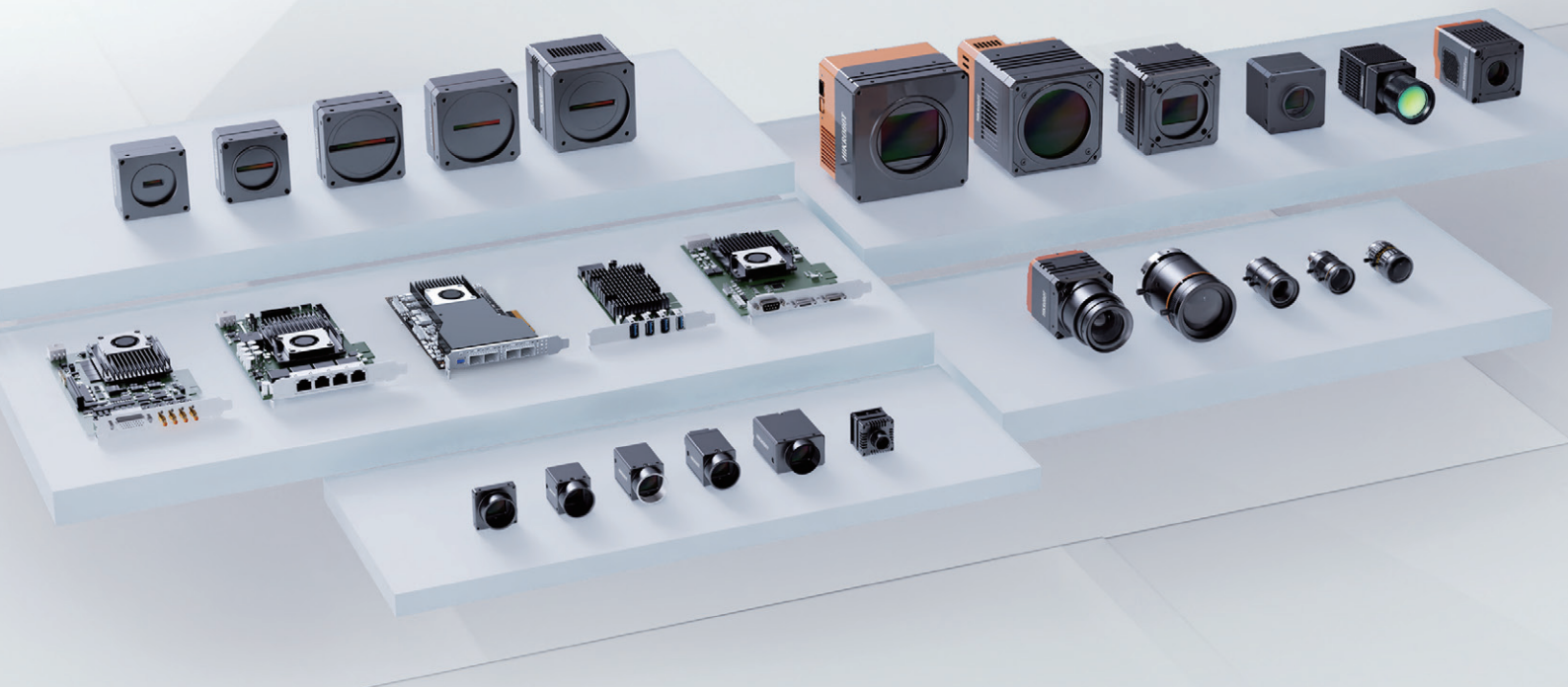
Vision for Imagination

MACHINE VISION
STANDARD PRODUCT CATALOG



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HIKROBOT

Overview

Area Scan Camera P8

- Complete resolution distribution: 0.4MP~604MP
- Equipped data interface: GigE, USB3.0, 10GigE, Camera Link, CoaXPress, XoFLink

Line scan camera P24

- Resolution distribution: 2k, 4k, 8k, 16k
- Equipped data interface: GigE, Camera Link, XoFLink

Board Level Camera P28

- Single-board or multi-board stacking design, suitable for application scenarios with high space requirements
- Equipped data interface: GigE, USB3.0

Industrial Infrared Camera P32

- Long Wave: The responsive wavelength range covers 8-14μm; visually present temperature information and measure temperature characteristics
- Short Wave: Equipped with InGaAs sensors, applicable to area scan camera and line scan camera, covering the visible light to short wave range of 0.4 um to 1.7 um

Frame Grabber P34

- Rich data interfaces are optional include GigE, 10GigE, USB3.0, Camera Link, CoaXPress, XoFLink

Lens P38

- Comprehensive coverage of format and focal length
- Ultra-high image resolution and consistency

Cable P52

- Support common interface types and lengths
- Provide stable power supply and data tranimission

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HIKROBOT

Hangzhou Hikrobot Co., Ltd.

Hikrobot is a global product and solution supplier specialized in machine vision and mobile robot. Focusing on IIoT, smart logistics and smart manufacturing, we build open cooperation ecosystem, provide service to industry and logistics customers, and commit to continuously promoting the intelligentization and leading the intelligent manufacturing process.

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.
Through rigorous EMC, safety and reliability tests, 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 to greatly improve productivity, accuracy and stability.

Machine Vision System

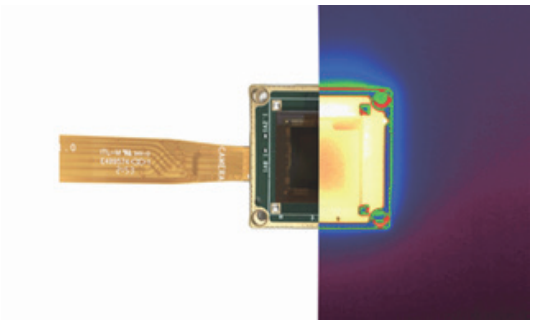
Product Background

An excellent machine vision system needs to have basic features such as stable acquisition, efficient processing, execution accuracy, and high-quality images. In a typical image acquisition system, there are light source, lens, camera, acquisition protocols, data transmission and data processing. The camera cooperates with the lens and lighting unit to ensure high-quality original images and maximize the difference between target features and background, and carry out stable transmission and collection through a suitable transmission protocol. Finally, the target feature information is extracted from the background through software and perform efficient algorithm processing to obtain the target image.

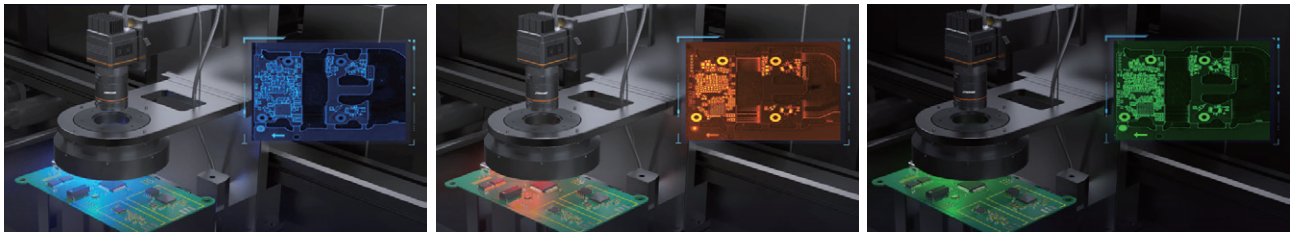
Hikrobot is committed to providing customers with one-stop procurement services for visual systems. The products cover industrial area scan cameras, line scan cameras, board-level cameras, infrared cameras, and accessories such as frame grabbers, lenses, light sources, and cables. Realize the construction of visual systems for customers to meet various application needs in various industries.

Product Features

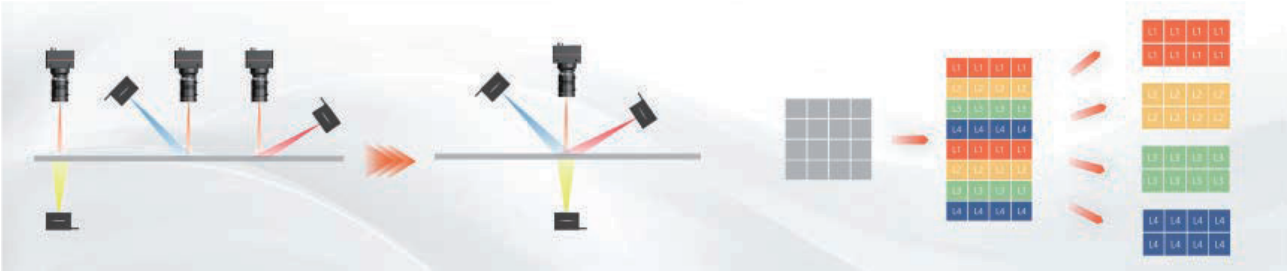
- More spectral coverage, suitable for rich application scenarios.



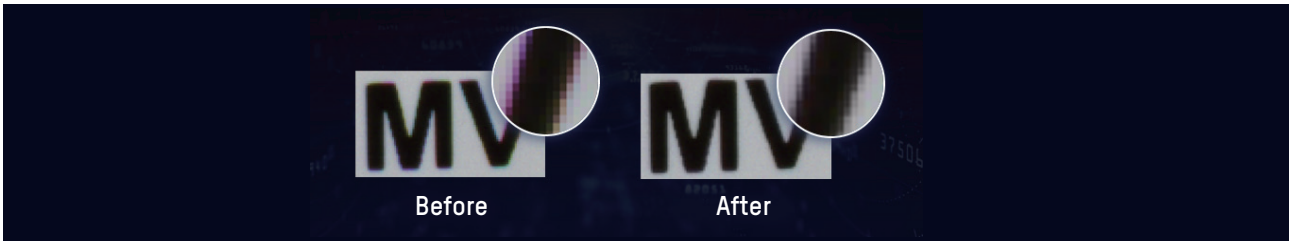
- Sequencer function support periodically acquire images according to the preset parameters and improve the acquisition efficiency.



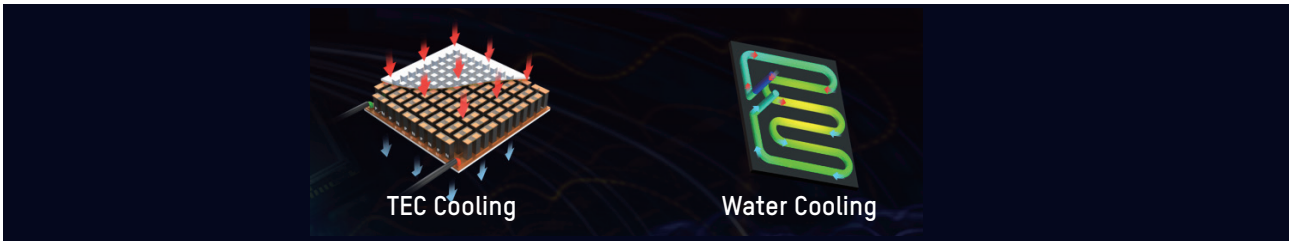
- The camera with multi-field image function can capture variety of defects combined with multiple lightings synchronously, effectively reducing the number of work stations and the cost of visual solutions.



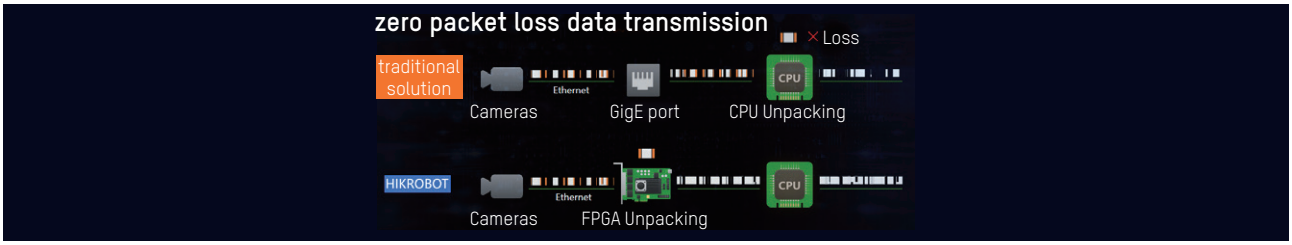
- Purple edge correction algorithm effectively suppressing image edge dispersion.



- The two methods will help the core components in camera to actively cool down and suppress thermal noise.



- Featured and innovative functions of frame grabber, no packet loss, low load at HOST end.

