
- Support Binning mode, which improves camera sensitivity
- GigE interface, with maximum transmission distance up to 100m (without delay)
- 128 MB on-board buffer, which enables to cache multiple pictures for data transmission or image retransmission in Burst mode
- Compatible with GigE Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS, KC certification

Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CE003-20GM	PYTHON	CMOS	1/3.6"	4.8μm	Global	640×480	173fps	GigE	√	
MV-CE003-20GC	PYTHON	CMOS	1/3.6"	4.8μm	Global	640×480	173fps	GigE		√
MV-CE004-10GM *	IMX297	CMOS	1/2.9"	6.9μm	Global	720×540	120fps	GigE	√	
MV-CE004-10GC *	IMX297	CMOS	1/2.9"	6.9μm	Global	720×540	120fps	GigE		√
MV-CE013-50GM	RJ33	CCD	1/3"	3.75μm	Global	1280×960	30fps	GigE	√	
MV-CE013-50GC	RJ33	CCD	1/3"	3.75μm	Global	1280×960	30fps	GigE		√
MV-CE016-10GM *	IMX296	CMOS	1/2.9"	3.45μm	Global	1440×1080	60fps	GigE	√	
MV-CE016-10GC *	IMX296	CMOS	1/2.9"	3.45μm	Global	1440×1080	60fps	GigE		√
MV-CE020-10GC *	IMX290	CMOS	1/2.8"	2.9μm	Rolling	1920×1080	58fps	GigE		√
MV-CE050-30GM	MT9P031	CMOS	1/2.5"	2.2μm	Rolling	2592×1944	14fps	GigE	√	
MV-CE050-31GM *	AR0521	CMOS	1/2.5"	2.2μm	Rolling	2592×1944	24fps	GigE	√	
MV-CE050-31GC *	AR0521	CMOS	1/2.5"	2.2μm	Rolling	2592×1944	24fps	GigE		√
MV-CE100-30GM	MT9J003	CMOS	1/2.3"	1.67μm	Rolling	3840×2748	7fps	GigE	√	
MV-CE100-30GC	MT9J003	CMOS	1/2.3"	1.67μm	Rolling	3840×2748	7fps	GigE		√
MV-CE100-31GM	MT9J003	CMOS	1/2.3"	1.67μm	Rolling	3840×2748	11.2fps	GigE	√	
MV-CE120-10GM	IMX226	CMOS	1/1.7"	1.85μm	Rolling	4024×3036	9.6fps	GigE	√	
MV-CE120-10GC	IMX226	CMOS	1/1.7"	1.85μm	Rolling	4024×3036	9.6fps	GigE		√
MV-CE200-10GM	IMX183	CMOS	1"	2.4μm	Rolling	5472×3648	5.9fps	GigE	√	
MV-CE200-10GC	IMX183	CMOS	1"	2.4μm	Rolling	5472×3648	5.9fps	GigE		√
MV-CE200-11GM	IMX183	CMOS	1"	2.4μm	Rolling	5472×3648	5.9fps	GigE	√	

Notice:* will be released soon.

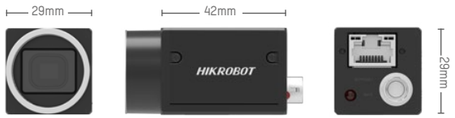
Parameter \ Model	MV-CE003-20GM/C	MV-CE004-10GM/C *	MV-CE013-50GM/C	MV-CE016-10GM/C *
Exposure Range	42μs~10sec	1μs~10sec	34μs~1sec	1μs~10sec
Dynamic Range	59dB	74dB	60dB	71.4dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GR 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GR 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<3.0W@12VDC	<3W@12VDC	<2.6W@12VDC	<3.2W@12VDC
Power Supply	Power supply voltage 5~15 V, support PoE	Power supply voltage 9~24 V, support PoE	Power supply voltage 5~15 V, support PoE	Power supply voltage 9~24 V, support PoE
Dimension	29mm*29mm*42mm			
Weight	<68g			
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

Notice:* will be released soon.

Parameter \ Model	MV-CE020-10GC *	MV-CE050-30GM	MV-CE050-31GM/C *	MV-CE100-30GM/C
Exposure Range	46μs~10sec	34μs~1sec	21μs~1sec	50μs~2sec
Dynamic Range	66dB	60dB	63dB	65dB
Pixel Format	Bayer GR 8/10/10p/12/12p	Mono 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GB 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GR 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<3.3W@12VDC	<2.75W@12VDC	<2.4W@12VDC	<2.6W@12VDC
Power Supply	Power supply voltage 9~24 V, support PoE	Power supply voltage 5~15 V, support PoE	Power supply voltage 9~24 V, support PoE	Power supply voltage 5~15 V, support PoE
Dimension	29mm*29mm*42mm			
Weight	<68g			
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

Notice:* will be released soon.

Parameter \ Model	MV-CE100-31GM	MV-CE120-10GM/C	MV-CE200-10GM/C	MV-CE200-11GM
Exposure Range	26μs~1sec	34μs~2sec	46μs~2.5sec	46μs~2.5sec
Dynamic Range	65dB	70.5dB	65.5dB	65.5dB
Pixel Format	Mono 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GB 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GB 8/10/10p/12/12p	Mono 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<2.6W@12VDC	M:<2.7W@12VDC C:<3.0W@12VDC	M:<3.1W@12VDC C:<3.5W@12VDC	<2.9W@12VDC
Power Supply	Power supply voltage 5~15 V, support PoE	Power supply voltage 5~15 V, support PoE	Power supply voltage 5~15 V, support PoE	Power supply voltage 9~24VDC, support PoE
Dimension	29mm*29mm*42mm	29mm*29mm*42mm	29mm*44mm*59mm	29mm*29mm*42mm
Weight	<68g	<68g	<100g	<68g
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation			



29*29*42 structure

44*29*59 structure

CE Series USB3.0 Area Scan Camera

Key Features

- Adopt high cost-performace ratio sensors, ideal image quality
- Rolling Shutter cameras support Global Reset mode: work with LED strobe light to acquire images of fast-moving object without distortion
- Support adjustment of gain, exposure time, white balance, gamma correction, LUT, Binning, etc.
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI to improve frame rate by reducing resolution, and support mirror output
- Compatible with USB3.0 Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS, KC certification

Specifications

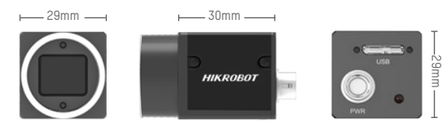
Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CE013-50UM	RJ33	CCD	1/3"	3.75μm	Global	1280×960	30fps	USB3.0	√	
MV-CE013-50UC	RJ33	CCD	1/3"	3.75μm	Global	1280×960	30fps	USB3.0		√
MV-CE013-80UM	SS	CMOS	1/2.7"	4.0μm	Global	1280×1024	150fps	USB3.0	√	
MV-CE050-30UM	AR0521	CMOS	1/2.5"	2.2μm	Rolling	2592×1944	31fps	USB3.0	√	
MV-CE050-30UC	AR0521	CMOS	1/2.5"	2.2μm	Rolling	2592×1944	31fps	USB3.0		√
MV-CE060-10UM	IMX178	CMOS	1/1.8"	2.4μm	Rolling	3072×2048	42.7fps	USB3.0	√	
MV-CE060-10UC	IMX178	CMOS	1/1.8"	2.4μm	Rolling	3072×2048	42.7fps	USB3.0		√
MV-CE120-10UM *	IMX226	CMOS	1/1.7"	1.85μm	Rolling	4000×3036	30fps	USB3.0	√	
MV-CE120-10UC *	IMX226	CMOS	1/1.7"	1.85μm	Rolling	4000×3036	30fps	USB3.0		√
MV-CE200-10UM	IMX183	CMOS	1"	2.4μm	Rolling	5472×3648	14fps	USB3.0	√	
MV-CE200-10UC	IMX183	CMOS	1"	2.4μm	Rolling	5472×3648	14fps	USB3.0		√
MV-CE200-11UM	IMX183	CMOS	1"	2.4μm	Rolling	5472×3648	14fps	USB3.0	√	

Notice:* will be released soon.

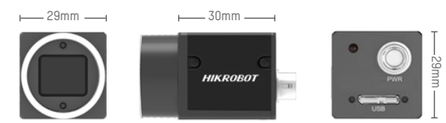
Parameter \ Model	MV-CE013-50UM/C	MV-CE013-80UM	MV-CE050-30UM/C
Exposure Range	10μs~1sec	30μs~10sec	M:28μs~1sec C:16μs~1sec
Dynamic Range	60dB		
Pixel Format	Mono 8/10/10p/12/12p Bayer GR 8/10/10p/12/12p	Mono 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GR 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1		
Power Consumption	<2.7W@12VDC	<1.93W@12VDC	<2.5W@12VDC
Power Supply	Power supply voltage 5~15V, power over USB3.0 supported		
Dimension	29mm*29mm*30mm		
Weight	<100g	<56g	<56g
Lens Mount	C-mount		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation		

Parameter \ Model	MV-CE060-10UM/C	MV-CE120-10UM/C *	MV-CE200-10UM/C	MV-CE200-11UM
Exposure Range	M:16μs~1sec C:24μs~1sec	10μs~500ms	M:19μs~1sec C:44μs~1sec	19μs~1sec
Dynamic Range	71.3dB	70.5dB	65.5dB	65.5dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GB 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GB 8/10/10p/12/12p	Mono 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<2.7W@5VDC	<3.4W@5VDC	<2.83W@5VDC	<2.83W@5VDC
Power Supply	Power supply voltage 5~15V, support USB power supply	Power supply voltage 9~24V, support USB power supply	Power supply voltage 5~15V, support USB power supply	Power supply voltage 9~24V, support USB power supply
Dimension	29mm*29mm*30mm	29mm*29mm*30mm	29mm*44mm*59mm	29mm*29mm*30mm
Weight	<56g	<56g	<100g	<56g
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

Notice:* will be released soon.