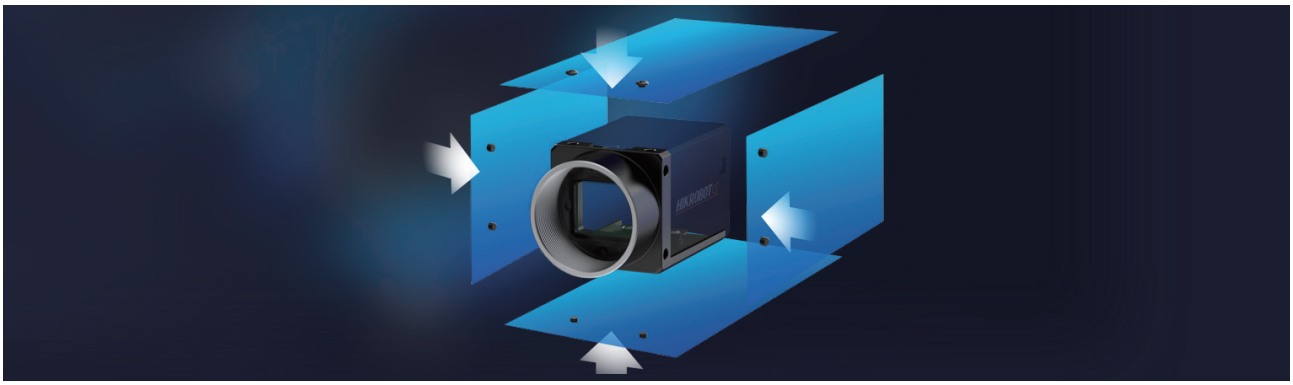


- The SDK compatibility is strong and adaptable to various development platforms.

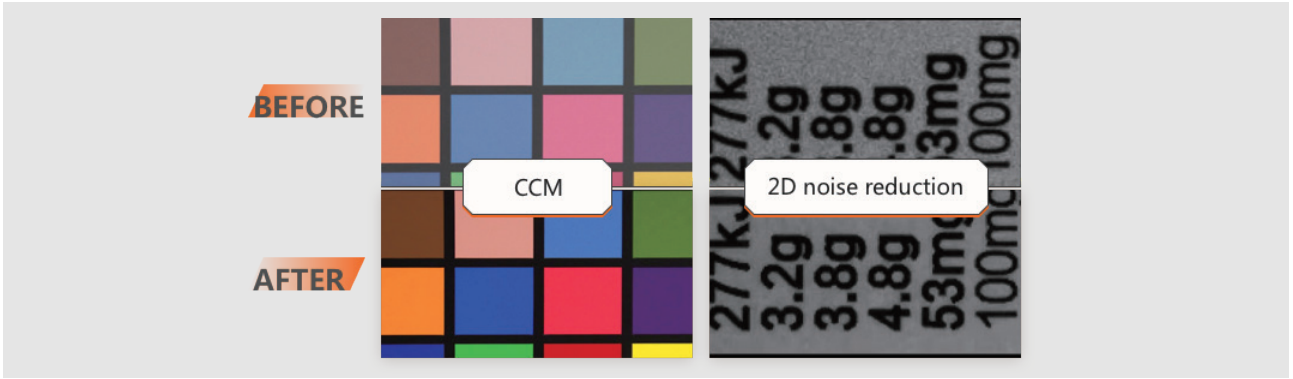
Area Scan Camera

CS Series Area Scan Camera

HIKROBOT released the 2nd generation of CS Series with technological breakthroughs from products appearance design, R&D to production management, which gives an upgraded experience to all end users.



Evolved performance, various scenarios adaptable



Upgraded imaging, built-in algorithms

CS Series GigE Area Scan Camera

CE KC RoHS

Specifications

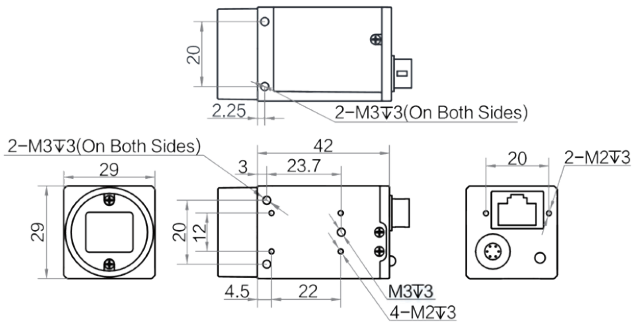
Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption
MV-CS004-10GM	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.2 W@12 VDC
MV-CS004-10GC	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.5 W@12 VDC
MV-CS004-11GM	IMX287	1/2.9"	6.9 μm	Global	720 × 540	312.9 fps	NE: 1 μs~10 sec	Typ. 2.2 W@12 VDC
MV-CS004-11GC	IMX287	1/2.9"	6.9 μm	Global	720 × 540	312.9 fps	NE: 1 μs~10 sec	Typ. 2.4 W@12 VDC

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption
MV-CS013-60GN	HK	2/3"	6.9 um	Global	1224*1024	60 fps	NE: 5 μs ~ 10 sec	Typ. 2.3 W@12 VDC
MV-CS016-10GM	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.4 W@12 VDC
MV-CS016-10GC	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.5 W@12 VDC
MV-CS016-11GM *	IMX273	1/2.9"	3.45 μm	Global	1440 × 1080	78.2 fps	USE:1 μs ~ 14 μs NE:15 μs ~ 10 sec	Tyo. 2.3 W@12 VDC
MV-CS020-10GM	IMX430	1/1.7"	4.5 μm	Global	1624 × 1240	60 fps	USE:1 μs~5 μs NE:6 μs~10 sec	Typ. 2.8 W@12 VDC
MV-CS020-10GC	IMX430	1/1.7"	4.5 μm	Global	1624 × 1240	60 fps	USE:1 μs~5 μs NE:6 μs~10 sec	Typ. 3.0 W@12 VDC
MV-CS020-60GM *	HK	1/2.53"	3.45 μm	Global	1632 × 1264	60 fps	NE: 5 μs ~ 10 sec	Typ. 2.1 W@12 VDC
MV-CS020-60GC *	HK	1/2.53"	3.45 μm	Global	1632 × 1264	60 fps	NE: 5 μs ~ 10 sec	Typ. 2.3 W@12 VDC
MV-CS023-10GM	IMX249	1/1.2"	5.86 μm	Global	1920 × 1200	41 fps	NE: 15 μs~10 sec	Typ. 2.2 W@12 VDC
MV-CS023-10GC	IMX249	1/1.2"	5.86 μm	Global	1920 × 1200	41 fps	NE: 15 μs~10 sec	Typ. 2.6 W@12 VDC
MV-CS032-60GM	HK	1/1.8"	3.45 μm	Global	2048 × 1536	36.8 fps	NE: 5 μs ~ 10 sec	Typ. 2.1 W@12 VDC
MV-CS032-60GC	HK	1/1.8"	3.45 μm	Global	2048 × 1536	36.8 fps	NE: 5 μs ~ 10 sec	Typ. 2.3 W@12 VDC
MV-CS050-10GM	IMX264	2/3"	3.45 μm	Global	2448 × 2048	24.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.6 W@12 VDC
MV-CS050-10GC	IMX264	2/3"	3.45 μm	Global	2448 × 2048	24.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.9 W@12 VDC
MV-CS050-10GM-PRO	IMX264	2/3"	3.45 μm	Global	2448 × 2048	35.6 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.6 W@12 VDC
MV-CS050-10GC-PRO	IMX264	2/3"	3.45 μm	Global	2448 × 2048	35.6 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.9 W@12 VDC
MV-CS050-20GM	XGS5000	2/3"	3.2 μm	Global	2592 × 2048	22.7fps	USE: 23 μs~99 μs NE: 100 μs~10 sec	Typ. 2.5 W@12 VDC
MV-CS050-20GC	XGS5000	2/3"	3.2 μm	Global	2592 × 2048	22.7fps	USE: 23 μs~99 μs NE: 100 μs~10 sec	Typ. 2.7 W@12 VDC
MV-CS050-60GM	HK	2/3"	3.45 um	Global	2448*2048	23 fps	NE: 5 μs ~ 10 sec	Typ. 2.3 W@12 VDC

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption
MV-CS050-60GC	HK	2/3"	3.45 um	Global	2448*2048	23 fps	NE: 5 μs ~ 10 sec	Typ. 2.5 W@12 VDC
MV-CS050-60GN *	HK	2/3"	3.45 μm	Global	2448 × 2048	23 fps	NE: 5 μs ~ 10 sec	Typ. 2.3 W@12 VDC
MV-CS050-90GM	GMAX3405	2/3"	3.4 μm	Global	2448 × 2048	24.2 fps	USE: 2 μs ~ 4 μs NE: 5 μs ~ 10 sec	Typ. 2.2 W@12 VDC
MV-CS050-90GC	GMAX3405	2/3"	3.4 μm	Global	2448 × 2048	24.2 fps	USE: 2 μs ~ 4 μs NE: 5 μs ~ 10 sec	Typ. 2.3 W@12 VDC
MV-CS060-10GM	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	19.1 fps	NE: 25 μs~2.5 sec	Typ. 2.4 W@12 VDC
MV-CS060-10GC	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	19.1 fps	NE: 25 μs~2.5 sec	Typ. 2.5 W@12 VDC
MV-CS060-10GM-PRO	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs~2.5 sec	Typ. 2.4 W@12 VDC
MV-CS060-10GC-PRO	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs~2.5 sec	Typ. 2.5 W@12 VDC
MV-CS200-10GM	IMX183	1"	2.4 μm	Rolling	5472 × 3648	5.9 fps	NE: 46 μs~2.5 sec	Typ. 2.4 W@12 VDC
MV-CS200-10GC	IMX183	1"	2.4 μm	Rolling	5472 × 3648	5.9 fps	NE: 46 μs~2.5 sec	Typ. 2.5 W@12 VDC

Notice: * will be released soon, please consult details with sales representative
USE: Ultra-short exposure mode
NE: Normal exposure mode

Dimension



Unit:mm

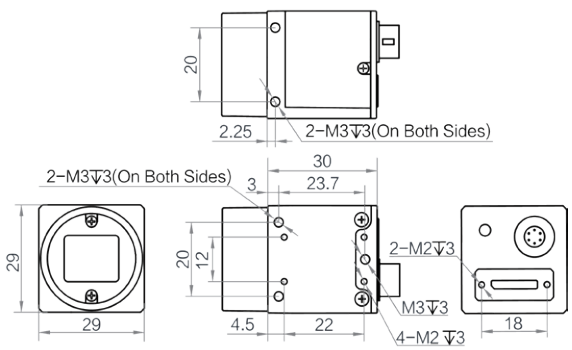
CS Series USB3.0 Area Scan Camera

Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption
MV-CS004-10UM	IMX287	1/2.9"	6.9 μm	Global	720 × 540	526.5 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.4 W@5 VDC
MV-CS004-10UC	IMX287	1/2.9"	6.9 μm	Global	720 × 540	526.5 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.6 W@5 VDC
MV-CS016-10UM	IMX273	1/2.9"	3.45 μm	Global	1440 × 1080	249.1 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 3.0 W@5 VDC
MV-CS016-10UC	IMX273	1/2.9"	3.45 μm	Global	1440 × 1080	249.1 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 3.3 W@5 VDC
MV-CS020-10UM	IMX430	1/1.7"	4.5 μm	Global	1624 × 1240	90 fps	USE: 1 μs~5 μs NE : 6 μs~10 sec	Typ. 2.3 W@5 VDC
MV-CS020-10UC	IMX430	1/1.7"	4.5 μm	Global	1624 × 1240	90 fps	USE: 1 μs~5 μs NE : 6 μs~10 sec	Typ. 2.4 W@5 VDC
MV-CS028-10UM	IMX421	2/3"	4.5 μm	Global	1936 × 1464	132.2 fps	USE: 1 μs~5 μs NE: 9 μs~10 sec	Typ. 2.8 W@5 VDC
MV-CS040-A0UM	HK	1"	5.5μm	Global	2048 × 2048	90.1 fps	NE: 30 μs~10 sec	Typ. 2.4 W@5 VDC
MV-CS040-A0UC	HK	1"	5.5μm	Global	2048 × 2048	90.1 fps	NE: 30 μs~10 sec	Typ. 2.4 W@5 VDC
MV-CS050-10UM	IMX264	2/3"	3.45 μm	Global	2448 × 2048	90.1 fps	NE: 30 μs~10 sec	Typ. 2.4 W@5 VDC
MV-CS050-10UC	IMX264	2/3"	3.45 μm	Global	2448 × 2048	60 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.8 W@5 VDC
MV-CS050-60UM	HK	2/3"	3.45 um	Global	2448 × 2048	60 fps	NE: 5 μs~10 sec	Typ. 1.7 W@5 VDC
MV-CS050-60UC	HK	2/3"	3.45 um	Global	2448 × 2048	60 fps	NE: 5 μs~10 sec	Typ. 1.8 W@5 VDC
MV-CS060-10UM-PRO	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	59.6 fps	NE: 32 us~1 sec	Typ. 2.3 W@5 VDC
MV-CS060-10UC-PRO	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	59.6 fps	NE: 32 us~1 sec	Typ. 2.5 W@5 VDC
MV-CS200-10UM	IMX183	1"	2.4 μm	Rolling	5472 × 3648	19.2 fps	NE: 44 μs~0.83 sec	Typ. 2.3 W@5 VDC
MV-CS200-10UC	IMX183	1"	2.4 μm	Rolling	5472 × 3648	19.2 fps	NE: 44 μs~0.83 sec	Typ. 2.3 W@5 VDC

Notice: USE: Ultra-short exposure mode
NE: Normal exposure mode

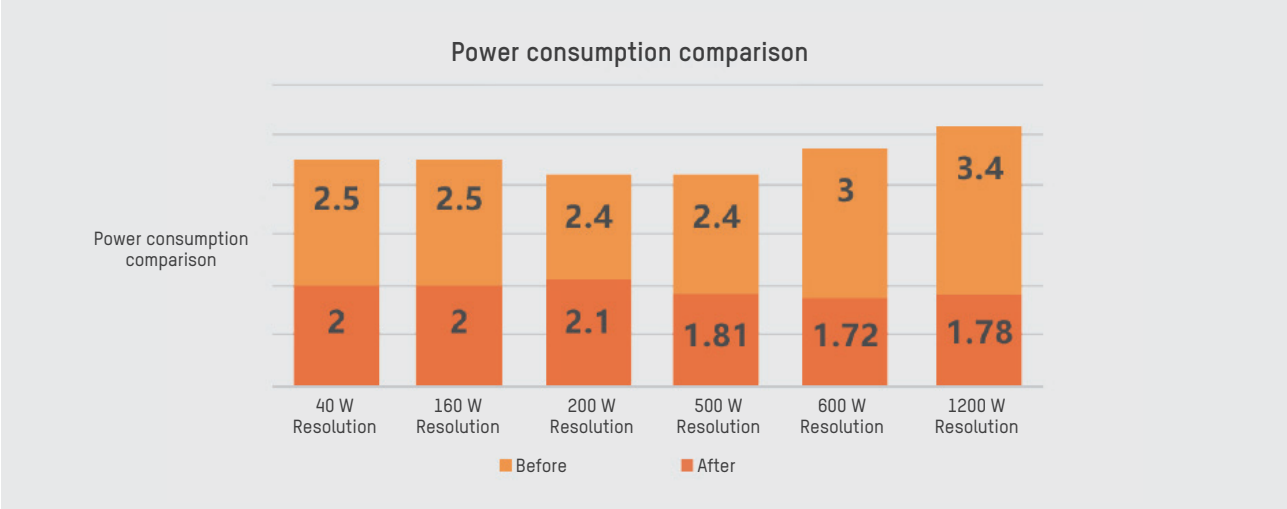
Dimension



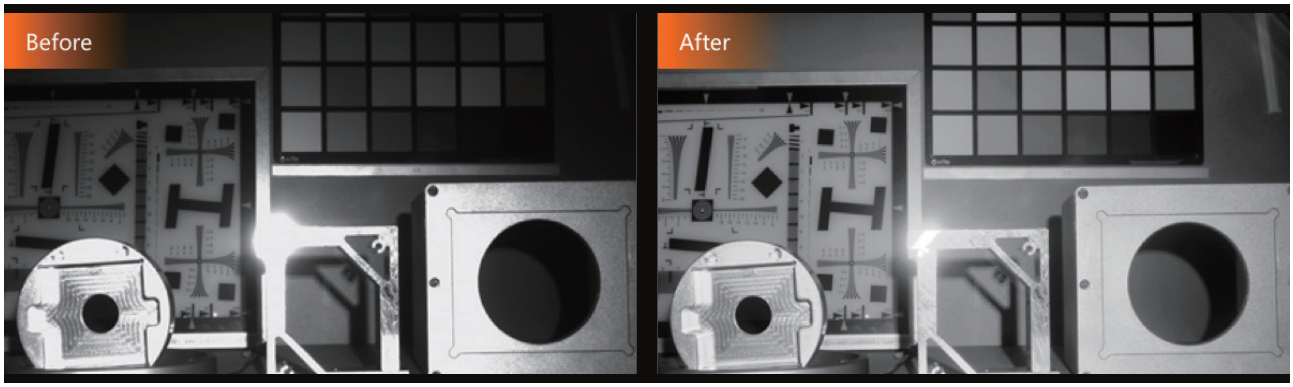
Unit:mm

CU Series Universal Industrial Camera

The CU series is designed with low power-consuming platform and stable performance, which creates a universal industrial camera product that satisfies the requirements for stability and necessary functions, helping users to obtain vision applications more easily.



Ultra-low power supply, stable performance



Built-in image preprocessing

CU Series GigE Area Scan Camera

CE KC RoHS

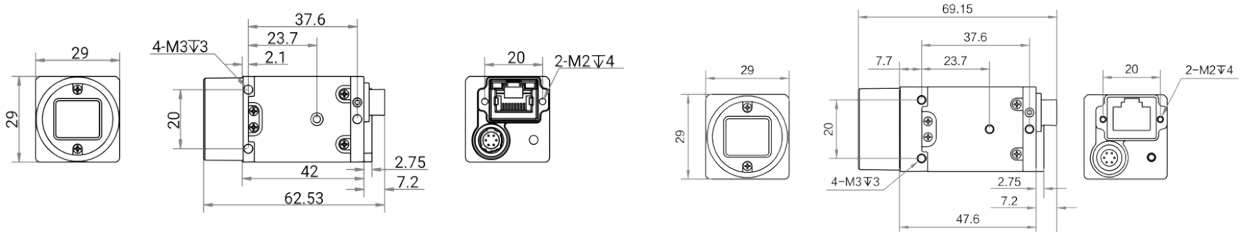
Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Label
MV-CU004-10GM	IMX297	1/2.9"	6.9 μm	Global	720 × 540	126.5 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2 W@12 VDC	A
MV-CU004-10GC	IMX297	1/2.9"	6.9 μm	Global	720 × 540	126.5 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2 W@12 VDC	A
MV-CU013-80GM	SS	1/2.7"	4.0 μm	Global	1280 × 1024	89.9 fps	NE: 31 μs~1 sec	Typ. 1.9 W@12 VDC	A
MV-CU013-80GC	SS	1/2.7"	4.0 μm	Global	1280 × 1024	89.9 fps	NE: 31 μs~1 sec	Typ. 1.9 W@12 VDC	A
MV-CU013-A0GM	HK	1/2''	4.8 μm	Global	1280 × 1024	91.3 fps	NE: 10 μs~10 sec	Typ. 1.8 W@12 VDC	A
MV-CU013-A0GC	HK	1/2''	4.8 μm	Global	1280 × 1024	91.3 fps	NE: 10 μs~10 sec	Typ. 1.8 W@12 VDC	A
MV-CU016-10GM	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.8 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2 W@12 VDC	A
MV-CU016-10GC	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.8 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2 W@12 VDC	A
MV-CU020-19GM	IMX290	1/2.8"	2.9 μm	Rolling	1920 × 1080	56 fps	NE: 64 μs~130 ms	Typ. 2.1 W@12 VDC	A
MV-CU020-19GC	IMX290	1/2.8"	2.9 μm	Rolling	1920 × 1080	56 fps	NE: 128 μs~260 ms	Typ. 2.1 W@12 VDC	A
MV-CU020-19GC (850nm)	IMX290	1/2.8''	2.9 μm	Rolling	1920 × 1080	56 fps	NE: 128 μs ~ 260 ms	Typ. 2.1 W@12 VDC	A
MV-CU020-80GM	SC235	1/2.6"	3.45 μm	Global	1600×1200	51 fps	NE: 24 μs~2.5 sec	Typ. 2.5 W@12 VDC	A
MV-CU020-80GC	SC235	1/2.6"	3.45 μm	Global	1600×1200	51 fps	NE: 24 μs~2.5 sec	Typ. 2.5 W@12 VDC	A
MV-CU020-90GM	GMAX4002	1/1.7''	4 μm	Global	2048 × 1200	49 fps	NE: 4 us~10 sec	Typ. 1.9 W@12 VDC	A
MV-CU020-90GC	GMAX4002	1/1.7''	4 μm	Global	2048 × 1200	49 fps	NE: 4 us~10 sec	Typ. 2 W@12 VDC	A
MV-CU050-30GM	AR0521	1/2.5"	2.2 μm	Rolling	2592 × 1944	24 fps	NE: 21 μs~1 sec	Typ. 1.81 W@12 VDC	A
MV-CU050-30GC	AR0521	1/2.5"	2.2 μm	Rolling	2592 × 1944	24 fps	NE: 21 μs~1 sec	Typ. 1.81 W@12 VDC	A
MV-CU050-90GM	GMAX2505	1/2"	2.5 μm	Global	2600 × 2160	21 fps	NE: 3 μs~10 sec	Typ. 2.3 W@12 VDC	B
MV-CU050-90GC	GMAX2505	1/2"	2.5 μm	Global	2600 × 2160	21 fps	NE: 3 μs~10 sec	Typ. 2.5 W@12 VDC	B

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Label
MV-CU060-10GM	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	19.1 fps	NE: 25 μs~2.5 sec	Typ. 1.7 W@12 VDC	A
MV-CU060-10GC	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	19.1 fps	NE: 25 μs~2.5 sec	Typ. 1.72 W@12 VDC	A
MV-CU060-60GM	BSI	1/2.4''	3.45 μm	Global	3200 × 1944	19.1 fps	NE: 31 μs~1 sec	Typ. 2 W@12 VDC	A
MV-CU060-60GC	BSI	1/2.4''	3.45 μm	Global	3200 × 1944	19.1 fps	NE: 31 μs~1 sec	Typ. 2 W@12 VDC	A
MV-CU120-10GM	IMX226	1/1.7"	1.85 μm	Rolling	4024 × 3036	9.7 fps	NE: 34 μs~2 sec	Typ. 1.78 W@12 VDC	A
MV-CU120-10GC	IMX226	1/1.7"	1.85 μm	Rolling	4024 × 3036	9.7 fps	NE: 34 μs~2 sec	Typ. 1.82 W@12 VDC	A
MV-CU200-20GM	AR2020	1/1.8"	1.4 μm	Rolling	5120 × 3840	5.9fps	NE: 31 μs~1 sec	Typ. 2.5 W@12 VDC	A
MV-CU200-20GC	AR2020	1/1.8"	1.4 μm	Rolling	5120 × 3840	5.9fps	NE: 31 μs~1 sec	Typ. 2.5 W@12 VDC	A

Notice: USE: Ultra-short exposure mode
NE: Normal exposure mode

Dimension



A B

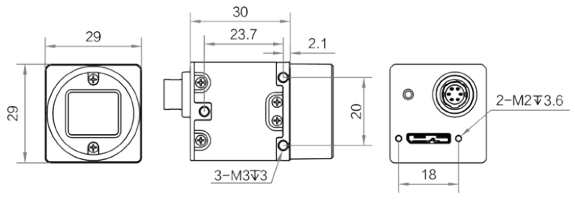
Unit:mm

CU Series USB3.0 Area Scan Camera

Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Label
MV-CU013-80UM	SS	1/2.7"	4.0 μm	Global	1280 × 1024	240 fps	30 μs~1 sec	Typ. 1.7 W@5 VDC	A
MV-CU013-80UC	SS	1/2.7"	4.0 μm	Global	1280 × 1024	240 fps	30 μs~1 sec	Typ. 1.7 W@5 VDC	A
MV-CU013-A0UM	HK	1/2"	4.8 μm	Global	1280 × 1024	201.4 fps	5 μs~10 sec	Typ. 1.79 W@5 VDC	A
MV-CU013-A0UC	HK	1/2"	4.8 μm	Global	1280 × 1024	201.4 fps	5 μs~10 sec	Typ. 1.81 W@5 VDC	A
MV-CU050-60UM	HK	1/2.5"	2.2 μm	Rolling	2592 × 1944	48.2 fps	12 μs ~ 1.25 sec	Typ. 2.7 W@5 VDC	A
MV-CU020-90UM	GMAX4002	1/1.7''	4 μm	Global	2048 × 1200	150 fps	4 μs ~ 10 sec	Typ. 2.0 W@5 VDC	A
MV-CU050-60UM	HK	1/2.5"	2.2 μm	Rolling	2592 × 1944	48.2 fps	12 μs~1.25 sec	Typ. 2.7 W@5 VDC	A
MV-CU050-90UM	GMAX2505	1/2"	2.5 μm	Global	2600 × 2160	58.8 fps	3 μs~10 sec	Typ. 2.1 W@5 VDC	B
MV-CU050-90UC	GMAX2505	1/2"	2.5 μm	Global	2600 × 2160	58.8 fps	3 μs~10 sec	Typ. 2.2 W@5 VDC	B
MV-CU060-10UM	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	59.6 fps	8 μs~1 sec	Typ. 1.9 W@5 VDC,USB	A
MV-CU060-10UC	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	59.6 fps	8 μs~1 sec	Typ. 1.9 W@5 VDC,USB	A
MV-CU120-10UM	IMX226	1/1.7"	1.85 μm	Rolling	4024 × 3036	29.2fps	20 μs~0.5 sec	Typ. 1.9 W@5 VDC	A
MV-CU120-10UC	IMX226	1/1.7"	1.85 μm	Rolling	4024 × 3036	29.2fps	20 μs~0.5 sec	Typ. 2.0 W@5 VDC	A