29*29*30 structure



29*29*30 structure

44*29*59 structure

CA Series GigE Area Scan Camera

Key Features

- Support adjustment of gain, exposure time, white balance, gamma correction, LUT, Binning, etc.
- Support HDR polling, to ensure different exposure time and gain cyclical adjustment under different lighting
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI to improve frame rate by reducing resolution, and support mirror output
- Support Binning mode, which improves camera sensitivity
- GigE interface, with maximum transmission distance up to 100m (without delay)
- 128 MB on-board buffer, which enables to cache multiple pictures for data transmission or image retransmission in Burst mode
- Compatible with GigE Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS, KC certification

Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CA003-20GM	PYTHON300	CMOS	1/4"	4.8μm	Global	672×512	344fps	GigE	√	
MV-CA003-20GC	PYTHON300	CMOS	1/4"	4.8μm	Global	672×512	336fps	GigE		√
MV-CA003-50GM	RJ33	CCD	1/3"	7.4μm	Global	640×480	200fps	GigE	√	
MV-CA004-10GM	IMX287	CMOS	1/2.9"	6.9μm	Global	720×540	312.9fps	GigE	√	
MV-CA004-10GC	IMX287	CMOS	1/2.9"	6.9μm	Global	720×540	312.9fps	GigE		√
MV-CA005-20GM	PYTHON480	CMOS	1/3.6"	4.8μm	Global	808×608	116fps	GigE	√	
MV-CA005-20GC	PYTHON480	CMOS	1/3.6"	4.8μm	Global	808×608	116fps	GigE		√
MV-CA013-20GM	PYTHON1300	CMOS	1/2"	4.8μm	Global	1280×1024	90fps	GigE	√	
MV-CA013-20GC	PYTHON1300	CMOS	1/2"	4.8μm	Global	1280×1024	90fps	GigE		√
MV-CA013-20GN	PYTHON1300	CMOS	1/2"	4.8μm	Global	1280×1024	90fps	GigE	√	
MV-CA013-70GM	E2V	CMOS	1"	10μm	Global	1280×1024	49fps	GigE	√	
MV-CA016-10GM	IMX273	CMOS	1/2.9"	3.45μm	Global	1440×1080	78.2fps	GigE	√	
MV-CA016-10GC	IMX273	CMOS	1/2.9"	3.45μm	Global	1440×1080	78.2fps	GigE		√
MV-CA020-10GM *	IMX430	CMOS	1/1.7"	4.5μm	Global	1624×1240	60fps	GigE	√	
MV-CA020-10GC *	IMX430	CMOS	1/1.7"	4.5μm	Global	1624×1240	60fps	GigE		√
MV-CA020-20GM	PYTHON2000	CMOS	2/3"	4.8μm	Global	1920×1200	54fps	GigE	√	
MV-CA020-20GC	PYTHON2000	CMOS	2/3"	4.8μm	Global	1920×1200	54fps	GigE		√
MV-CA023-10GM	IMX249	CMOS	1/1.2"	5.86μm	Global	1920×1200	41fps	GigE	√	
MV-CA023-10GC	IMX249	CMOS	1/1.2"	5.86μm	Global	1920×1200	41fps	GigE		√
MV-CA032-10GM	IMX265	CMOS	1/1.8"	3.45μm	Global	2048×1536	37.5fps	GigE	√	
MV-CA032-10GC	IMX265	CMOS	1/1.8"	3.45μm	Global	2048×1536	37.5fps	GigE		√
MV-CA050-10GM	IMX264	CMOS	2/3"	3.45μm	Global	2448×2048	23.3fps	GigE	√	
MV-CA050-10GC	IMX264	CMOS	2/3"	3.45μm	Global	2448×2048	23.3fps	GigE		√
MV-CA050-20GM	PYTHON5000	CMOS	1"	4.8μm	Global	2592×2048	22fps	GigE	√	
MV-CA050-20GC	PYTHON5000	CMOS	1"	4.8μm	Global	2592×2048	22fps	GigE		√
MV-CA050-20GN	PYTHON5000	CMOS	1"	4.8μm	Global	2592×2048	22fps	GigE	√	
MV-CA060-11GM	IMX178	CMOS	1/1.8"	2.4μm	Rolling	3072×2048	17fps	GigE	√	
MV-CA060-10GC	IMX178	CMOS	1/1.8"	2.4μm	Rolling	3072×2048	17fps	GigE		√

Note: N= Infrared enhancement model

Parameter \ Model	MV-CA003-20GM/C	MV-CA003-50GM	MV-CA004-10GM/C
Exposure Range	M: 49μs~10sec C: 40μs~10sec	20μs~1sec	1us~1sec
Dynamic Range	59dB	52dB	74dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p	Mono8/10/10p/12/12p Bayer RG 8/10/10p/12/12p
GPIO	6-pin Hirose connector provides power supply and I/O,including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1		
Power Consumption	<2.6W@12VDC	<3.6W@12VDC	<3.1W@12VDC
Power Supply	Power supply voltage 5~15V, PoE supported	Power supply voltage 5~15V, PoE supported	Power supply voltage 9~24V, PoE supported
Dimension	29mm*29mm*42mm		
Weight	<68g		
Lens Mount	C-mount		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation		

Parameter \ Model	MV-CA005-20GM/C	MV-CA013-20GM/C/N	MV-CA013-70GM
Exposure Range	42μs~10sec	M/N: 38μs~10sec C: 62μs~10sec	20μs~1sec
Dynamic Range	59dB	59.6dB	73dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p
GPIO	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1		
Power Consumption	<3.0W@12VDC	<2.7W@12VDC	<3.72W@12VDC
Power Supply	Power supply voltage 5~15V, PoE supported		
Dimension	29mm*29mm*42mm	29mm*29mm*42mm	44mm*38.2mm*59.8mm
Weight	<68g	<68g	<140g
Lens Mount	C-mount		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation		

Notice: * will be released soon.

Parameter \ Model	MV-CA016-10GM/C	MV-CA020-10GM/C *	MV-CA020-20GM/C	MV-CA023-10GM/C
Exposure Range	1μs~10sec	1μs~10sec	59μs~10sec	34μs~10sec
Dynamic Range	71.4dB	72dB	57.9dB	70dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer BG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer BG 8/10/10p/12/12p
GPIO	6-pin Hirose connector provides power supply and I/, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<3W@12VDC	M: <3.27W@12VDC C: <3.6W@12VDC	<2.9W@12VDC	M: <2.9W@12VDC C: <3.1W@12VDC
Power Supply	Power supply voltage 9~24 V, support PoE		Power supply voltage 5~15 V, support PoE	
Dimension	29mm*29mm*42mm			
Weight	<68g			
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

Parameter \ Model	MV-CA032-10GM/C	MV-CA050-10GM/C	MV-CA050-20GM/C/N	MV-CA060-10GC MV-CA060-11GM
Exposure Range	1μs~10sec	1μs~10sec	59μs~10sec	34μs~10sec
Dynamic Range	71.4dB	72dB	57.9dB	70dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer BG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer BG 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	M: <3.2W@12VDC C: <3.5W@12VDC	M: <3.2W@12VDC C: <3.1W@12VDC	<3.3W@12VDC	M: <2.5W@12VDC C: <3.5W@12VDC
Power Supply	Power supply voltage 9~24 V, support PoE			
Dimension	29mm*29mm*42mm			
Weight	<68g			
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

29*29*42 structure

44*38.2*59.8 structure

CA Series USB3.0 Area Scan Camera

USB3 VISION

Key Features

- Support automatic or manual adjustment of gain, exposure time, white balance, gamma correction, LUT, etc.
- Support HDR polling, to ensure different exposure time and gain cyclical adjustment under different light source
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI, to improve frame rate by reducing the resolution, and support mirror output
- Support Binning modes, which could improve camera sensitivity
- Compatible with USB3.0 Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS certification

Specifications

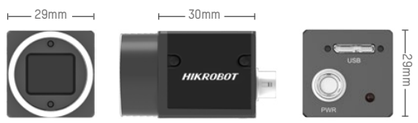
Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CA003-21UM	PYTHON300	CMOS	1/4"	4.8μm	Global	640×480	814fps	USB3.0	√	
MV-CA003-21UC	PYTHON300	CMOS	1/4"	4.8μm	Global	640×480	814fps	USB3.0		√
MV-CA004-10UM	IMX287	CMOS	1/2.9"	6.9μm	Global	720×540	523.5fps	USB3.0	√	
MV-CA004-10UC	IMX287	CMOS	1/2.9"	6.9μm	Global	720×540	523.5fps	USB3.0		√
MV-CA013-21UM	PYTHON1300	CMOS	1/2"	4.8μm	Global	1280×1024	170fps	USB3.0	√	
MV-CA013-21UC	PYTHON1300	CMOS	1/2"	4.8μm	Global	1280×1024	90fps	USB3.0		√
MV-CA016-10UM	IMX273	CMOS	1/2.9"	3.45μm	Global	1440×1080	166fps	USB3.0	√	
MV-CA016-10UC	IMX273	CMOS	1/2.9"	3.45μm	Global	1440×1080	166fps	USB3.0		√
MV-CA020-10UM *	IMX430	CMOS	1/1.7"	4.5μm	Global	1624×1240	89fps	USB3.0	√	
MV-CA020-10UC *	IMX430	CMOS	1/1.7"	4.5μm	Global	1624×1240	89fps	USB3.0		√
MV-CA023-10UM	IMX249	CMOS	1/1.2"	5.86μm	Global	1920×1200	41fps	USB3.0	√	
MV-CA023-10UC	IMX249	CMOS	1/1.2"	5.86μm	Global	1920×1200	40fps	USB3.0		√
MV-CA050-11UM	IMX264	CMOS	2/3"	3.45μm	Global	2448×2048	35fps	USB3.0	√	
MV-CA050-11UC	IMX264	CMOS	2/3"	3.45μm	Global	2448×2048	35fps	USB3.0		√
MV-CA050-20UM	PYTHON5000	CMOS	1"	4.8μm	Global	2592×2048	60fps	USB3.0	√	
MV-CA050-20UC	PYTHON5000	CMOS	1"	4.8μm	Global	2592×2048	30fps	USB3.0		√

Notice: * will be released soon.

Parameter \ Model	MV-CA003-21UM/C	MV-CA004-10UM/C	MV-CA013-21UM/C	MV-CA016-10UM/C
Exposure Range	40μs~10sec	1μs~10sec	M: 40μs~10sec C: 65μs~10sec	16μs~10sec
Dynamic Range	60dB	60dB	71dB	71dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p			
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<3.3W@12VDC	<3.0W@12VDC	<2.8W@12VDC	<2.8W@12VDC
Power Supply	Power supply voltage 5~15V, power over USB3.0 supported			
Dimension	29mm*29mm*30mm			
Weight	<56g			
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~ 50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

Parameter \ Model	MV-CA020-10UM/C *	MV-CA023-10UM/C	MV-CA050-11UM/C	MV-CA050-20UM/C
Exposure Range	1μs~10sec	34μs~10sec	50μs~10sec	59μs~10sec
Dynamic Range	72dB	70dB	72dB	57.5dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer GB 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer BG 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1			
Power Consumption	<3.2W@5VDC	<2.52W@5VDC	<2.8W@5VDC	<3.5W@5VDC
Power Supply	Power supply voltage 5~15V, power over USB3.0 supported			
Dimension	29mm*29mm*30mm			
Weight	<56g			
Lens Mount	C-mount			
Temperature/Humidity	Working temperature 0~ 50°C, storage temperature -30~70°C, 20%~80%RH without condensation			

Notice: * will be released soon.



29*29*30 structure

29*29*30 structure

CH Series GigE Area Scan Camera

GigE VISION

Key Features

- Support adjustment of gain, exposure time, white balance, gamma correction, LUT, Binning, etc.
- Support HDR polling, to ensure the periodic adjustment of exposure time and gain under different lighting
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI to improve frame rate by reducing resolution, and support mirror output
- 128 MB on-board buffer, which enables to cache multiple pictures for data transmission or image retransmission in Burst mode
- Compatible with GigE Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS, KC certification

Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CH080-60GM	KAI-08051	CCD	4/3"	5.5μm	Global	3296×2472	14fps	GigE	√	
MV-CH080-60GC	KAI-08051	CCD	4/3"	5.5μm	Global	3296×2472	14fps	GigE		√
MV-CH089-10GM	IMX267	CMOS	1"	3.45μm	Global	4096×2160	13fps	GigE	√	
MV-CH089-10GC	IMX267	CMOS	1"	3.45μm	Global	4096×2160	13fps	GigE		√
MV-CH120-10GM	IMX304	CMOS	1.1"	3.45μm	Global	4096×3000	9.4fps	GigE	√	
MV-CH120-10GC	IMX304	CMOS	1.1"	3.45μm	Global	4096×3000	9.4fps	GigE		√
MV-CH120-11GM *	IMX304	CMOS	1.1"	3.45μm	Global	4096×3000	9.4fps	GigE	√	
MV-CH250-21GM	PYTHON25K	CMOS	23mm×23mm	4.5μm	Global	5120×5120	4.6fps	GigE	√	
MV-CH250-21GC	PYTHON25K	CMOS	23mm×23mm	4.5μm	Global	5120×5120	4.6fps	GigE		√
MV-CH250-90GM	GMAX0505	CMOS	1.1"	2.5μm	Global	5120×5120	4.5fps	GigE	√	
MV-CH290-60GM	KAI-29050	CCD	36mm×24mm	5.5μm	Global	6576×4384	4fps	GigE	√	
MV-CH290-61GM	KAI-29050	CCD	36mm×24mm	5.5μm	Global	6576×4384	4fps	GigE	√	
MV-CH290-60GC	KAI-29050	CCD	36mm×24mm	5.5μm	Global	6576×4384	4fps	GigE		√
MV-CH310-10GM *	IMX342	CMOS	APS-C	3.45μm	Global	6464×4852	3.9fps	GigE	√	

Notice: * will be released soon.

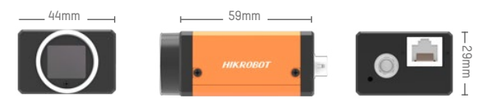
Parameter \ Model	MV-CH080-60GM/C	MV-CH089-10GM/C	MV-CH120-10GM/C
Exposure Range	50μs~1sec	Ultra-short exposure mode: 1μs~14μs Normal exposure mode: 15μs~10sec	Ultra-short exposure mode: 1μs~14μs Normal exposure mode: 15μs~10sec
Dynamic Range	66dB	72.5dB	72.2dB
Pixel Format	Mono 8/10/10p/12/12p Bayer GR 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p
I/O	12-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1, RS232 x1	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1
Power Consumption	<12W@12VDC	M: <3.5W@12VDC C: <3.8W@12VDC	M: <4.3W@12VDC C: <4.6W@12VDC
Power Supply	Power supply 12V 2A by switching power source or an adapter	Power supply voltage 5~15V, support PoE	Power supply voltage 5~15V, support PoE
Dimension	M58-mount, without fan: 74mm*74mm*47.5mm M58-mount, with fan: 74mm*74mm*75.3mm	29mm*44mm*59mm	29mm*44mm*59mm
Weight	M58-mount, without fan: <410g M58-mount, with fan: <450g	<100g	<100g
Lens Mount	M58*0.75, optical back focal length 11.48mm, Supporting C-mount or F-mount via lens adapter	C-mount	C-mount
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation		

Parameter \ Model	MV-CH120-11GM *	MV-CH250-21GM/C	MV-CH250-90GM
Exposure Range	Ultra-short exposure mode: 1μs~14μs Normal exposure mode: 15μs~10sec	80μs~10sec	12μs~10sec
Dynamic Range	72.2dB	58dB	63dB
Pixel Format	Mono 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1	12-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1, RS232 x1	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x3
Power Consumption	<4.22W@12VDC	M: <6.7W@12VDC C: <7.8W@12VDC	<3.6W@12VDC
Power Supply	Power supply voltage 5~15V, support PoE	Power supply voltage 9~13V	Power supply voltage 5~15V, support PoE
Dimension	29mm*29mm*42mm	M58-mount, with fan: 74mm*74mm*72.7mm F-mount, with fan: 74mm*74mm*78.7mm	29mm*44mm*59mm
Weight	<68g	M58-mount, with fan: <450g F-mount, with fan: <600g	<100g
Lens Mount	C-mount	M58*0.75, optical back focal length 11.48mm or F-mount, optical back focal length 46.5mm	C-mount
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation		

Notice: * will be released soon.

Parameter \ Model	MV-CH290-60GM/C MV-CH290-61GM	MV-CH310-10GM *
Exposure Range	MV-CH290-60GM/C: 110μs~5sec MV-CH290-61GM: 110μs~1sec	Ultra-short exposure mode: 3μs~33μs Normal exposure mode: 36μs~2sec
Dynamic Range	64dB	73dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p
I/O	12-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1, RS232 x1	
Power Consumption	<12W@12VDC	<9W@12VDC
Power Supply	Power supply 12V 2A by switching power source or an adapter	Power supply voltage 9~26V
Dimension	M58-mount, without fan: 74mm*74mm*47.5mm M58-mount, with fan: 74mm*74mm*75.3mm F-mount, without: 74mm*74mm*53.9mm F-mount, with fan: 74mm*74mm*81.7mm	74mm*74mm*80.1mm
Weight	M58-mount, without fan: <410g M58-mount, with fan: <450g F-mount, without fan: <560g F-mount, with fan: <600g	<600g
Lens Mount	M58*0.75, optical back focal length or F-mount,optical back focal length 46.5mm	F-mount,optical back focal length 46.5mm
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation

Notice: * will be released soon.



44*29*59 structure

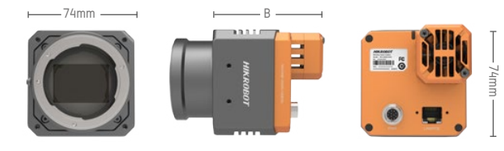
29*29*42 structure

74*74*47.5 structure

74*74*A structure

Model	A(mm)
MV-CH080-60GM/C	75.3
MV-CH250-21GM/C	72.7
MV-CH290-60GM/C MV-CH290-61GM	75.3

74*74*53.9 structure



74*74*B structure

Model	B(mm)
MV-CH250-21GM/C	78.7
MV-CH290-60GM/C MV-CH290-61GM	81.7
MV-CH310-10GM	80.1

CH Series USB3.0 Area Scan Camera

Key Features

- Support automatic or manual adjustment of gain, exposure time, white balance, gamma correction, LUT, etc.
- Support HDR polling, to ensure different exposure time and gain cyclical adjustment under different light source
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI, to improve frame rate by reducing the resolution, and support mirror output
- Support Binning modes, which could improve camera sensitivity
- Compatible with USB3.0 Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS certification

Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CH050-10UM	IMX250	CMOS	2/3"	3.45μm	Global	2448×2048	74fps	USB3.0	√	
MV-CH050-10UC	IMX250	CMOS	2/3"	3.45μm	Global	2448×2048	74fps	USB3.0		√
MV-CH050-10UP *	IMX250	CMOS	2/3"	3.45μm	Global	2448×2048	74fps	USB3.0	√	
MV-CH089-10UM	IMX267	CMOS	1"	3.45μm	Global	4096×2160	32fps	USB3.0	√	
MV-CH089-10UC	IMX267	CMOS	1"	3.45μm	Global	4096×2160	32fps	USB3.0		√
MV-CH120-10UM	IMX304	CMOS	1.1"	3.45μm	Global	4096×3000	23fps	USB3.0	√	
MV-CH120-10UC	IMX304	CMOS	1.1"	3.45μm	Global	4096×3000	23fps	USB3.0		√
MV-CH120-20UM *	XGS12000	CMOS	1"	3.2μm	Global	4096×3072	30fps	USB3.0	√	
MV-CH120-20UC *	XGS12000	CMOS	1"	3.2μm	Global	4096×3072	30fps	USB3.0		√

Notice:* will be released soon.

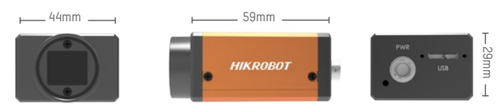
Parameter \ Model	MV-CH050-10UM/C	MV-CH050-10UP*	MV-CH089-10UM/C
Exposure Range	15μs~10sec	15μs~10sec	50μs~10sec
Dynamic Range	75.4dB	75.4dB	72.5dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p
GPIO	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1		
Power Consumption	<3.2W@12VDC	<3.5W@12VDC	<3.27W@12VDC
Power Supply	Power supply voltage 9~15V, power over USB3.0 supported	Power supply voltage 5~15V, power over USB3.0 supported	Power supply voltage 5~15V, power over USB3.0 supported
Dimension	29mm*29mm*30mm	29mm*29mm*30mm	44mm*29mm*59mm
Weight	<56g	<56g	<100g
Lens Mount	C-mount		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation		

Notice:* will be released soon.

Parameter \ Model	MV-CH120-10UM/C	MV-CH120-20UM/C *
Exposure Range	50μs~10sec	10μs~10sec
Dynamic Range	65dB	67dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	
GPIO	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1	
Power Consumption	<3.5W@12VDC	<2.3W@5VDC
Power Supply	Power supply voltage 5~15V, power over USB3.0 supported	Power supply voltage 9~24V, power over USB3.0
Dimension	44mm*29mm*59mm	29mm*29mm*30mm
Weight	<100g	<56g
Lens Mount	C-mount	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation	

Notice:* will be released soon.

29*29*30 structure



44*29*59 structure

CH Series 10 GigE Area Scan Camera

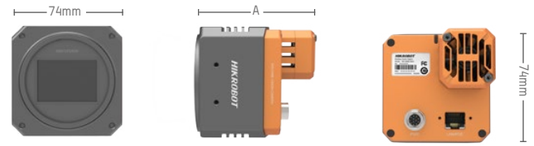
Key Features

- Support adjustment of gain, exposure time, white balance, gamma correction, LUT, Binning, etc.
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI, to improve frame rate by reducing resolution, and support mirror output
- Support PRNU and FPN correction
- High cost-performance ratio solution for applications that require high speed transmission
- Compatible with GigE Vision protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS, KC certification

Specifications

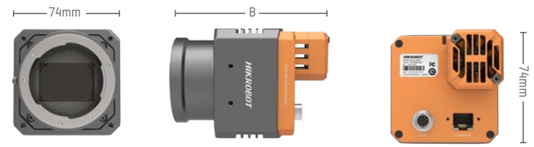
Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CH120-10TM	IMX253	CMOS	1.1"	3.45μm	Global	4096×3000	68fps	10 GigE	√	
MV-CH250-21TM	PYTHON25K	CMOS	23mm×23mm	4.5μm	Global	5120×5120	40fps	10 GigE	√	
MV-CH250-20TC	PYTHON25K	CMOS	23mm×23mm	4.5μm	Global	5120×5120	40fps	10 GigE		√

Parameter \ Model	MV-CH120-10TM	MV-CH250-21TM MV-CH250-20TC
Exposure Range	2μs~10sec	45μs~10sec
Dynamic Range	71.6dB	58dB
Pixel Format	Mono 8/10/10p/12/12p	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p
I/O	12-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1, RS232 x1, RS485 x1	
Power Consumption	<11W@12VDC	<14W@12VDC
Power Supply	Power supply 9~24VDC	Power supply 9~16VDC
Dimension	M58-mount, with fan: < 74mm*74mm*72.4mm F-mount, with fan: < 74mm*74mm*78.4mm	M58-mount, with fan: < 74mm*74mm*72.7mm F-mount, with fan: < 74mm*74mm*78.7mm
Weight	M58-mount, with fan: <450g F-mount, with fan: <600g	
Lens Mount	M58*0.75, optical back focal length 11.48mm or F-mount, optical back focal length 46.5mm	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation	



74*74*A structure

Model	A(mm)
MV-CH120-10TM	72.4
MV-CH250-21TM/20TC	72.7



74*74*B structure

Model	B(mm)
MV-CH120-10TM	78.4
MV-CH250-21TM/20TC	78.7

CH Series CameraLink Area Scan Camera

Key Features

- Support automatic or manual adjustment of gain, exposure time, white balance, gamma correction, LUT, etc.
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI, to improve frame rate by reducing the resolution, and support mirror output
- Support PRNU and FPN
- Support Base and Medium mode
- Compatible with CameraLink protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS certification

Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CH050-10CM	IMX250	CMOS	2/3"	3.45μm	Global	2432×2048	140fps	CameraLink	√	
MV-CH050-10CC	IMX250	CMOS	2/3"	3.45μm	Global	2432×2048	140fps	CameraLink		√
MV-CH120-10CM *	IMX253	CMOS	1/1"	3.45μm	Global	4112×3008	68fps	CameraLink	√	
MV-CH120-10CC *	IMX253	CMOS	1/1"	3.45μm	Global	4112×3008	68fps	CameraLink		√
MV-CH250-20CM *	PYTHON 25K	CMOS	23mm×23mm	4.5μm	Global	5120×5120	32fps	CameraLink	√	
MV-CH290-60CM *	KAI-29050	CCD	36mm×24mm	5.5μm	Global	6576×4384	4.5fps	CameraLink	√	
MV-CH290-61CM *	KAI-29050	CCD	36mm×24mm	5.5μm	Global	6576×4384	4.5fps	CameraLink	√	

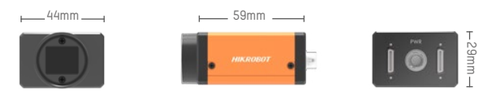
Notice:* will be released soon.