Dimension



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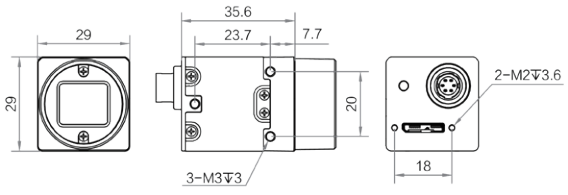
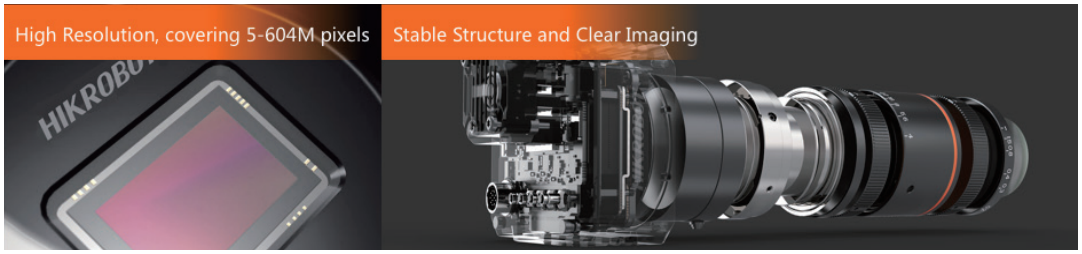


B

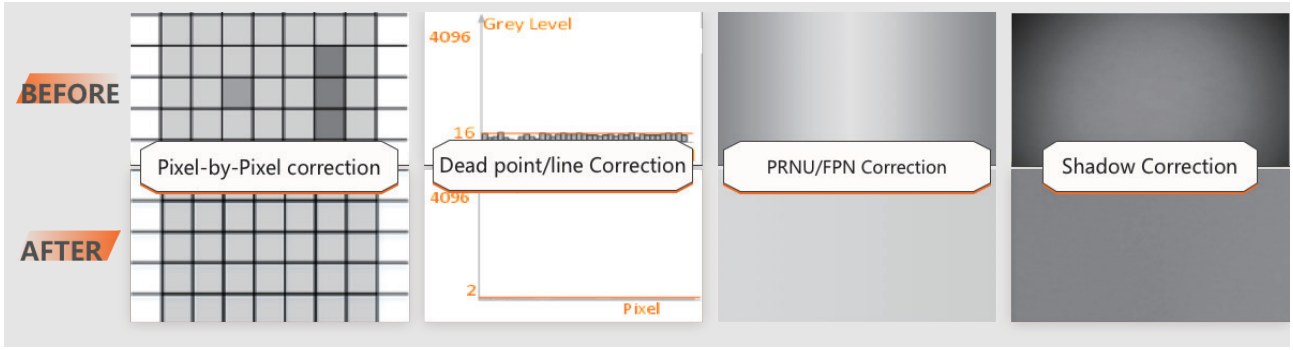
Unit:mm

CH Series Area Scan Camera

High-end product series designed for high-precision application and development in Panel, electronic semiconductor, new energy and other industries. which covers data interfaces of GigE, USB 3.0, 10 GigE, Camera Link, CoaXPress, XoFLink.



High-end area scan camera with high resolution coverage



Rich ISP algorithm

CH Series GigE Area Scan Camera

CE KC RoHS

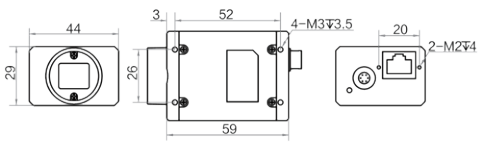
Dimension

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH100-60GM	HK	1"	3.45 μm	Global	4096 × 2460	12 fps	NE:80 μs~10 sec	Typ. 3.1 W@12 VDC	C	A
MV-CH100-60GC	HK	1"	3.45 μm	Global	4096 × 2460	12 fps	NE:80 μs~10 sec	Typ. 3.5 W@12 VDC	C	A
MV-CH120-10GM	IMX304	1.1"	3.45 μm	Global	4096 × 3000	9.4 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.9 W@12 VDC	C	B
MV-CH120-10GC	IMX304	1.1"	3.45 μm	Global	4096 × 3000	9.4 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 3.0 W@12 VDC	C	B
MV-CH120-20GM	XGS12000	1"	3.2 μm	Global	4096 × 3072	9.6 fps	USE: 52 μs~161 μs NE: 162 μs~10 sec	V2.6 W@12 VDC	C	B
MV-CH120-20GC	XGS12000	1"	3.2 μm	Global	4096 × 3072	9.6 fps	USE: 52 μs~161 μs NE: 162 μs~10 sec	Typ. 2.7 W@12 VDC	C	B
MV-CH120-60GM	BSI	1.1"	3.45 μm	Global	4096 × 3000	9.6 fps	NE: 50 μs ~ 10 sec	Typ. 3.0 W@12 VDC	C	A
MV-CH120-60GC	BSI	1.1"	3.45 μm	Global	4096 × 3000	28 fps	NE: 50 μs ~ 10 sec	Typ. 3.0 W@12 VDC	C	A
MV-CH140-60GM	HK	1"	3 μm	Global	4708 × 2824	9 fps	NE:80 μs ~ 10 sec	Typ. 3.0 W@12 VDC	C	A

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH140-60GC	HK	1"	3 μm	Global	4708 × 2824	9 fps	NE:80 μs ~ 10 sec	Typ. 3.5 W@12 VDC	C	A
MV-CH160-60GM	HK	1.1"	3.2 μm	Global	4000 × 4000	7.25 fps	NE: 12 μs~10 sec	Typ. 3.72 W@12 VDC	C	A
MV-CH250-21GM	PYTHON25K	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	4.64 fps	NE: 80 μs ~ 10 sec	Typ. 7.8 W@12 VDC	F	C
									M58	D
MV-CH250-21GC	PYTHON25K	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	4.64 fps	NE: 80 μs ~ 10 sec	Typ. 7.8 W@12 VDC	F	C
									M58	D
MV-CH250-90GM	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	4.5 fps	NE: 12 μs~10 sec	Typ. 3.1 W@12 VDC	C	A
MV-CH250-90GC	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	4.5 fps	NE: 12 μs~10 sec	Typ. 3.2 W@12 VDC	C	A
MV-CH250-90GN	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	4.5 fps	NE: 12 μs~10 sec	Typ. 3.1 W@12 VDC	C	A
MV-CH310-10GM	IMX342	22.3 mm × 16.7 mm	3.45 μm	Global	6464 × 4852	3.9 fps	USE: 3 us ~ 33 us NE: 36 μs ~ 2 Sec	Typ. 9 W@12 VDC	F	C
									M58	D
MV-CH310-10GC	IMX342	22.3 mm × 16.7 mm	3.45 μm	Global	6464 × 4852	3.9 fps	USE: 3 us ~ 33 us NE: 36 μs ~ 10 Sec	Typ. 9 W@12 VDC	F	C
									M58	D
MV-CH1520-90GM *	GMAX32152	53.0 mm × 29.4 mm	3.2 μm	Global	16320 × 9600	5 fps	NE: 20 μs ~ 10 sec	Typ. 9 W@24 VDC	M72	E

Notice: * will be released soon, please consult details with sales representative USE: Ultra-short exposure mode NE: Normal exposure mode

Dimension



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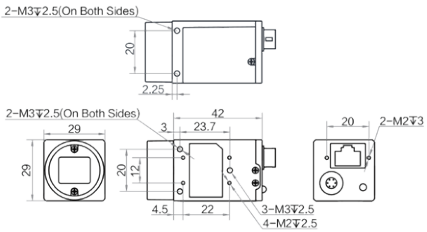

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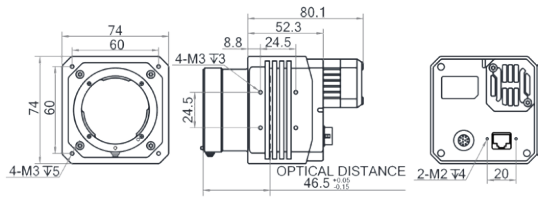

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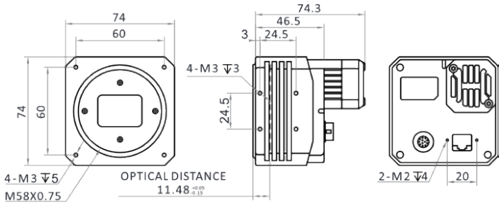

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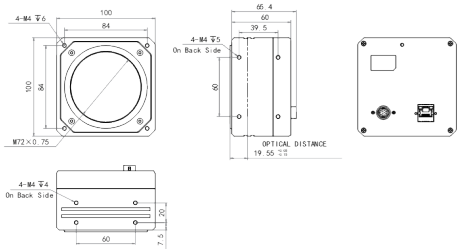


E

Unit:mm

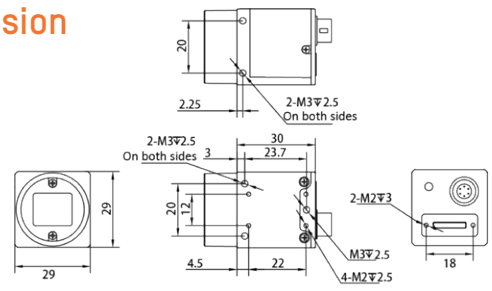
CH Series USB3.0 Area Scan Camera

Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH050-10UM	IMX250	2/3"	3.45 μm	Global	2448 × 2048	74.1 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 3.3 W@5 VDC	C	A
MV-CH050-10UC	IMX250	2/3"	3.45 μm	Global	2448 × 2048	74.1 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.8 W@5 VDC	C	A
MV-CH050-10UP	IMX250	2/3"	3.45 μm	Global	2448 × 2048	74.1 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 3.3 W@5 VDC	C	A
MV-CH100-60UM	HK	1"	3.45 μm	Global	4096 × 2460	36 fps	NE: 80 μs ~ 10 sec	Typ. 3.6 W@5 VDC	C	C
MV-CH100-60UC	HK	1"	3.45 μm	Global	4096 × 2460	36 fps	NE: 80 μs ~ 10 sec	Typ. 4.0 W@5 VDC	C	C
MV-CH120-10UM	IMX304	1.1"	3.45 μm	Global	4096 × 3000	30.5 fps	USE:1 μs~14 μs NE:15 μs~10 sec	Typ. 2.9 W@5 VDC	C	A
MV-CH120-10UC	IMX304	1.1"	3.45 μm	Global	4096 × 3000	30.5 fps	USE:1 μs~14 μs NE:15 μs~10 sec	Typ. 2.9 W@5 VDC	C	A
MV-CH120-20UM	XGS12000	1"	3.2 μm	Global	4096 × 3072	28 fps	USE: 52 μs~161 μs NE: 162 μs~10 sec	Typ. 2.9 W@5 VDC	C	A
MV-CH120-20UC	XGS12000	1"	3.2 μm	Global	4096 × 3072	28 fps	USE: 10 μs~56 μs NE: 57 μs~10 sec	Typ. 3.2 W@5 VDC	C	A
MV-CH120-60UM	HK	1.1"	3.45 μm	Global	4096 × 3000	30 fps	NE: 50 μs ~ 10 sec	Typ. 3.0 W@12 VDC	C	A
MV-CH120-60UC	HK	1.1"	3.45 μm	Global	4096 × 3000	30 fps	NE: 50 μs ~ 10 sec	Typ. 3.0 W@12 VDC	C	A
MV-CH120-60VM *	HK	1.1"	3.45 μm	Global	4096 × 3000	60 fps	NE: 50 μs ~ 10 sec	Typ. 4.2 W@12 VDC	C	B
MV-CH120-60VC *	HK	1.1"	3.45 μm	Global	4096 × 3000	60 fps	NE: 50 μs ~ 10 sec	Typ. 4.2 W@12 VDC	C	B
MV-CH140-60UM	HK	1"	3 μm	Global	4708 × 2824	27 fps	NE: 80 μs ~ 10 sec	Typ. 4.0 W@5 VDC	C	C
MV-CH250-90UM	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	14 fps	NE: 12 μs~10 sec	Typ. 3.6 W@5 VDC	C	C
MV-CH250-90UC	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	14 fps	NE: 12 μs~10 sec	Typ. 3.6 W@5 VDC	C	C
MV-CH250-90UN	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	14 fps	12 μs ~ 10 sec	Typ. 3.6 W@5 VDC	C	C
MV-CH250-90VM	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	28 fps	NE:12 μs~10 sec	Typ. 4.5 W@5 VDC	C	B
MV-CH250-90VC	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	30 fps	USE: 1 μs ~ 8 μs NE: 9 μs ~ 10 sec	Typ. 4.8 W@5 VDC	C	B