Parameter \ Model	MV-CH050-10CM/C	MV-CH120-10CM/C *
Exposure Range	15μs~10sec	
Dynamic Range	75.4dB	
Pixel Format	Mono 8/10/12 Bayer RG 8/10/12	
I/O	6-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1	
Power Consumption	<3.5W@12VDC	<4.5W@12VDC
Power Supply	Power supply voltage 9~24VDC	
Dimension	44mm*29mm*59mm	
Weight	<100g	
Lens Mount	C-mount	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without	

Notice:* will be released soon.

Parameter \ Model	MV-CH250-20CM *	MV-CH290-60CM* MV-CH290-61CM *
Exposure Range	17μs~10sec	103μs~2sec
Dynamic Range	59dB	64dB
Pixel Format	Mono 8/10/12	Mono 8/10/12
I/O	12-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, bi-directional non-isolated I/O x1, RS232 x1	12-pin Hirose connector provides power supply and I/O, including opto-isolated input x1, opto-isolated output x1, RS232 x1
Power Consumption	<10W@12VDC	<11W@12VDC
Power Supply	Power supply 12V 2A by switching power source or an adapter	
Dimension	M58-mount with fan: 70mm*70mm*74.1mm F-mount with fan: 70mm*70mm*80.5mm	M58-mount, with fan:74mm*74mm*74.1mm F-mount, with fan:74mm*74mm*80.5mm
Weight	M58-mount with fan: <450g F-mount with fan: <600g	
Lens Mount	M58*0.75, optical back focal length 11.48mm F-mount, optical back focal length 46.5mm	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	

Notice:* will be released soon.



44*29*59 structure

74*74*74.1 structure

74*74*80.5 structure

CH Series CoaXPress Area Scan Camera

Key Features

- Support adjustment of gain, exposure time, white balance, gamma correction, LUT, Binning, etc.
- Support hardware trigger, software trigger and free run mode
- Support user defined ROI to improve frame rate by reducing resolution, and support mirror output
- Support PRNU and FPN correction
- Four channel CXP-6 output
- Compatible with CoaXPress protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS, KC certification

Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CH250-90XM *	GMAX0505	CMOS	1.1"	2.5μm	Global	5120×5120	150fps	CoaXPress	√	
MV-CH310-10XM *	IMX342	CMOS	APS-C	3.45μm	Global	6464×4852	17.9fps	CoaXPress	√	
MV-CH430-90XM	GMAX0806	CMOS	22.16mm×15.22mm	2.8μm	Global	7904×5432	16.4fps	CoaXPress	√	
MV-CH650-90XM *	GMAX3265	CMOS	29.9mm×22.4mm	3.2μm	Global	9344×7000	30fps	CoaXPress	√	
MV-CH1510-10XM *	IMX411	CMOS	66.7mm	3.76μm	Rolling	14208×10640	6.2fps	CoaXPress	√	

Notice:* will be released soon.

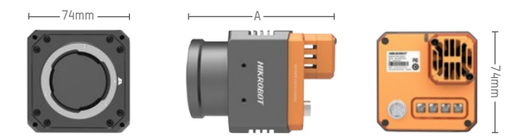
Parameter \ Model	MV-CH250-90XM *	MV-CH310-10XM *
Exposure Range	12μs-10sec	Ultra-short exposure mode: 3μs~33μs ADC8bit mode: 47μs~2sec ADC12bit mode: 36μs~2sec
Dynamic Range	63dB	73dB
Pixel Format	Mono 8/10/12	Mono 8/10/12
GPIO	12 pin IO, including isolated input x1, isolated output x1, configurable I/O x1, RS232 x1	
Power Consumption	<7.2W@12VDC	<9.1W@12VDC
Power Supply	Power supply voltage 9~24VDC	Power supply voltage 9~24VDC
Dimension	74mm*74mm*76.8mm	74mm*74mm*75.6mm
Weight	<650g	<650g
Lens Mount	F-mount, optical back focal length 46.5mm	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	

Notice:* will be released soon.

Parameter \ Model	MV-CH250-90XM	MV-CH650-90XM *	MV-CH1510-10XM *
Exposure Range	12μs~2sec	25μs~10sec	15μs~10sec
Dynamic Range	69dB	70dB	90dB
Pixel Format	Mono 8/10/12		
GPIO	12 pin IO, including isolated input x1, isolated output x1, configurable I/O x1, RS232 x1		
Power Consumption	<7.2W@12VDC	<14.5W@12VDC	Standard model: <17W@24VDC TEC model: <64.8W@24VDC (cooling mode) ; <18W@24VDC (normal mode)
Power Supply	Power supply voltage 9~24VDC	Power supply voltage 9~26VDC	Standard model: Power supply voltage 12~24VDC TEC model: Power supply voltage 24VDC
Dimension	M58-mount, with fan, 74mm*74mm*72.8mm F-mount, with fan, 74mm*74mm*76.8mm	74mm*74mm*76.8mm	Standard model: 100mm×100mm×81mm TEC model: 120mm*120mm*91.2mm
Weight	M58-mount, with fan: <540g F-mount, with fan: <650g	<650g	Standard model: <1kg TEC model: <2.9kg
Lens Mount	M58*0.75, optical back focal length 11.48mm or F-mount, optical back focal length 46.5mm	F-mount, optical back focal length 46.5mm	M72*0.75, optical back focal length 19.55mm
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation		

Notice:* will be released soon.

74*74*72.8 structure



74*74*A structure

Model	A(mm)
MV-CH250-90XM	76.8
MV-CH310-10XM	75.6
MV-CH430-90XM	76.8
MV-CH650-90XM	76.8

100*100*81 structure

120*120*91.2 structure

Line Scan Camera

CL Series Line Scan Camera

Key Features

- Support automatic or manual adjustment of gain, exposure time, etc.
- Support user defined ROI
- Support multiple trigger modes, can run under hardware trigger, software trigger and free run mode
- Support PRNU and FPN
- Multiple ISP algorithms, ensuring the optimal image quality
- Compatible with GigE Vision, CameraLink protocol and GenICam standard and can be seamlessly connected to third-party software platforms
- CE, FCC, RoHS certification

Specifications

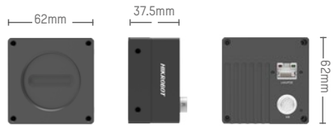
Model	Sensor Type	Pixel Size	Resolution	Line Rate	Data Interface	Mono	Color
MV-CL021-40GM	CMOS	7μm	2048*1	51kHz	GigE	√	
MV-CL020-41GC	CMOS	7μm	2048*2	26kHz	GigE		√
MV-CL041-70GM	CMOS	5μm	4096*1	29kHz	GigE	√	
MV-CL042-70GC	CMOS	5μm	4096*2	14kHz	GigE		√
MV-CL041-70CM	CMOS	5μm	4096*1	100kHz	CameraLink	√	
MV-CL042-70CC	CMOS	5μm	4096*2	40kHz	CameraLink		√
MV-CL082-70CM	CMOS	5μm	8192*2	40kHz	CameraLink	√	
MV-CL084-90CM	CMOS	5μm	8192*4	100kHz	CameraLink	√	
MV-CL086-90CC *	CMOS	5μm	8192*6	34kHz	CameraLink		√

Notice:* will be released soon.

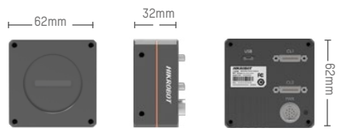
Parameter \ Model	MV-CL021-40GM MV-CL020-41GC	MV-CL041-70GM MV-CL042-70GC
Exposure Range	2μs~10ms	
Dynamic Range	60dB	M:70dB C:56dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono8/10/12 Bayer GR 8/10/12
Data Interface	GigE, with PoE support	
GPIO	12-pin Hirose connector provides power supply and I/O, including differential inputs x2, differential output x2, single-end input x1	12-pin Hirose connector provides power supply and I/O, including differential input x2, differential output x2
Power Consumption	<4.0W	M: <4.2W C: <5.3W
Power Supply	5~15VDC	12-24VDC
Dimension	62mm*62mm*37.5mm	62mm*62mm*38mm
Weight	<170g	
Lens Mount	M42*1.0, optical back focal length 12mm, supporting C-mount, F-mount and other mounts via lens adapter	
Temperature	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation	
Humidity	20%~80%RH without condensation	

Parameter \ Model	MV-CL041-70CM MV-CL042-70CC	MV-CL082-70CM	MV-CL084-90CM MV-CL086-90CC *
Exposure Range	2μs-10ms	1.5μs-6.6ms	3μs-10ms
Dynamic Range	M:67.3dB C:56dB	67.6dB	62dB
Pixel Format	Mono 8/10/12 RGB 8	Mono 8/10/12	Mono 8/10/12 RGB 8
Data Interface	CameraLink		
GPIO	12-pin Hirose connector provides power supply and I/O, including differential input x2, differential output x2 CameraLink connector provides I/O	CameraLink connector provides I/O	12-pin Hirose connector provides power supply and I/O, including differential input x2, differential output x2 CameraLink connector provides I/O
Power Consumption	M: <3.5W C: <4.0W	<7.5W	< 8.0W
Power Supply	12-24VDC		
Dimension	62mm*62mm*32mm	125mm*60mm*28.5mm	150mm*80mm*23.8mm
Weight	<150g	<360g	<400g
Lens Mount	M42*1.0, optical back focal length 12mm, supporting C-mount, F-mount and other mounts via lens adapter	φ42, M2.5*3, optical back focal length 10.3mm, fixed by screw, supporting F-mount via lens adapter	M72*0.75, optical back focal length 10.1mm, supporting F-mount via lens adapter
Temperature	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation	Working temperature 0~55°C, storage temperature -30~70°C, 20%~80%RH without condensation	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation
Humidity	20%~80%RH without condensation		

Notice:* will be released soon.



62*62*37.5 structure



62*62*32 structure

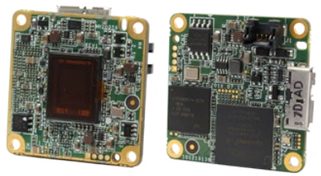
150*80*23.8 structure

Board Level Camera

CB Series Board Level Camera

Key Features

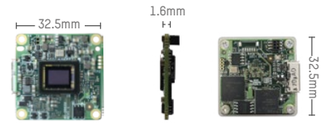
- Single board design, flexible configuration
- Support automatic or manual adjustment of gain, exposure time, white balance, gamma correction, LUT, Binning, etc.
- Optional bare board, C-mount, M12 lens interface
- USB3.0 interface, transmission bandwidth up to 5Gbps, support USB interface power supply
- Compatible with USB3.0 Vision protocol and GenICam standard, seamless connection to third-party software platforms
- CE, FCC, RoHS certification



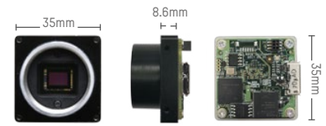
Specifications

Model	Sensor			Pixel Size	Shutter Mode	Resolution	Frame Rate	Data Interface	Mono	Color
	Model	Type	Size							
MV-CB013-20UM-B/C/S	PYTHON 1300	CMOS	1/2"	4.8μm	Global	1280*1024	170fps	USB3.0	√	
MV-CB013-20UC-B/C/S	PYTHON 1300	CMOS	1/2"	4.8μm	Global	1280*1024	170fps	USB3.0		√
MV-CB060-10UM-B/C/S	IMX178	CMOS	1/1.8"	2.4μm	Rolling	3072*2048	17fps	USB3.0	√	
MV-CB060-10UC-B/C/S	IMX178	CMOS	1/1.8"	2.4μm	Rolling	3072*2048	29fps	USB3.0		√
MV-CB120-10UM-B/C/S	IMX226	CMOS	1/1.7"	1.85μm	Rolling	4024*3036	28fps	USB3.0	√	
MV-CB120-10UC-B/C/S	IMX226	CMOS	1/1.7"	1.85μm	Rolling	4024*3036	21fps	USB3.0		√

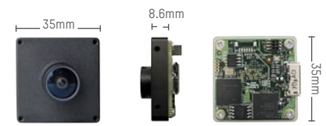
Parameter \ Model	MV-CB013-20UM-B/C/S MV-CB013-20UC-B/C/S	MV-CB060-10UM-B/C/S MV-CB060-10UC-B/C/S	MV-CB120-10UM-B/C/S MV-CB120-10UC-B/C/S
Exposure Time	M:40μs~10sec	M:27μs~2.5sec	M:11μs~2sec
	C:65μs~10sec	C:16μs~2.5sec	C:23μs~2sec
Dynamic Range	59.6dB	71.3dB	70.5dB
Pixel Format	Mono 8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono8/10/10p/12/12p Bayer RG 8/10/10p/12/12p	Mono8/10/10p/12/12p Bayer RG 8/10/10p/12/12p
GPIO	bi-directional configurable I/O x2		
Power Consumption	<2.28W@5VDC	<2.0W@5VDC	<2.45W@5VDC
Power Supply	Power over USB3.0 supported		
Dimension	B: 32.5mm*32.5mm*1.6mm		
	C: 35mm*35mm*8.6mm		
	S: 35mm*35mm*8.6mm		
Weight	B:<10g		
	C:<30g		
	S:<30g		
Lens Mount	B: NA		
	C: C-mount		
	S: M12-mount		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~80%RH without condensation		



Board structure



C-mount structure



M12-mount structure

Smart Camera

SC2000 Series Vision Sensor

Key Features

- Embedded hardware platform for high-speed image data acquisition
- Built-in high precision location and measurement algorithms realize the inspection of absence/presence, front/back, position, size, etc.
- Rich IO interfaces provide access for multiple input and output signals
- Multiple LED indicators indicating realtime status to assist the configuration and debugging on site
- Optimized light cup ensures brightness uniformity
- Support multiple communication protocols: Fast Ethernet, serial port, TCP, UDP, ftp, etc.
- CE, FCC, KC certification

Specifications

Model / Parameter	MV-SC2004M	MV-SC2016M *
Function Modules	Built-in function modules: Location, Inspection, Measurement, etc.	
Vision Tools	Pattern matching, Blob, Position correction, Find line, Find circle, Interval measurement, Brightness measurement, L2L, Contrast measurement	
Software	Web-based client software	
Pixel Size	6.9 μm×6.9 μm	3.45μm×3.45μm
Sensor Size	1/2.9"	1/2.9"
Resolution	720×540	1440×1080
Frame Rate	100fps	60fps
Data Interface	Fast Ethernet(100Mbit/s)	
Communication Protocols	RS232, TCP, UDP, FTP	
I/O	2 non-isolated input, 3 non-isolated output and 3 bidirectional I/O (NPN/PNP configurable output); Support external trigger via top physical tirgger button	
Power Supply	12~24VDC	
Power Waste	< 5.4W@12VDC	< 7W@12VDC
Focal Length	6mm/12.4mm/14.8mm	
Lens Mount	M12-Mount	
Lens Cover	Transparent lens cover (polarization lens cover available for option)	
Lighting	Wide Angle: White/Red/Blue Spotlight: White/Red/Blue	
Dimension	65.2mm*65.2mm*42mm	
Weight	<240g	
IP Level	IP67 (with lens cover appropriately mounted)	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	

Notice:* will be released soon.

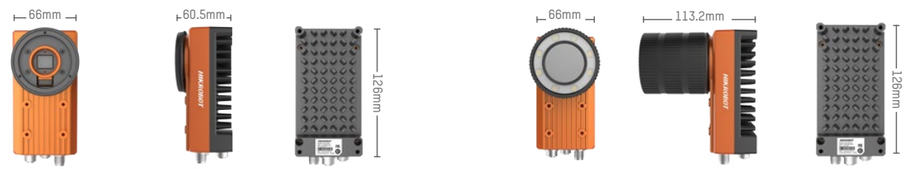
Open Platform Smart Camera

Key Features

- Excellent sensor platform for high-speed image data acquisition
- Open platform for users to develop their own application based systems
- Rich IO interfaces provide access for multiple input and output signals
- Provide multiple trigger modes adapted to diversified application scenarios
- Multiple LED indicators indicating realtime status to assist the configuration and debugging on site
- Optional interface expansion module including USB interface and VGA output
- IP67 protection level, meeting the requirement of strict industrial environment
- CE, FCC, RoHS certification

Model / Parameter	MV-SI600-38GM MV-SI600-38GC	MV-SI610-08GM	MV-SI620-38GM MV-SI620-38GC
Sensor	PYTHON1300	PYTHON2000	PYTHON5000
Pixel Size	4.8μm×4.8μm		
Sensor Size	1/2"	2/3"	1"
Resolution	1280×1024	1920×1200	2592×2048
Frame rate	80fps	50fps	30fps
Pixel Format	MV-SI6*0-**GM: Mono 8 MV-SI6*0-*8GC: Mono 8,Bayer GB 8,RGB8		
Hardware Platform	Intel X86 win Intel E3845, 1.9GHz		
Memory	DDR3L Memory 4GB		
Storage	32GB SSD		
Data Interface	Gigabit Ethernet(1000Mbit/s)		
I/O	12-pin M12 connector provides power and I/O, including 3 opto-siolated input and 3 opto-isolated output		
Expansion Interface	17-pin expansion interface for optional interface expansion module (VGA output x1, USB2.0 x3, full-duplex RS232 x1, half-duplex RS485 x1, GPI x7, GPO x7, lighting power supply x1)		
Power Supply	9~24VDC		
Power Consumption	<24W@24VDC	<24W@24VDC	<34W@24VDC
Lens Mount	C-mount		
Lighting/Lens Cover	MV-SI6*0-*8GM/C models include integrated light and lens cover		
Dimension	MV-SI6*0-*8GM/C: 126mm*66mm*113.2mm		
Weight	MV-SI6*0-*8GM/C: <750g		
IP Protection Level	IP67 (with lens cover appropriately mounted)		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation		

Model / Parameter	MV-SI630-08GM MV-SI630-08GC	MV-SI640-08GM
Sensor	IMX178	IMX267
Pixel Size	2.4μm×2.4μm	3.45μm×3.45μm
Sensor Size	1/1.8"	1"
Resolution	1280×1024	4096×2160
Frame rate	17fps	30fps
Pixel Format	MV-SI6*0-**GM: Mono 8 MV-SI6*0-*8GC: Mono 8,Bayer GB 8,RGB8	
Hardware Platform	Intel X86 win Intel E3845, 1.9GHz	
Memory	DDR3L Memory 4GB	
Storage	32GB SSD	
Data Interface	Gigabit Ethernet(1000Mbit/s)	
I/O	12-pin M12 connector provides power and I/O, including 3 opto-siolated input and 3 opto-isolated output	
Expansion Interface	17-pin expansion interface for optional interface expansion module (VGA output x1, USB2.0 x3, full-duplex RS232 x1, half-duplex RS485 x1, GPI x7, GPO x7, lighting power supply x1)	
Power Supply	9~24VDC	
Power Consumption	<34W@24VDC	<24W@24VDC
Lens Mount	C-mount	
Lighting/Lens Cover	MV-SI6*0-*8GM/C models include integrated light and lens cover	
Dimension	MV-SI6*0-*8GM/C: 126mm*66mm*113.2mm	
Weight	MV-SI6*0-*8GM/C: <750g	
IP Protection Level	IP67 (with lens cover appropriately mounted)	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	



Smart Code Reader

SI Series Smart Code Reader

Key Features

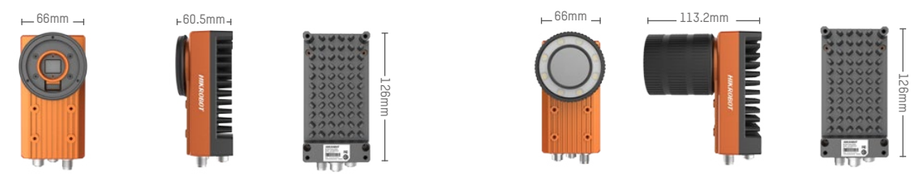
- Excellent sensor platform for high-speed image data acquisition
- Embedded code-reading algorithm efficiently reads multiple types of code
- Provide multiple trigger modes adapted to diversified application scenarios
- Various lighting options, including additional on-camera light or external extended light control
- Rich IO interfaces provide access for multiple input and output signals, support RS232 serial port transmission protocol
- Multiple LED indicators indicating realtime status to assist the configuration and debugging on site
- IP67 protection level, meeting the requirement of strict industrial environment
- CE, FCC, RoHS certification

Specifications

Parameter \ Model	MV-SI602-31GM	MV-SI612-01GM	MV-SI622-30GM MV-SI622-31GM
Symbologies	1D Codes: Code 39, Code 93, Code 128, CodaBar, EAN, ITF25, etc. 2D Codes: QR Code, Datamatrix, etc.		
Frame Rate	80fps	50fps	30fps
Reading Speed	90 codes/s	90 codes/s	90 codes/s
Pixel Size	4.8μm×4.8μm	4.8μm×4.8μm	4.8μm×4.8μm
Sensor Size	1/2"	2/3"	1"
Resolution	1280×1024	1920×1200	2592×2048
Communication Protocols	SmartSDK, TCP Client, Serial, FTP, HTTP, TCP Server		
Software	IDMVS		
Data Interface	Gigabit Ethernet (1000Mbit/s)		
I/O	12-pin M12 connector provides power and I/O, including 3 opto-siolated input, 3 opto-isolated output and 1 RS-232 serial port		
Power Supply	20~30VDC	20~30VDC	MV-SI622-30GM: 10~30VDC MV-SI622-31GM: 20~30VDC
Power Consumption	<24W@24VDC	<28W@24VDC	MV-SI622-30G: <15W@24VDC MV-SI622-31GM: <34W@24VDC
Lens Mount	C-mount		
Lighting	MV-SI6*2-*0GM models don't include integrated light or lens cover MV-SI6*2-*1GM models include integrated light and lens cover		
Dimension	MV-SI6*2-*0GM: 126mm*66mm*60.5mm MV-SI6*2-*1GM: 126mm*66mm*113.2mm		
Weight	MV-SI6*2-*0GM: <550g MV-SI6*2-*1GM: <750g		
IP Protection Level	IP67 (with lens cover appropriately mounted)		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation		

Parameter \ Model	MV-SI642-00GM	MV-SI662-00GM *
Symbologies	1D Codes: Code 39, Code 93, Code 128, CodaBar, EAN, ITF25, etc. 2D Codes: QR Code, Datamatrix, etc.	
Frame Rate	30fps	10fps
Reading Speed	60 codes/s	30 codes/s
Pixel Size	3.45μm×3.45μm	2.4μm×2.4μm
Sensor Size	1"	1"
Resolution	4096×2160	5472×3648
Communication Protocols	SmartSDK, TCP Client, Serial, FTP, HTTP, TCP Server	
Software	IDMVS	
Data Interface	Gigabit Ethernet (1000Mbit/s)	
I/O	12-pin M12 connector provides power and I/O, including 3 opto-siolated input, 3 opto-isolated output and 1 RS-232 serial port	
Power Supply	10~30VDC	10~30VDC
Power Consumption	<15W@24VDC	<15W@24VDC
Lens Mount	C-mount	
Lighting	MV-SI6*2-*0GM models don't include integrated light or lens cover MV-SI6*2-*1GM models include integrated light and lens cover	
Dimension	MV-SI6*2-*0GM: 126mm*66mm*60.5mm MV-SI6*2-*1GM: 126mm*66mm*113.2mm	
Weight	MV-SI6*2-*0GM: <550g MV-SI6*2-*1GM: <750g	
IP Protection Level	IP67 (with lens cover appropriately mounted)	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	

Notice:* will be released soon.