Notice: * will be released soon, please consult details with sales representative
P=Polarization USE: Ultra-short exposure mode NE: Normal exposure mode

Dimension



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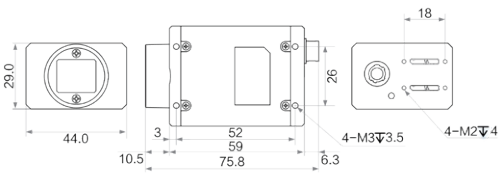

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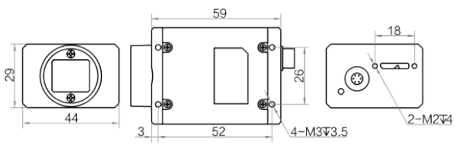


C

Unit:mm

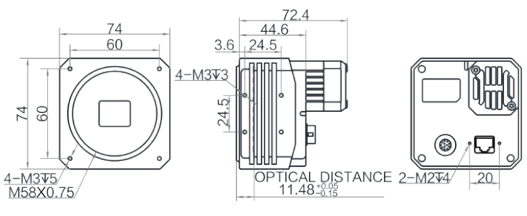
CH Series 10GigE Area Scan Camera

Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH120-15TM	IMX253	1.1"	3.45 μm	Global	4096 × 3000	68.3 fps	USE: 2 μs~14 μs NE: 15 μs~10 sec	Typ. 9.6 W@24 VDC	M58	A
MV-CH120-15TC	IMX253	1.1"	3.45 μm	Global	4096 × 3000	68.3 fps	USE: 2 μs~14 μs NE: 15 μs~10 sec	Typ. 10.1 W@24 VDC	M58	A
MV-CH120-90TM *	GMAX3412	1.1"	3.4 μm	Global	4096 × 3000	92 fps	NE: 6 μs ~ 10 sec	Typ. 10.2 W@12 VDC	C	B
MV-CH240-10TM	IMX540	1.2"	2.74 μm	Global	5328 × 4600	35.1 fps	USE: 1 μs~7 μs NE: 8 μs~10 sec	Typ. 10 W@12 VDC	C M58	C D
MV-CH250-25TM	PYTHON25K	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	40 fps	NE: 45 μs ~ 10 sec	Typ. 12.48 W@24 VDC	F	E
	PYTHON25K	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	40 fps	NE: 45 μs ~ 10 sec	Typ. 12.48 W@24 VDC	M58	F
MV-CH250-25TC	PYTHON25K	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	40 fps	NE: 45 μs ~ 10 sec	Typ. 12.48 W@24 VDC	F	E
	PYTHON25K	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	40 fps	NE: 45 μs ~ 10 sec	Typ. 12.48 W@24 VDC	M58	F
MV-CH250-60TM	HK	23 mm × 23 mm	4.5 μm	Global	5120 × 5120	31.7 fps	NE: 15 μs~10 sec	Typ. 15.1W@12 VDC	M58	G
MV-CH250-90TM	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	41.5 fps	NE: 13 μs to 10 sec	Typ. 9.7 W@12 VDC	C M58	H G
MV-CH250-90TC	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	41.5 fps	NE: 13 μs to 10 sec	Typ. 9.7 W@12 VDC	C M58	H G
MV-CH250-90TN	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	41.5 fps	USE: 3 μs ~ 8 μs NE: 9 μs ~ 10 sec	Typ. 9.7 W@12 VDC	M58	G
MV-CH250-91TM *	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	41.5 fps	USE: 3 μs ~ 8 μs NE: 9 μs ~ 10 sec	Typ. 11.5 W@12 VDC	C	I
MV-CH250-92TM	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	41.5 fps	NE: 13 μs ~ 10 sec	Typ. 10.5 W@12 VDC	C	B
MV-CH310-10TM	IMX342	22.3 mm × 16.7 mm	3.45 μm	Global	6464 × 4852	17.2 fps	NE: 4 μs~10 sec	Typ. 11.2 W@12 VDC	M58	J
MV-CH310-10TC	IMX342	22.3 mm × 16.7 mm	3.45 μm	Global	6464 × 4852	17.2 fps	NE: 4 μs~10 sec	Typ. 11.4 W@12 VDC	M58	J
MV-CH320-60TM *	BSI	22.6 mm × 12.7 mm	2.9 μm	Rolling	7744 × 4336	35fps	NE: 50 μs ~ 10 sec	Typ. 11 W@12 VDC	M58	D
MV-CH320-60TC *	BSI	22.6 mm × 12.7 mm	2.9 μm	Rolling	7744 × 4336	35fps	NE: 50 μs ~ 10 sec	Typ. 12 W@12 VDC	M58	D
MV-CH500-90TM	GMAX	22.4 mm × 22.4 mm	3.2 μm	Global	7008 × 7000	15.5 fps	15 μs ~ 10 sec	11 W@12 VDC	F M58	K G
MV-CH500-90TC	GMAX	22.4 mm × 22.4 mm	3.2 μm	Global	7008 × 7000	15.5 fps	NE: 15 μs~10 sec	Typ. 12 W@12 VDC	M58	G
MV-CH650-90TM	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	17.2 fps	NE: 18 μs~10 sec	Typ. 10.2 W@12 VDC	F M58	K G
MV-CH650-90TC	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	17.2 fps	NE: 18 μs~10 sec	Typ. 11.6 W@12 VDC	F M58	K G
MV-CH800-60TM *	BSI	30 mm × 22.4 mm	2.9 μm	Rolling	10304 × 7712	15fps	NE: 50 μs ~ 10 sec	Typ. 12 W@12 VDC	M58	D
MV-CH800-60TC *	BSI	30 mm × 22.4 mm	2.9 μm	Rolling	10304 × 7712	15fps	NE: 50 μs ~ 10 sec	Typ. 13 W@12 VDC	M58	D
MV-CH1030-90TM	GMAX32103	36.1 mm × 29.4 mm	3.2 μm	Global	11276 × 9200	10fps	NE: 15 μs~10 sec	Typ. 15 W@12 VDC	M58	D
MV-CH1030-90TC	GMAX32103	36.1 mm × 29.4 mm	3.2 μm	Global	11276 × 9200	10fps	NE: 15 μs~10 sec	Typ. 15 W@12 VDC	M58	D
MV-CH1510-10FM	IMX411	66.7 mm	3.76 μm	Rolling	14208 × 10640	6.2 fps	NE: 30 μs~10 sec	TEC off: Typ. 11.3 W@24 VDC TEC on: Typ. 49 W@24 VDC*	M72	L
MV-CH1510-10FC	IMX411	66.7 mm	3.76 μm	Rolling	14208 × 10640	6.2 fps	NE: 15 μs ~ 10 sec	TEC off: Typ. 13.2 W@24 VDC TEC on: Typ. 51.22 W@24 VDC*	M72	L

Notice: * will be released soon, please consult details with sales representative
USE: Ultra-short exposure mode
NE: Normal exposure mode

Dimension



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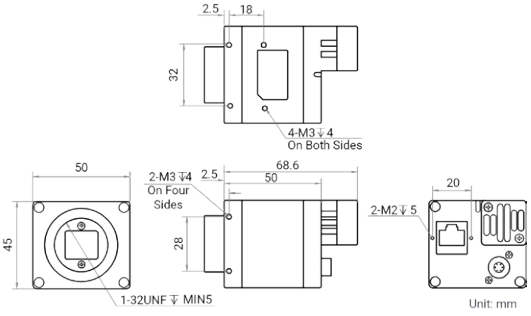

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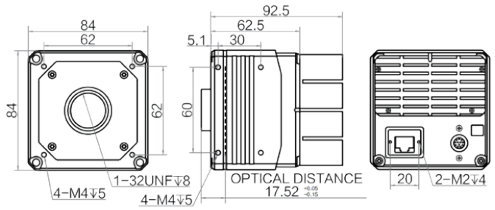

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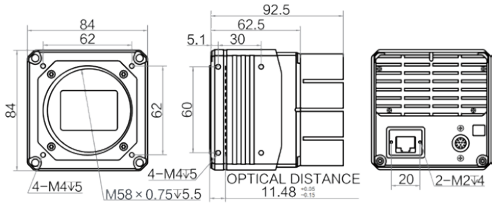

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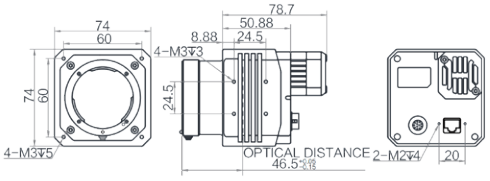
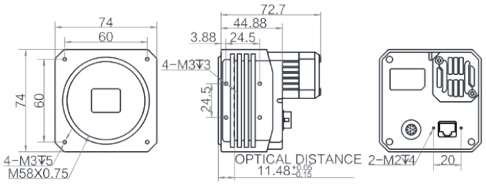


E



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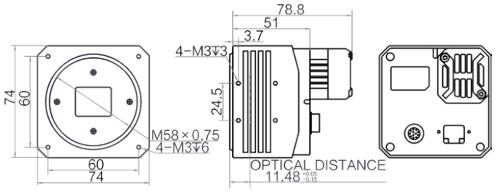

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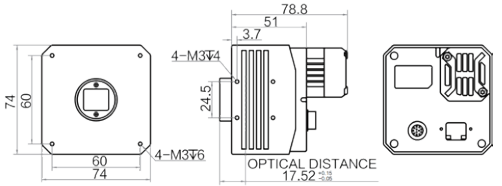

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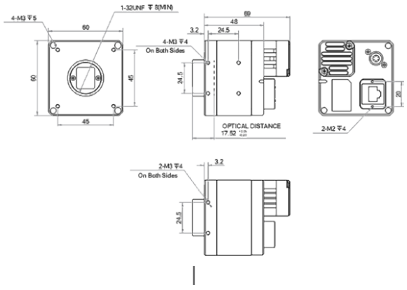

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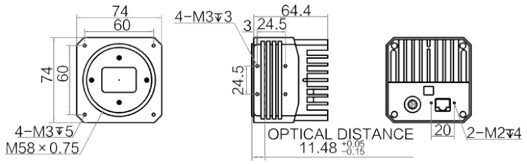

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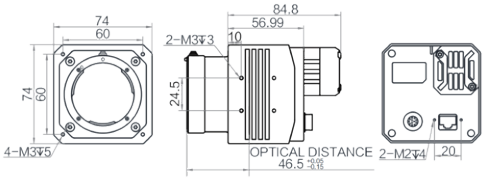

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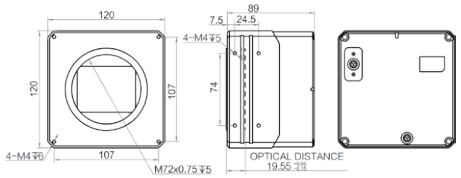


L

Unit:mm

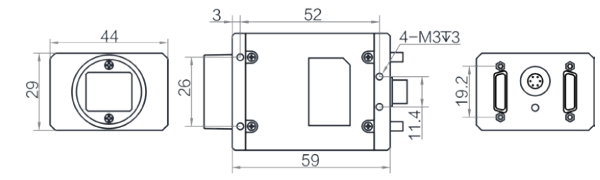
CH Series Camera Link Area Scan Camera

Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH040-A0CM	HK	1"	5.5μm	Global	2048 × 2048	180 fps	NE: 34 μs~10 sec	Typ. 3.5 W@12 VDC	C	A
MV-CH050-10CM	IMX250	2/3"	3.45 μm	Global	2432 × 2048	140 fps	NE: 15 μs~10 sec	Typ. 3.3 W@12 VDC	C	A
MV-CH050-10CC	IMX250	2/3"	3.45 μm	Global	2432 × 2048	140 fps	NE: 15 μs~10 sec	Typ. 3.41 W@12 VDC	C	A
MV-CH050-11CM	IMX264	2/3"	3.45 μm	Global	2448 × 2048	35 fps	NE: 15 μs~10 sec	Typ. 3.25 W@12 VDC	C	A
MV-CH120-10CM	IMX253	1.1"	3.45 μm	Global	3840 × 3000	69.8 fps	NE: 1 μs~10 sec	Typ. 4.51 W@12 VDC	C	A
MV-CH120-10CC	IMX253	1.1"	3.45 μm	Global	3840 × 3000	68.1 fps	NE: 1 μs~10 sec	Typ. 4.5 W@12 VDC	C	A
MV-CH120-11CM	IMX304	1.1"	3.45 μm	Global	4096 × 3000	23.4 fps	USE: 1 μs~14 sec NE: 15 μs~10 sec	Typ. 3.48 W@12 VDC	C	A
MV-CH1010-10CM	IMX461	55 mm	3.76 μm	Rolling	11648 × 8740	8.1 fps	NE: 14μs~10 sec	Typ. 14 W@24 VDC	M72	B
								TEC off: Typ. 14 W@24 VDC TEC on: Typ. 48 W@24 VDC		C
MV-CH1010-10CC	IMX461	55 mm	3.76 μm	Rolling	11648 × 8740	8.1 fps	NE: 14μs~10 sec	TEC off: 14 W@24 VDC TEC on: 48 W@24 VDC	M72	C
								Typ.14 W@24 VDC		B