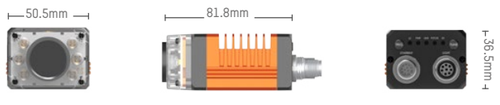
IM Series Smart Code Reader

Key Features

- Movidius VPU platform with the deep learning hardcore provides unprecedented high performance
- Embedded code reading algorithm for efficient reading of various types of code
- Robust algorithms easily deal with complex situations like reflection, stains, defect, low contrast, etc.
- Embedded aviation connectors, various I/O interface, can access multiple input signals and output signals
- Multiple LED indicators indicating realtime status to assist the configuration and debugging on site
- Optimized light cup ensures brightness uniformity
- IP65 protection level, meeting the requirement of strict industrial environment
- CE, FCC, RoHS certification

Specifications

Model / Parameter	MV-IM1013-12MWG
Symbologies	1D Codes: Code 39, Code 128, etc. 2D Codes: QR Code, Datamatrix, etc.
Frame Rate	60fps
Reading Speed	45 codes/s
Pixel Size	4.8 μm×4.8 μm
Sensor Size	1/2"
Resolution	1280×1024
Communication Protocols	SmartSDK, TCP/IP, Serial, FTP, PROFINET
Software	IDMVS
Data Interface	Gigabit Ethernet (1000Mbit/s)
I/O	12-pin M12 connector provides power and I/O, including 3 opto-siolated input, 3 opto-isolated output and 1 RS-232 serial port
Power Supply	9~24VDC
Power Consumption	<6.5W@24VDC (with integrated light enabled)
Lens Mount	M12-mount
Lighting	Integrated white light
Dimension	81.8 mm*50.5 mm*36.5 mm
Weight	< 90g
IP Protection Level	IP65(with lens cover appropriately mounted)
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation



ID3000 Series Smart Code Reader

Key Features

- Excellent imaging based on world class sensor
- Embedded deep learning algorithm for efficient and robust code reading of various types of code
- Rich IO interfaces provide access for multiple input and output signals
- Top water-proof trigger button with cycle-type LED indicators around for fast debugging
- Line-type status indicators on both sieds, indicating realtime status that can be viewed from multiple angles
- Support multiple transmission protocols: TCP/IP, Serial, FTP, PROFINET
- IP67 protection level, meeting the requirement of strict industrial environment

Specifications

Model / Parameter	MV-ID3004M	MV-ID3016M
Symbologies	1D Codes: Code 39, Code 128, etc. 2D Codes: QR Code, Datamatrix, etc.	
Frame Rate	50fps	20fps
Reading Speed	60 codes/s	
Pixel Size	6.9 μm×6.9 μm	3.45 μm×3.45 μm
Sensor Size	1/2.9"	
Resolution	704×512	1408×1024
Communication Protocols	SmartSDK, TCP/IP, Serial, FTP, PROFINET	
Software	IDMVS	
Data Interface	Fast Ethernet（100Mbit/s）	
I/O	3 non-siolated input, 3 non-isolated output and 1 RS-232 serial port; Support external trigger via top physical tirgger button	
Power Supply	12~24VDC	
Power Consumption	<19.8W@24VDC (max instantaneous power consumption)	
Lens Mount	M12-mount	
Focal Length	6mm/12.4mm/14.8mm	
Lens Cover	Transparent lens cover (polarization lens cover available for option)	
Lighting	Wide angle: White/Blue Spotlight: White/Red/Blue	
Dimension	65.2 mm*65.2 mm*42 mm	
Weight	< 240g	
IP Protection Level	IP67 (with lens cover appropriately mounted)	
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	

ID6000 Series Smart Code Reader

Key Features

- Excellent sensor platform for high-speed image data acquisition
- Embedded deep learning algorithm for efficient and robust image processing
- Built-in code-reading algorithm efficiently reads multiple types of code
- Provide multiple trigger modes adapted to diversified application scenarios
- Rich IO interfaces provide access for multiple input and output signals, support RS232 serial port transmission protocol
- Multiple LED indicators indicating real-time status to assist the configuration and debugging on site
- IP67 protection level, meeting the requirement of strict industrial environment

Specifications

Parameter \ Model	MV-ID6089M-00C-NNG	MV-ID6120M-00C-NNG	MV-ID6200M-00C-NNG
Symbologies	1D Codes: Code 39, Code 93, Code 128, CodaBar, EAN, ITF25, etc. 2D Codes: QR, DM, etc.		
Frame Rate	30fps	20fps	12.5fps
Reading Speed	90 codes/s	60 codes/s	36 codes/s
Pixel Size	3.45μm×3.45μm	1.85μm×1.85μm	2.4 μm×2.4 μm
Sensor Size	1"	1/1.7"	1"
Resolution	4096×2160	4096×3000	5440×3648
Communication Protocols	SmartSDK, TCP Client, Serial, FTP, HTTP, TCP Server		
Software	IDMVS		
Data Interface	Gigabit Ethernet（1000Mbit/s）		
I/O	12-pin M12 connector provides power and I/O, including 3 opto-siolated input, 3 opto-isolated output and 1 RS-232 serial port		
Power Supply	12~24VDC		
Power Consumption	< 12W@24VDC		
Lens Mount	C-Mount		
Lens Cover	Transparent lens cover		
Dimension	126 mm*66 mm*113.2 mm		
Weight	< 750g		
IP Protection Level	IP67 (with lens cover appropriately mounted)		
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation		

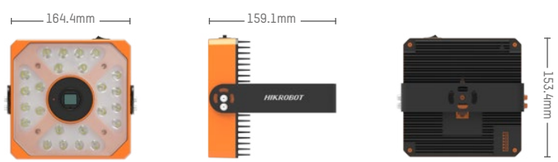
Integration Code Reader

Key Features

- Self-developed high performance code reading technology
- Support image acquisition, data integration, local storage, uploading and tracking
- Adopt integrated structure design to facilitate installation
- Centralized light with high luminescence efficiency
- Long service life time and stable performance
- Simple settings to connect to user's systems

Specifications

Parameter \ Model	MV-PD010003-21	MV-PD010003-23
Symbologies	1D Codes: Code 39, Code 93, Code 128, CodaBar, EAN, ITF25, etc. 2D Codes: QR Code, Datamatrix, etc.	
Frame Rate	17 fps	9 fps
Resolution	3072×2048	4024×3036
DOF	550mm	600mm
FOV	550mm ×340mm@10mil	730mm ×550mm@10mil
Focal Length	12mm	16mm
Evenness	0.53	0.56
Luminous Flux	2500lm	5900lm
Color Temperature	7500K	6500K
Optimal Working Distance	900mm	1500mm
Communication Protocols	SmartSDK, TCP Client, Serial, FTP, HTTP, TCP Server	
Software	Barcode	
Data Interface	Gigabit Ethernet(1000Mbit/s)	
I/O	6-pin terminal including 1 opto-siolated input, 1 opto-isolated output and 1 bidirectional I/O	
Power Supply	24 VDC	
Power Consumption	<40 W	<60 W
Dimension (Without Lens)	153.4mm*164.4mm*159.1mm	
Weight (Without Lens)	<990g	<1500g
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~70°C, 20%~95%RH without condensation	



3D Camera

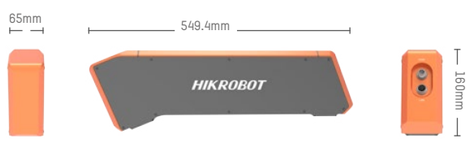
Line Laser 3D Camera

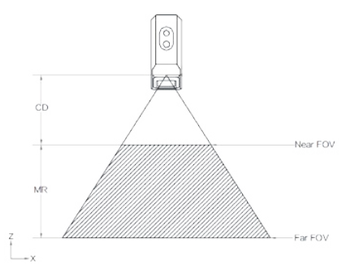
Key Features

- Built-in high accuracy measurementalgorithm
- Adopts high-power laser module with wide dynamic range
- Adopts band pass filter to suppress the interference of environment light
- Adopts GigE interface to provide stable data transmission
- CE, FCC, RoHS certification

Specifications

Parameter \ Model	MV-DL1617-05L
Near FOV	1000mm
Far FOV	2235mm
Clearance Distance (CD)	750mm
Measurement Range (MR)	1000mm
Accuracy	±5mm
Inspection Speed	1m/s@±5mm Accuracy
Scan Rate	200Hz@1m³ MR
Output Data Format	Point cloud data or L/W/H
Sync Signal Mode	External trigger, Encoder input trigger
Interface	Gigabit Ethernet
I/O	5-pin M12 connector including 1 bidirectional I/O
Power Consumption	<7.0W@12VDC
Laser Class	3B@200mw
Dimension	549.4mm*65mm*160mm
Weight	<5Kg
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~80°C, 20%~85%RH without condensation





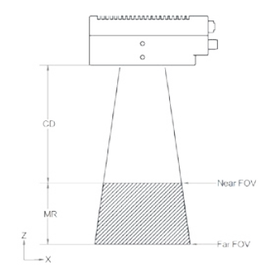
Binocular 3D Camera

Key Features

- Adopts built-in high accuracy volume measurement algorithm with minimal error
- Adopts near-infrared laser module to provide wide dynamic range
- Adopts narrow band pass filter design to suppress the interference of environment light
- Supports depth data or volume data output
- CE, FCC, RoHS certification

Specifications

Parameter \ Model	MV-DS135-06GM-L
Near FOV	640mm×540mm
Far FOV	1040mm×840mm
Clerance Distance (CD)	900mm
Measurement Range (MR)	500mm
Accuracy	±10mm
Scan Rate	4fps@depth data
Output Data Format	Raw image, depth data, volume data (L/W/H)
Interface	Gigabit Ethernet
I/O	12-pin I/O interface, GPI x3, GPO x3, RS232 serial port input x1, RS232 serial port output x1
Power Consumption	8W@12VDC
Laser Class	3B
Dimension	45mm*140mm*58mm
Weight	<600g
IP Protection Level	IP65
Temperature/Humidity	Working temperature 0~50°C, storage temperature -30~80°C, 20%~85%RH without condensation