Notice: USE: Ultra-short exposure mode NE: Normal exposure mode

Dimension



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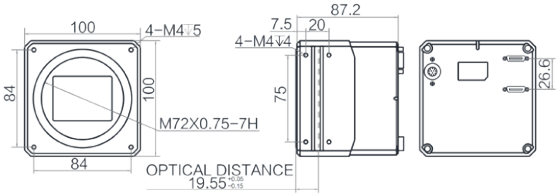

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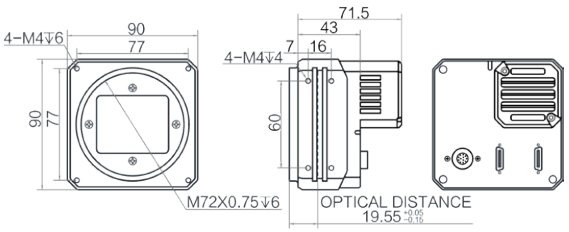


C

Unit:mm

CH Series CoaXPress Area Scan Camera

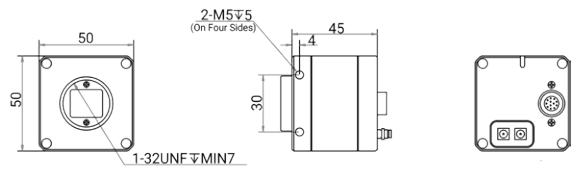
Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH050-90XM	GMAX2505	1/2''	2.5 μm	Global	2592 × 2160	213 fps	5 μs ~ 10 sec	Typ. 5.3 W @12 VDC	C	A
MV-CH050-90XC	GMAX2505	1/2''	2.5 μm	Global	2592 × 2160	213 fps	5 μs ~ 10 sec	Typ. 5.3 W @12 VDC	C	A
MV-CH120-40XM	CMV12000	22.5 mm × 16.9 mm	5.5μm	Global	4096 × 3072	188 fps	34 μs~10 sec	Typ. 10 W@12 VDC	M58	B
MV-CH120-90X2M *	GMAX3412	1.1''	3.4 μm	Global	4096 × 3072	95 fps	6 μs ~ 10 sec	Typ. 5.8 W @24 VDC	C	A
MV-CH120-90Y1M *	GMAX3412	1.1"	3.4 μm	Global	4096 × 3072	93.9 fps	6 μs ~ 10 sec	Typ. 5 W @12 VDC	C	C
MV-CH120-90Y1C *	GMAX3412	1.1"	3.4 μm	Global	4096 × 3072	93.9 fps	6 μs ~ 10 sec	Typ. 5 W @12 VDC	C	C
MV-CH120-90Y2M *	GMAX3412	1.1''	3.4 μm	Global	4096 × 3072	145fps	6 μs ~ 10 sec	Typ. 5.8 W @24 VDC	C	A
MV-CH140-90YM *	Gsprint5514	25.34 mm × 16.9 mm	5.5 μm	Global	4608 × 3072	340 fps	4 μs ~ 10 sec	Typ. 18 W @12 VDC	M58	B
MV-CH210-90YM	Gsprint 4521	23.04 mm × 18.43 mm	4.5 μm	Global	5120 × 4096	222 fps	4 μs~10 sec	Typ. 18 W@24 VDC	M58	D
MV-CH210-90YC	Gsprint 4521	23.04 mm × 18.43 mm	4.5 μm	Global	5120 × 4096	222 fps	4 μs~10 sec	Typ. 16.3 W@24 VDC	M58	D
MV-CH250-20XM	PYTHON25K	23 mm (H) x 23 mm (V)	4.5 μm	Global	5120 × 5120	80 fps	33 us ~ 10 sec	Typ. 10.5 W @24 VDC	M58	D
MV-CH250-20XC	PYTHON25K	23 mm (H) x 23 mm (V)	4.5 μm	Global	5120 × 5120	80 fps	33 us ~ 10 sec	Typ. 10.5 W @24 VDC	M58	D
MV-CH250-90XM	GMAX0505	1.1''	2.5 μm	Global	5120 × 5120	41.5 fps	13 μs ~ 10 sec	Typ. 7.0 W @12 VDC	C	A
MV-CH250-90XC *	GMAX0505	1.1''	2.5 μm	Global	5120 × 5120	41.5 fps	USE: 3 μs ~ 8 μs NE: 10 μs ~ 10 sec	Typ. 7.0 W @12 VDC	C	A
MV-CH250-90YM V2.0	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	150 fps	USE:3 μs ~ 8 sec NE:10 μs ~ 10 sec	Typ. 9.9 W@12 VDC	M58	E

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH250-90YC V2.0	GMAX0505	1.1"	2.5 μm	Global	5120 × 5120	150 fps	USE: 3 μs ~ 8 μs NE: 10 μs ~ 10 sec	Typ. 9.9 W @12 VDC	C	E
									M58	F
MV-CH650-90XM	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	31.5 fps	14 μs~10 sec	Typ. 10.5W@12 VDC	F	G
									M58	H
MV-CH650-90XC	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	31.5 fps	14 μs~10 sec	Typ. 10.2 W@12 VDC	F	G
									M58	H
MV-CH650-90YM	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	71 fps	15 μs~10 sec	Typ. 13.0W@12 VDC	M58	D
MV-CH650-90YM V2.0	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	71 fps	12 μs~10 sec	Typ. 14.4W@12 VDC	M58	B
MV-CH650-90YC	GMAX3265	29.9 mm × 22.4 mm	3.2 μm	Global	9344 × 7000	71 fps	15 μs~10 sec	Typ. 13.2W@12 VDC	M58	D
MV-CH1510-10XM	IMX411	66.7 mm	3.76 μm	Rolling	14208 × 10640	6.2 fps	15 μs~10 sec	Typ. 18 W@24 VDC	M72	I
MV-CH1510-10XC	IMX411	66.7mm	3.76 μm	Rolling	14208 × 10640	6.2 fps	15 μs~10 sec	Typ. 21 W@24 VDC	M72	I
MV-CH1510-11XM	IMX411	66.7mm	3.76 μm	Rolling	14208 × 10640	6.2 fps	15 μs~10 sec	TEC off: Typ. 21 W@24 VDC TEC on: Typ. 55 W@24 VDC	M72	J
MV-CH1510-11XC	IMX411	66.7mm	3.76 μm	Rolling	14208 × 10640	6.2 fps	15 μs~10 sec	TEC off: Typ. 22 W@24 VDC TEC on: Typ. 60 W@24 VDC	M72	J
MV-CH6040-10XM	IMX411	66.7mm	3.76 μm	Rolling	28416 × 21280	6.2 fps	15 μs~1 sec	Typ. 15 W@24 VDC	M72	K
MV-CH6040-10XC	IMX411	66.7mm	3.76 μm	Rolling	28416 × 21280	6.2 fps	15 μs~1 s	Typ. 15 W@24 VDC	M72	K

Notice: * will be released soon, please consult details with sales representative
USE:Ultra-short exposure mode
NE:Normal exposure mode

Dimension



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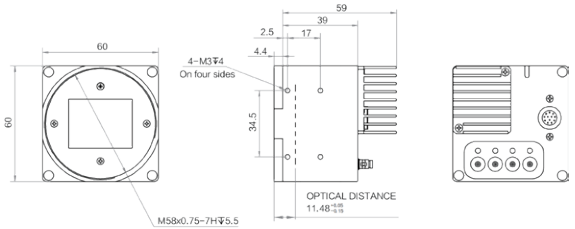

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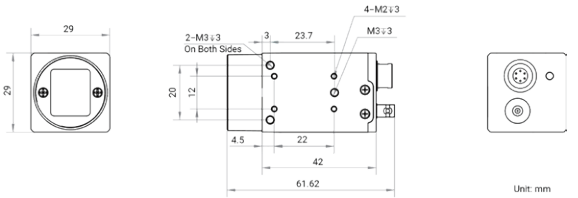

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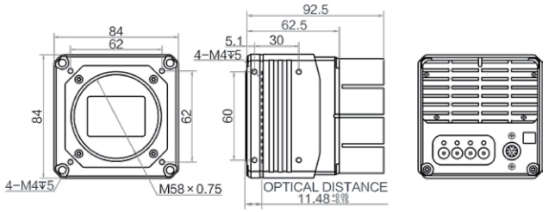

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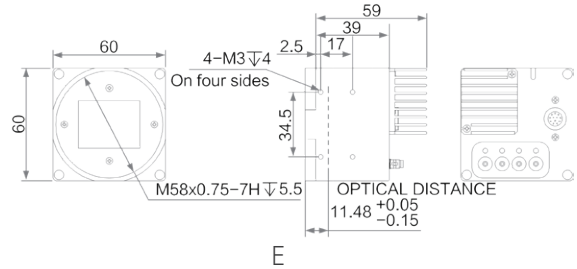

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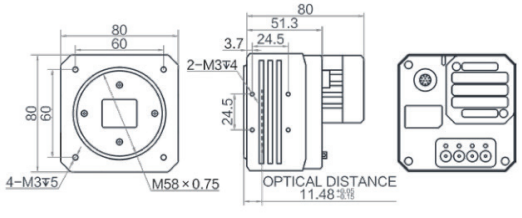

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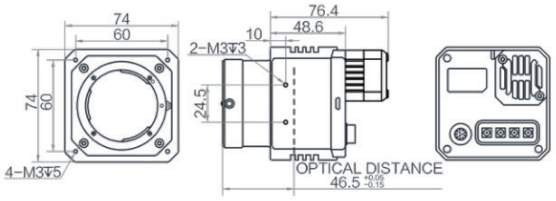

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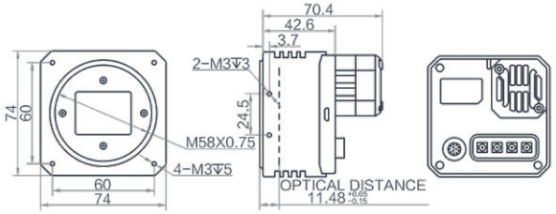

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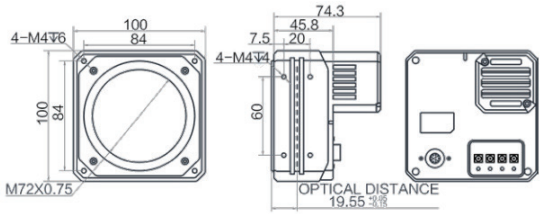

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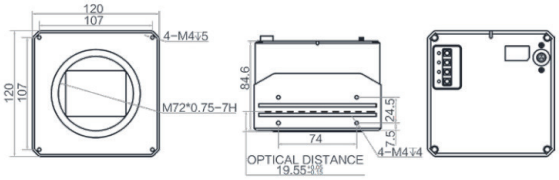

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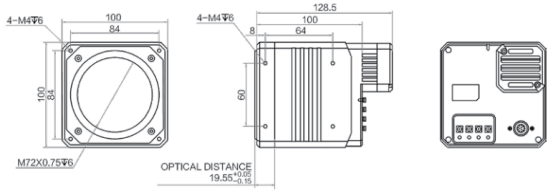


K

Unit:mm

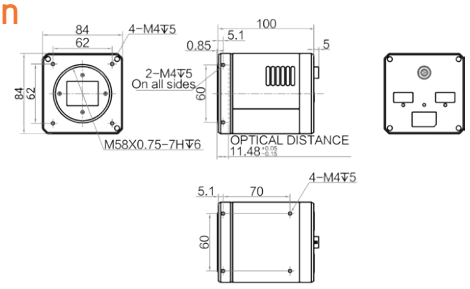
CH Series XoFLink Area Scan Camera

Specifications

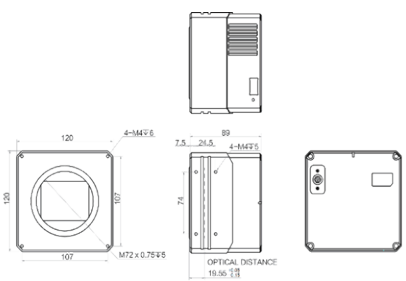
Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Lens mount	Label
MV-CH210-90Q2M	Gsprint 4521	23.04 mm × 18.43 mm	4.5 μm	Global	5120 × 4096	540 fps	4 μs ~ 10 sec	Typ. 25 W@24 VDC	M58	A
MV-CH2430-10QM *	BSI	64.84mm	2.81 μm	Rolling	19200 × 12800	12.4 fps	15 μs ~ 10 sec	TBD	M72	B
MV-CH2430-10QC *	BSI	64.84mm	2.81 μm	Rolling	19200 × 12800	12.4 fps	15 μs ~ 10 sec	TBD	M72	B

Notice: * will be released soon, please consult details with sales representative

Dimension



A

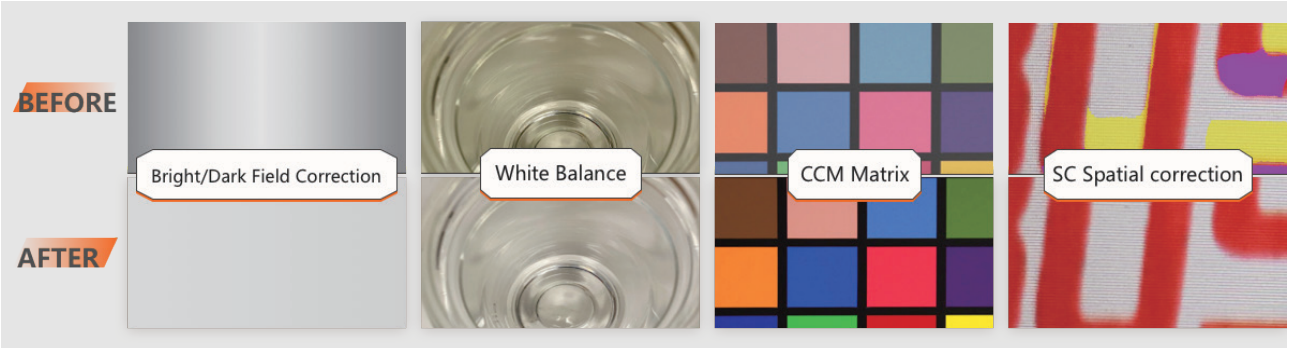


B

Unit:mm

Line Scan Camera

The CL series covers 2K-16K pixels and equipped with GigE/USB3.0/ Camera Link/CoaXPress/XoF interfaces, support a variety of ISP and algorithms that can fulfill various application needs of line scan cameras.



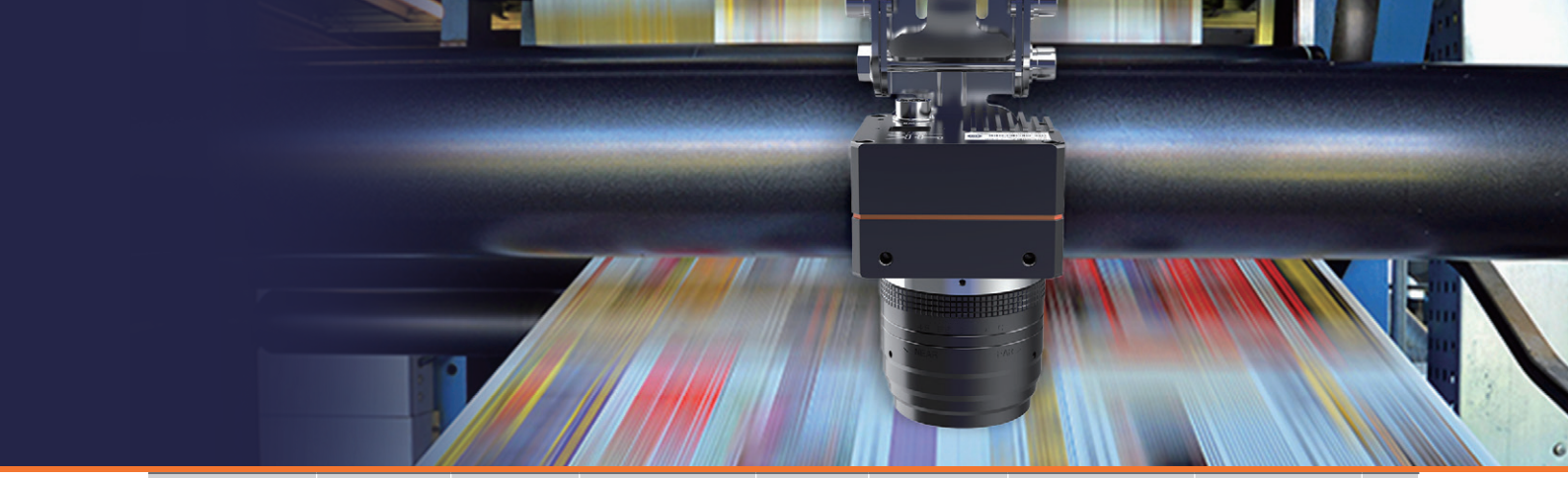
Diversified processing, flexible Acquisition

High-Bandwidth Mode, high line frequency transmission

CL Series GigE Line Scan Camera

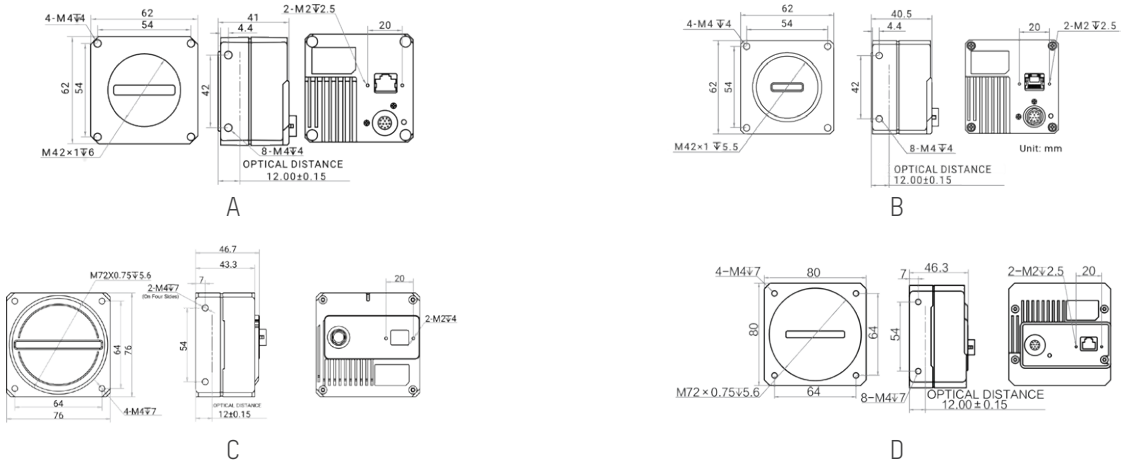
Specifications

Model	Pixel size	Resolution	Max. line rate	Mono/color	Power supply	Power consumption	Work temperature	Label
MV-CL022-91GM	14 μm x 14 μm	2048 × 1	100 kHz@HB peak	Mono	12~24 VDC,PoE	Typ. 5 W@12 VDC	-20~50℃	A
MV-CL022-91GC	14 μm x 14 μm	2048 × 2	40 kHz@HB peak	Color	12~24 VDC,PoE	Typ. 7.4 W@12 VDC	-20~50℃	A
MV-CL024-91GM	7μm x 7 μm	2048 × 2	86 kHz@HB peak	Mono	12~24 VDC,PoE	Typ. 5.2 W@12 VDC	-20~55℃	B
MV-CL024-91GC	7 μm x 7 μm	2048 × 3	70 kHz@HB peak	Color	12~24 VDC,PoE	Typ. 5.7 W@12 VDC	-20~55℃	B
MV-CL042-91GM	7 μm x 7 μm	4096 × 2	80 kHz@HB peak	Mono	12~24 VDC,PoE	Typ. 5.8 W@12 VDC	-20~55°C	A
MV-CL042-91GM-PL	7 μm × 7 μm	4096 × 2	28 kHz	Mono	12 ~ 24 VDC	5.8 W@12 VDC	-10~55°C	A
MV-CL042-91GC	7 μm x 7 μm	4096 × 2	80 kHz@HB peak	Color	12~24 VDC,PoE	Typ. 6.6 W@12 VDC	-20~55°C	A
MV-CL042-91GC-PL	7 μm × 7 μm	4096 × 2	28 kHz	Color	12 ~ 24 VDC	6.6 W@12 VDC	-20~55°C	A



Model	Pixel size	Resolution	Max. line rate	Mono/color	Power supply	Power consumption	Work temperature	Label
MV-CL043-A1GM-V2	7 μm × 7 μm	4096 × 3	28 kHz	Mono	12 ~ 24 VDC	3.9 W@12 VDC	-20~50°C	A
MV-CL043-A1GC	7 μm × 7 μm	4096 ×3	40 kHz@ROI	Color	12 ~ 24 VDC	4.2 W@12 VDC	-20~50°C	A
MV-CL082-92GM	7 μm x 7 μm	8192 × 2	33.3 kHz@HB peak	Mono	12~24 VDC	Typ. 6.8 W @12 VDC	-20~50°C	C
MV-CL083-92GC	7 μm x 7 μm	8192 × 3	33 kHz@HB peak	Color	12~24 VDC	Typ. 7.7 W @12 VDC	-20~50°C	C
MV-CL084-91GM	5 μm x 5 μm	8192 × 4	40 kHz@HB peak	Mono	12~24 VDC	Typ. 12.4 W@12 VDC	-20~50°C	D
MV-CL086-91GC	5 μm x 5 μm	8192 × 6	40 kHz@HB peak	Color	12~24 VDC	Typ. 13 W@12 VDC	-20~50°C	D

Dimension



Unit:mm

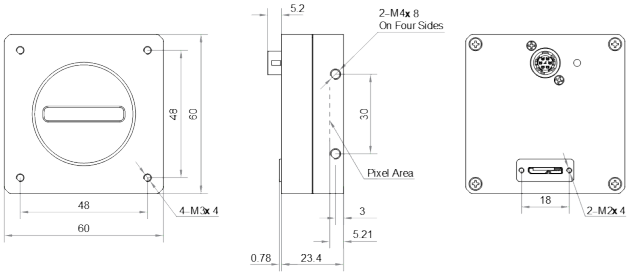
CL Series USB3.0 Line Scan Camera

Specifications

Model	Pixel size	Resolution	Max. line rate	Mono/color	Power supply	Power consumption	Work temperature
MV-CL021-60UM *	10μm × 180μm	2048 × 1	66 kHz	Mono	12 ~ 24 VDC	Typ. 5W@24VDC	-20~50℃

Notice: * will be released soon, please consult details with sales representative

Dimension



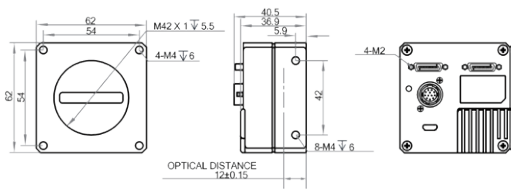
Unit:mm

CL Series Camera Link Line Scan Camera

Specifications

Model	Pixel size	Resolution	Max. line rate	Mono/color	Power supply	Power consumption	Work temperature	Label
MV-CL042-91CM	7 μm × 7 μm	4096 × 2	100 kHz	Mono	12~24 VDC	Typ. 5.5 W@12 VDC	-20~55°C	A
MV-CL042-91CM-V2	7 μm × 7 μm	4096 × 2	195 kHz	Mono	12~24 VDC	Typ. 8 W@12 VDC	-20~45°C	A
MV-CL042-91CC	7 μm × 7 μm	4096 × 2	100 kHz	Color	12~24 VDC	Typ. 6.1 W@12 VDC	-20~55°C	A
MV-CL082-92CM	7 μm × 7 μm	8192 × 2	100 kHz	Mono	12~24 VDC	Typ. 9.8 W@12 VDC	-20~55°C	B
MV-CL083-92CC	7 μm × 7 μm	8192 × 3	66.6 kHz	Color	12~24 VDC	Typ. 9.9 W@12 VDC	-20~55°C	B
MV-CL084-91CM	5 μm × 5 μm	8192 × 4	100 kHz	Mono	12~24 VDC	Typ. 9.7 W@12 VDC	-20~55°C	C
MV-CL084-91CM-PRO	5 μm × 5 μm	8192 × 16	100 kHz	Mono	24 VDC	Typ. 22.9 W@24 VDC	-20~60°C	D
MV-CL086-91CC	5 μm × 5 μm	8192 × 6	33.7 kHz	Color	12~24 VDC	Typ. 9.6 W@12 VDC	-20~50°C	C
MV-CL086-91CC-PRO	5 μm × 5 μm	8192 × 12	34 kHz	Color	24 VDC	Typ. 20.5 W@24 VDC	-20~60°C	D
MV-CL162-91CM	3.5 μm × 3.5 μm	16384 × 2	50 kHz	Mono	12~24 VDC	Typ. 10 W^E@12 VDC	-20~55°C	B