Vision Box

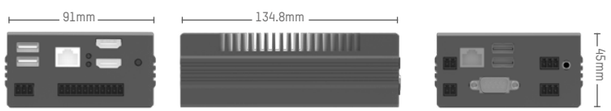
VB Series Vision Controller

Key Features

- On-board Intel E3845 SoC, 1.91GHz CPU
- 4GB DDR3L memory, reliable SSD storage
- 3 Intel chip GigE ports with enhanced anti-surge design to ensure the stability of vision system
- Multiple opto-isolated input and opto-isolated output
- Provide light interface for external light control
- 2 independent HDMI output
- CE, FCC, RoHS certification

Specifications

Parameter \ Model	MV-VB2210-120G	MV-VB2220-120G
Processor	Intel E3845, Quad-core 1.91GHz	
Memory	4GB DDR3L-1333	
Storage	128GB SSD	
Graphics	Integrated Gen7 GPU Support hardware-accelerated 3D imaging Support hardware-accelerated decoding of multiple video formats	
OS	Windows 7/10	
Display	HDMI port x2, support independent display output, maximum resolution 2560*1600	
GPIO	opto-isolated input x4, opto-isolated output x4	
Light Interface	1 voltage-control interface: 0-24 VDC output voltage with Max. 24W power consumption	1 current-control interface: 700mA output current with Max. 5W power consumption
Network	3 standard RJ45 Intel I210 GigE Ethernet ports	
USB	USB 3.0 x1, USB 2.0 x3, optional built-in USB 2.0 x1	
Serial Port	half-duplex RS485 port (non-isolated) x1, RS232 x1	
Power Supply	DC 24V/2.5A	
Power Consumption	34W	26W
Dimension	134.8mm*91mm*45mm	
Weight	< 650g	
Temperature/Humidity	0~50°C, 20%~80%RH without condensation	



VC Series Vision Controller

Key Features

- 6th-generation Intel SkyLAKE platform CPU powering the processing performance
- Support independent graphics card up to GTX1660, boosting deep learning applications
- Rich expansion slots for frame grabber interface expansion with strong stability
- Integrated 4-way constant voltage light interface, supporting power, intensity and trigger control of external light
- Provide 16 I/O interfaces, supporting NPN/PNP switch of output
- Adopt Intel GigE network card, ensuring fast and stable data transmission; Expanded POE network card available for option
- Built-in dual USB3.0 dongle interfaces, to ease the setup and maintenance on site
- CE, FCC, RoHS certification

Specifications

Parameter \ Model	MV-VC4519-128G20 *	MV-VC4510-128G60 *	MV-VC4719-128G20 *	MV-VC4710-128G60 *
Processor	Intel i5-6500 3.2GHz, Max Turbo Frequency 3.6GHz		Intel i7-6700 3.4GHz, Max Turbo Frequency 4.0GHz	
Memory	8GB			
Storage	128G SSD, expandable 2.5" SATA			
Graphics	Intel® HD Graphics 530			
OS	Windows 7/10, Ubuntu			
Display	HDMI port x1, VGA port x1, support independent display output, maximum resolution 4096 × 2304 @24Hz			
I/O	opto-isolated input x8, opto-isolated output x8 (support NPN/PNP switch)			
Light Interface	4-way 24V constant voltage interface supporting light intensity control: Max current 2.5A, Max power consumption 70W; Support light mode switch (strobe/constant) by external trigger			
Network	2 Intel GigE Ethernet ports	2 Intel GigE Ethernet ports, 1 Intel POE network card with 4 GigE Ethernet ports	2 Intel GigE Ethernet ports	2 Intel GigE Ethernet ports, 1 Intel POE network card with 4 GigE Ethernet ports
USB	USB 3.0 x8, built-in USB 3.0 x2			
Serial Port	RS-232 x2			
Expansion Interface	PCIE16 x1 or PCIE8 x2, PCI x1, PCIE4 x1			
Power Supply	100 ~ 240V AC			
Power Consumption	≤250 W	≤250 W	≤350 W	≤250 W
Dimension	306mm*180mm*287mm			
Weight	<7.5kg			
Temperature/Humidity	-10~50°C, 20%~95%RH without condensation			

Notice:* will be released soon.

Lens

HF Series (1/1.8" 6MP)

Key Features

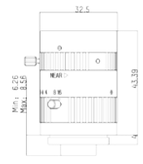
- High resolution, high definition consistency
- Low distortion, high illumination relative
- Maximum image circle 1/1.8"
- Special optimization for machine vision light sources and sensors
- Excellent mechanism design, improve the shock resistance and high/low temperature stability
- Multilayer wide band coating, ensuring high transmittance of visible and near infrared light
- Support ultra short working distance, maintaining excellent optical properties at different object distances

Specifications

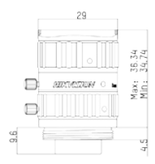
Model	Focal Length(mm)	F No.	Optical Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Operating Temperature
				D	H	V				
MVL-HF0628M-6MP	6	F2.8-F16	-1.50%	73.5°	62.8°	44.5°	0.05	/	C-mount	-10~50°C
MVL-HF0828M-6MP	8	F2.8-F16	-0.96%	58.5°	49.3°	34.0°	0.05	M27*0.5	C-mount	-10~50°C
MVL-HF1228M-6MP	12	F2.8-F16	-0.38%	41.2°	34.4°	23.4°	0.1	M27*0.5	C-mount	-10~50°C
MVL-HF1628M-6MP	16	F2.8-F16	-0.08%	31.0°	25.7°	17.5°	0.1	M27*0.5	C-mount	-10~50°C
MVL-HF2528M-6MP	25	F2.8-F16	-0.02%	19.8°	16.3°	10.9°	0.15	M25.5*0.5	C-mount	-10~50°C
MVL-HF3528M-6MP	35	F2.8-F16	-0.02%	13.8°	11.3°	7.6°	0.2	M27*0.5	C-mount	-10~50°C
MVL-HF5028M-6MP	50	F2.8-F16	0.11%	9.7°	8.0°	5.4°	0.3	M25.5*0.5	C-mount	-10~50°C

Dimension(unit: mm)

MVL-HF0628M-6MP



MVL-HF0828M-6MP



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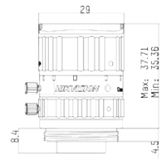

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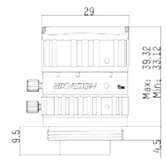
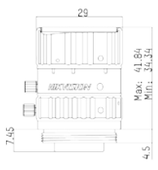


MVL-HF2528M-6MP



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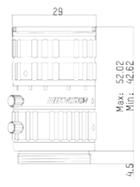
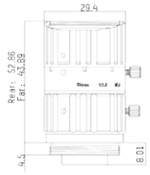


MVL-HF5028M-6MP



MF Series (2/3" 8MP)

Key Features

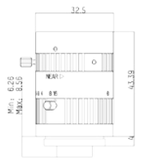
- High resolution, high definition consistency
- Maximum aperture F2.8, maximum image circle 2/3"
- Low distortion, ensuring measurement accuracy
- Stable structural design, better Anti-vibration performance
- High illumination relative
- Compact structure, convenient for equipment miniaturization

Specifications

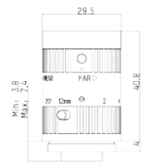
Model	Focal Length(mm)	F No.	Optical Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Operating Temperature
				D	H	V				
MVL-MF0828M-8MP	8	F2.8-F16	-1.50%	69°	55.4°	47.3°	0.1	/	C-mount	-10~50°C
MVL-MF1228M-8MP	12	F2.8-F16	-1.14%	48.57°	37.88°	32.03°	0.1	M30.5*0.5	C-mount	-10~50°C
MVL-MF1628M-8MP	16	F2.8-F16	-0.20%	37.13°	28.94°	24.38°	0.1	M27*0.5	C-mount	-10~50°C
MVL-MF2528M-8MP	25	F2.8-F16	-0.10%	23.06°	17.79°	14.93°	0.1	M27*0.5	C-mount	-10~50°C
MVL-MF3528M-8MP	35	F2.8-F16	0.08%	15.15°	11.67°	9.77°	0.15	M30.5*0.5	C-mount	-10~50°C
MVL-MF5028M-8MP	50	F2.8-F16	0.20%	10.86°	8.44°	7.07°	0.2	M30.5*0.5	C-mount	-10~50°C

Dimension(unit: mm)

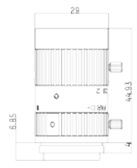
MVL-MF0828M-8MP



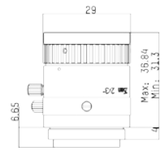
MVL-MF1228M-8MP



MVL-MF1628M-8MP



MVL-MF2528M-8MP



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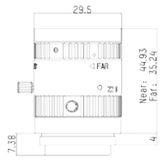


MVL-MF5028M-8MP

KF Series (1.1" 12MP)

Key Features

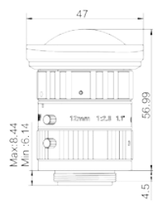
- High resolution, high definition of the whole image
- Low distortion, high illumination relative
- Maximum image format 1.1"
- Special optimization for machine vision light sources and sensors
- Excellent mechanism design, improve the shock resistance and high/low temperature stability
- Multilayer wide band coating, ensuring high transmittance of visible and near infrared light
- Support ultra short working distance, maintaining excellent optical properties at different object distances

Specifications

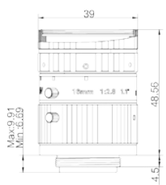
Model	Focal Length(mm)	F No.	Optical Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Operating Temperature
				D	H	V				
MVL-KF1228M-12MP	12	F2.8-F16	-0.0179	70.5°	59.8°	46.2°	0.1	~	C-mount	-10~50°C
MVL-KF1628M-12MP	16	F2.8-F16	-1.30%	54.8°	44.9°	33.9°	0.1	M35.5*0.5	C-mount	-10~50°C
MVL-KF2528M-12MP	25	F2.8-F16	0.40%	36.7°	29.6°	22.1°	0.15	M35.5*0.5	C-mount	-10~50°C
MVL-KF3528M-12MP	35	F2.8-F16	-0.21%	26.7°	21.4°	15.9°	0.2	M35.5*0.5	C-mount	-10~50°C
MVL-KF5028M-12MP	50	F2.8-F16	-0.05%	18.9°	15.1°	11.2°	0.3	M35.5*0.5	C-mount	-10~50°C

Dimension(unit: mm)

MVL-KF1228M-12MP



MVL-KF1628M-12MP



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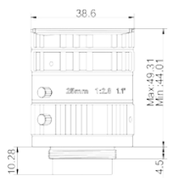
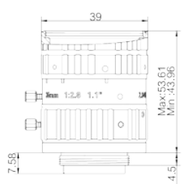
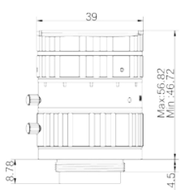


MVL-KF3528M-12MP



MVL-KF5028M-12MP



SA Series (4/3" 10MP)

Key Features

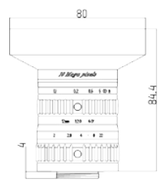
- High resolution, high definition of the whole image
- Maximum aperture F2.0
- Maximum image format 4/3"
- Low distortion, ensuring measurement accuracy
- High illumination relative, ensuring the brightness consistency of the image

Specifications

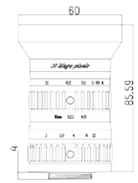
Model	Focal Length(mm)	F No.	Optical Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Operating Temperature
				D	H	V				
SA1220M-10MP	12	F2.0-F22	-2.40%	89.0°	75.5°	61.1°	0.15	M77*0.75	C-mount	-10~50°C
SA1620M-10MP	16	F2.0-F22	-2.81%	72.9°	60.9°	47.3°	0.1	M58*0.75	C-mount	-10~50°C
SA2520M-10MP	25	F2.0-F22	-0.66%	49.7°	40.6°	31.0°	0.15	M46*0.75	C-mount	-10~50°C
SA3520M-10MP	35	F2.0-F22	-0.56%	36.6°	29.6°	22.4°	0.2	M40.5*0.5	C-mount	-10~50°C
SA5020M-10MP	50	F2.0-F22	-0.14%	25.9°	20.9°	15.7°	0.3	M40.5*0.5	C-mount	-10~50°C
SA8520M-10MP	85	F2.0-F22	0.04%	15.4°	12.1°	9.3°	1.2	M77*0.75	C-mount	-10~50°C

Dimension(unit: mm)

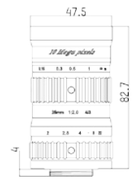
SA1220M-10MP



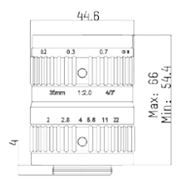
SA1620M-10MP



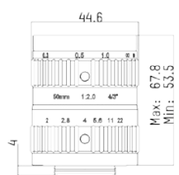
SA2520M-10MP



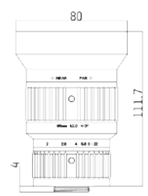
SA3520M-10MP



SA5020M-10MP



SA8520M-10MP



LF Series (Large Image Circle Lens)

Key Features

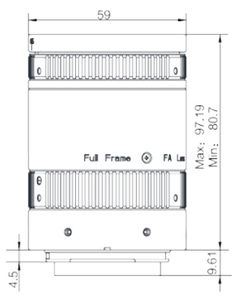
- Highest resolution 160lp/mm, ultra high definition consistency
- Low distortion, high illumination relative
- Image circle φ46mm, applicable to large size area scan and line scan cameras
- Optimized optical design for different magnification
- Optimization for machine vision light sources and sensors
- Detachable F-mount structure, extensible for other interfaces

Specifications

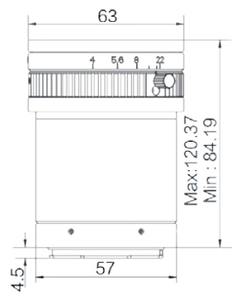
Model		MVL-LF5040M-F	MVL-LF8040M-F
Focal Length(mm)		50	80
F No.		F4.0-F32	F4.0-F32
Optical Distortion		-0.22%	0.04%
Field of View	D	47.02°	30.41°
	H	39.77°	25.47°
	V	27.11°	17.13°
M.O.D(m)		0.15	0.23
Recommended Magnification		0.01x~0.33x	0.04x~0.4x
Filter Thread		M52*0.75	M52*0.75
Mount		F-mount	F-mount
Operating Temperature		-10~50°C	-10~50°C

Dimension(unit: mm)

MVL-LF5040M-F



MVL-LF8040M-F



High Resolution Telecentric Lens

Key Features

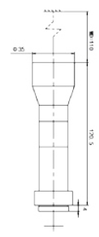
- Object telecentric design
- High resolution, contrast and illumination relative
- Nearly zero distortion, more suitable for high precision measurement and positioning
- Image format covers 1/2" and 2/3"
- Standard C-mount

Specifications

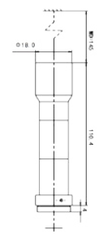
Model	Amplification Factor	Working Distance (mm)	Image Circle	DoF(mm)	Resolution (um)	TV-Distortion	Telecentricity	Aperture	Total Length (mm)	Maximum Diameter(mm)	Optional Coaxial Light Interface
MVL-MY-05-110-MP	0.5	110	2/3"	2.98	12	≤0.05%	≤0.1°	9.3	120.5	35	√
MVL-MY-07-145-MP	0.7	145	2/3"	3.2	14.3	≤0.1%	≤0.2°	11.2	110.4	28	
MVL-MY-08-130-MP	0.8	130	2/3"	1.4	9.4	≤0.1%	≤0.1°	11.2	117.1	28	√
MVL-MY-1-110-MP	1	110	2/3"	0.88	7.4	≤0.05%	≤0.1°	11	128.4	30	√
MVL-MY-2-110-MP	2	110	2/3"	0.27	4.5	≤0.05%	≤0.1°	13.6	130.4	30	√
MVL-MY-4-110-MP	4	110	2/3"	0.11	3.7	≤0.05%	≤0.1°	22	110.2	30	
MVL-HT-065-150	0.65	150	1/2"	1.93	10.53	≤0.2%	≤0.1°	10.2	87	26	√
MVL-HT-05-110	0.5	110	1/2"	3	12.61	≤ 0.1%	≤0.1°	9.4	99.9	30	√
MVL-HT-07-110	0.7	110	1/2"	1.63	9.59	≤0.12%	≤0.1°	10	114.17	28	√
MVL-HT-1-110	1	110	1/2"	0.80	6.71	≤0.1%	≤0.1°	10	127	26	√
MVL-HT-2-110	2	110	1/2"	0.32	5.37	≤0.1%	≤0.1°	16	118.94	24	√
MVL-HT-05-65	0.5	65	1/2"	3.01	12.61	≤0.1%	≤0.1°	9.4	105.9	28	√
MVL-HT-07-65	0.7	65	1/2"	1.63	9.59	≤0.1%	≤0.1°	10	91.75	24	√
MVL-HT-1-65	1	65	1/2"	0.88	7.38	≤0.1%	≤0.1°	11	117	24	√
MVL-HT-2-65	2	65	1/2"	0.32	5.37	≤0.1%	≤0.1°	16	119.83	22	√

Dimension(unit: mm)

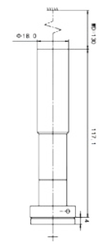
MVL-MY-05-110-MP



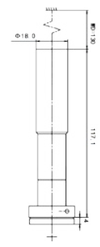
MVL-MY-07-145-MP



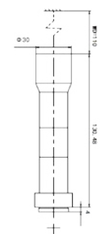
MVL-MY-08-130-MP



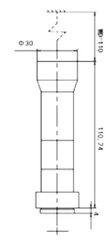
MVL-MY-1-110-MP



MVL-MY-2-110-MP



MVL-MY-4-110-MP



Machine Vision SDK

Overview

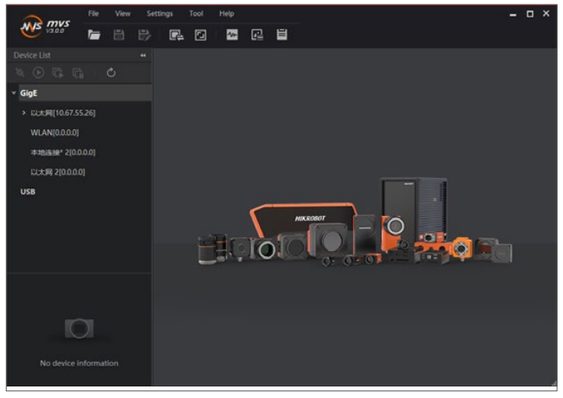
Hikrobot industrial camera SDK is based on GenICam standard, compliant with GigE Vision and USB3 Vision standard, and can be used to control the connected industrial area cameras and line cameras, supporting camera image debugging and secondary development.

Key Features

- Users can use SDK API or MVS to debug camera image, acquire and set camera parameters
- Powerful GigE driver can improve the ability of transmitting and processing image with extremely low CPU resources
- USB3 driver fully supports USB3 Vision standard and ensure that the U3V camera transmits ultra-high-speed image data with USB3.0 bandwidth
- Rich API interfaces can be used to facilitate quick and effective secondary development
- Support implement in Halcon, Labview, Sherlock and other software and can provide DirectShow developing kit
- Various sample programs, source code, and development documentation are provided for quick start
- Support further API encapsulation, plug-in, and other forms of customization

Supported Platforms	Supported Programing Languages	Supported IDE
Windows 32/64bits Linux 32/64bits MacOS	C C++ C# VB.NET	VC6.0 VS2008 and above QT XE5 BCB6.0

MVS



Download

SDK can be downloaded freely by the official website
http://en.hikrobotics.com/service/soft.htm?type=1

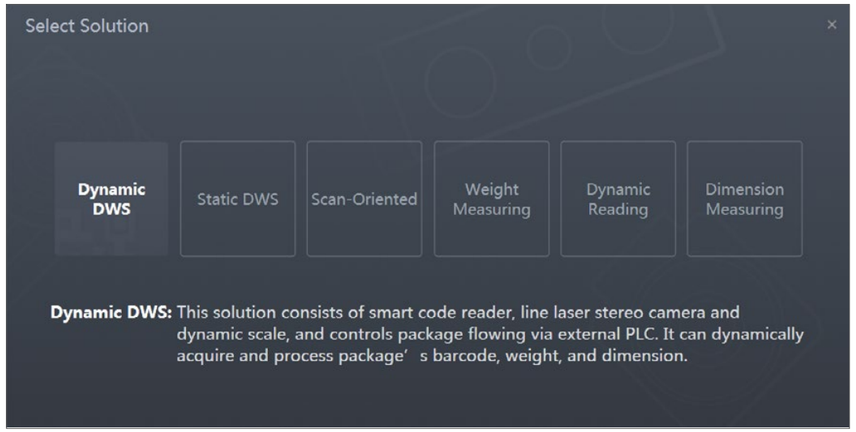
(Note: the QR code is a link to the download page of Hikrobot official website.)

CodeMaster Code-reading Platform

Hikrobot's CodeMaster is a comprehensive code-reading software platform, including data collection, image processing, communication output, data statistics and other functions. With strong compatibility and rich functions, the platform meets most demands of common code-reading application scenarios.

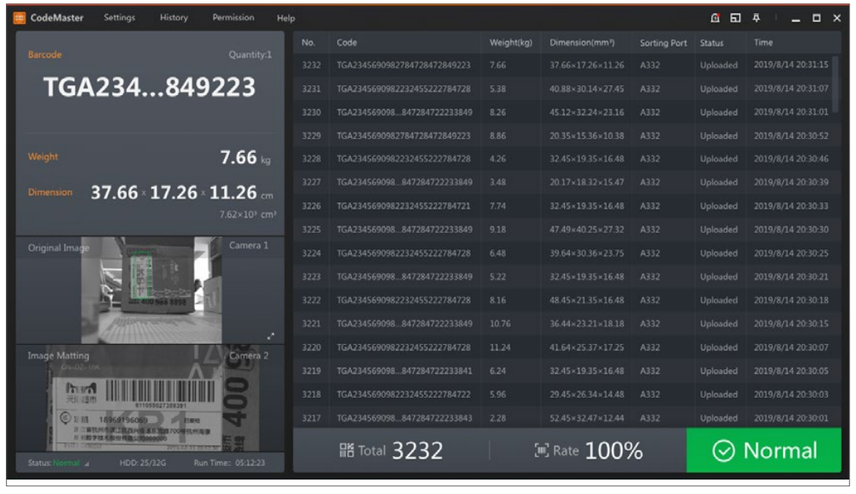
Diversified Solutions

- 6 typical solutions are provided for users to select based on their actual application scenarios.
- Support user-defined solution configuration: different tool modules can be combined and extended to create new solutions.



Informative Main Interface

The main interface of new style is rich and clear in information, including real-time information area, picture display area, history area, menu configuration area, quicklist area, etc.



Hikrobot

NEW VISION NEW WORLDS

MACHINE VISION PRODUCT CATALOG

Distributed by

No.399 Danfeng Road, Binjiang District,
Hangzhou 310052, China
Tel: +86-0571-88967998
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