Dimension



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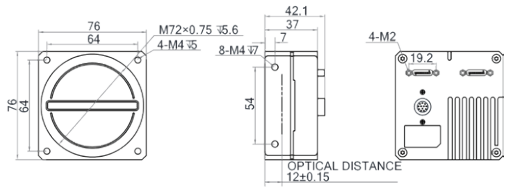

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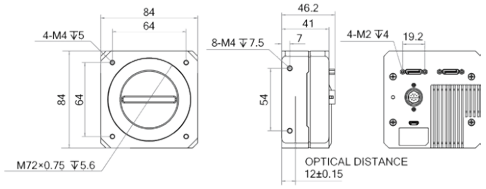

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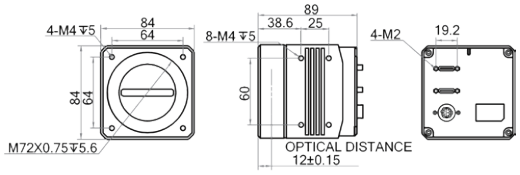


D

Unit:mm

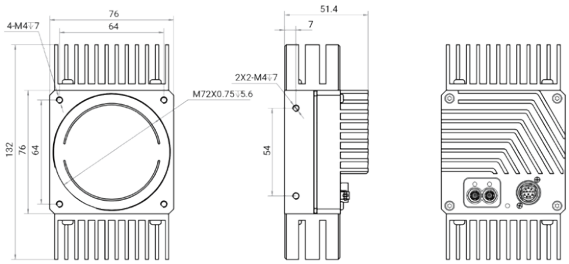
CL Series CoXPress Line Scan Camera

Specifications

Model	Pixel size	Resolution	Max. line rate	Mono/color	Power supply	Power consumption	Work temperature
MV-CL084-91Y2M *	7 μm	8192 × 4	200 kHz	Moon	12 ~ 24 VDC	Typ. 15.5W@24 VDC	-20 ~ 50°C

Notice: * will be released soon, please consult details with sales representative

Dimension



Unit:mm

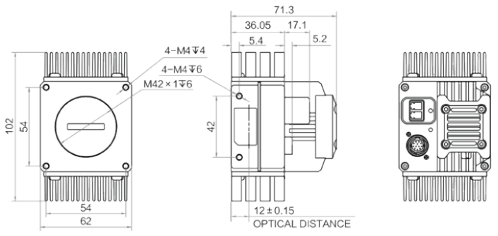
CL Series XoFLink Line Scan Camera

Specifications

Model	Pixel size	Resolution	Max. line rate	Mono/color	Power supply	Power consumption	Work temperature	Label
MV-CL042-91FC	7 x 7 μm	4096 × 2	100 kHz	Color	12 ~ 24 VDC	Typ. 14 W@24 VDC	-20~55°C	B
MV-CL082-90F1M *	7 μm × 7 μm	8192 × 4	120 kHz	Mono	12 ~ 24 VDC	Typ. 5.5W@24 VDC	-20 ~ 50°C	C
MV-CL082-91F2M	7 x 7 μm	8192 × 2	200 kHz	Mono	12 ~ 24 VDC	Typ. 14 W@24 VDC	-20~55°C	C
MV-CL083-91F2C	7 x 7 μm	8192 × 3	66.6kHz	Color	12 ~ 24 VDC	Typ. 14 W@24 VDC	-20~55°C	C
MV-CL084-91F2M	7 μm × 7 μm	8192 × 4	200 kHz	Mono	12~24 VDC	Typ. 15.4 W@24 VDC	-20~50°C	C
MV-CL162-91F2M	3.5 x 3.5 μm	16384 × 2	120 kHz	Mono	12 ~ 24 VDC	Typ. 14 W@24 VDC	-20~55°C	C
MV-CL166-91F2C	5 x 5 μm	16384 × 6	47 kHz	Color	24 VDC	Typ. 22.5 W@24 VDC	-20~55°C	D

Notice: * will be released soon
Paired with MV-GS1002F frame grabber

Dimension



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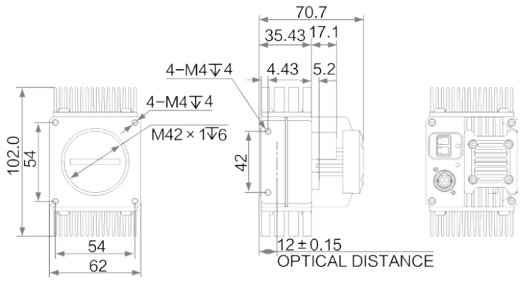

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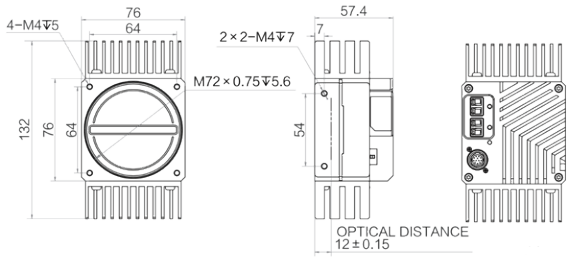

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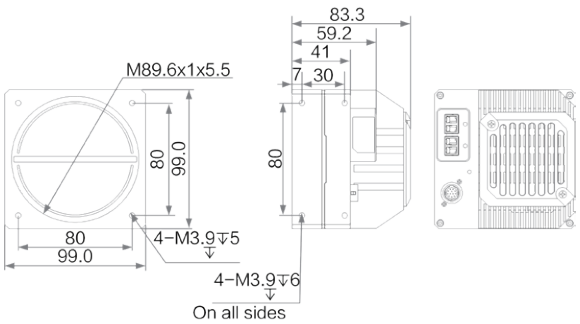
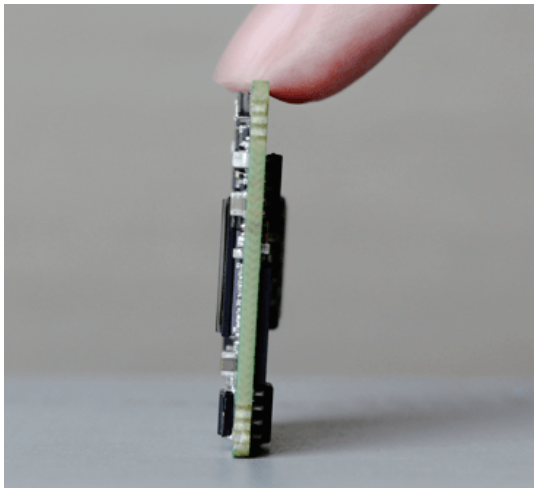


D

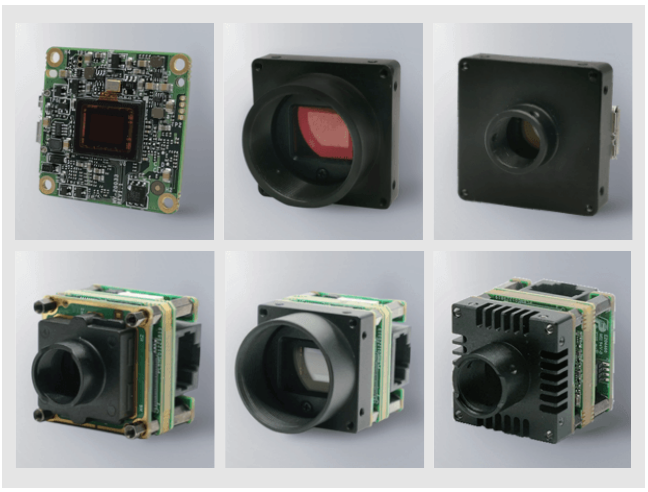
Unit:mm

Board Level Camera

The CB series board-level products is designed with a single board or multi-board stacked, which supports GigE or U3V protocol. It is applicable to the industrial, embedded, 3D, medical and other scenarios with more stringent space requirements.



Ultra-small size, flexible for application



High-Bandwidth Mode, high line frequency transmission

CB Series GigE Board Level Camera

CE KC RoHS

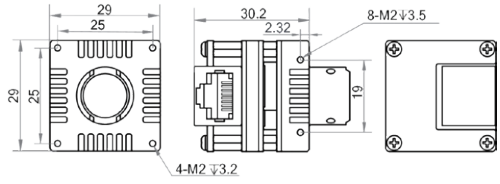
Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Label
MV-CB004-10GM-C	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.5 W@12 VDC	A
MV-CB004-10GM-S	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.5 W@12 VDC	B
MV-CB004-10GM-S-W	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.5 W@12 VDC	C
MV-CB004-10GC-C	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.6 W@12 VDC	A
MV-CB004-10GC-S	IMX297	1/2.9"	6.9 μm	Global	720 × 540	125.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.6 W@12 VDC	B
MV-CB016-10GM-C	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.6 W@12 VDC	A
MV-CB016-10GM-S	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.6 W@12 VDC	B
MV-CB016-10GM-S-W	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.6 W@12 VDC	C
MV-CB016-10GM-S-W(POE)	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.6 W@12 VDC	D
MV-CB016-10GM-M-W	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.6 W@12 VDC	E
MV-CB016-10GC-C	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs~14 μs NE: 15 μs~10 sec	Typ. 2.7 W@12 VDC	A
MV-CB016-10GC-S	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs ~ 14 μs N: 15 μs ~ 10 sec	Typ.2.7 W@12 VDC	B

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power consumption	Label
MV-CB016-10GC-S-W	IMX296	1/2.9"	3.45 μm	Global	1440 × 1080	65.2 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ.2.7 W@12 VDC	C
MV-CB060-10GM-C	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs ~ 2.5 sec	Typ.2.3 W@12 VDC	A
MV-CB060-10GM-S	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs~2.5 sec	Typ. 2.3 W@12 VDC	B
MV-CB060-10GM-S-W	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs ~ 2.5 sec	Typ.2.3 W@12 VDC	C
MV-CB060-10GM-M	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs ~ 2.5 sec	Typ.2.3 W@12 VDC	F
MV-CB060-10GC-C	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs ~ 2.5 sec	Typ.2.6 W@12 VDC	A
MV-CB060-10GC-S	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs~2.5 sec	Typ. 2.6 W@12 VDC	B
MV-CB060-10GC-S-W	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	30.7 fps	NE: 25 μs ~ 2.5 sec	Typ.2.6 W@12 VDC	C
MV-CB120-10GM-S *	IMX226	1/1.7"	1.85 μm	Rolling	4024 × 3036	9.7 fps	NE: 34 μs ~ 2 sec	Typ.2.6 W@12 VDC	B

Notice: * will be released soon. USE: Ultra-short exposure mode. NE: Normal exposure mode

Dimension



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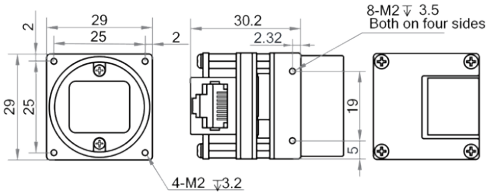

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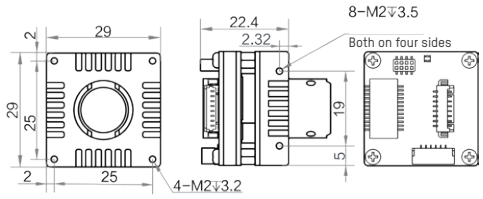

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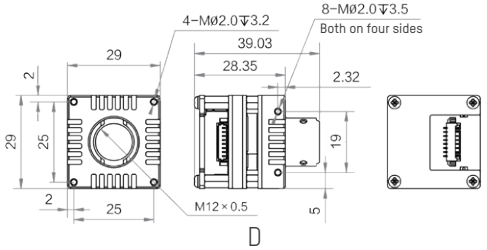

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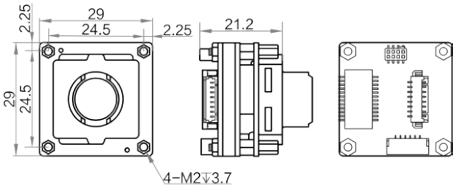
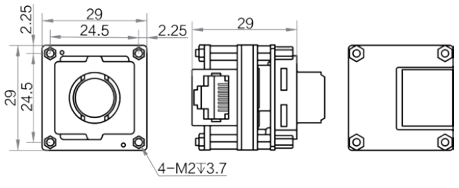


E



F

Unit:mm

CB Series USB3.0 Board Level Camera

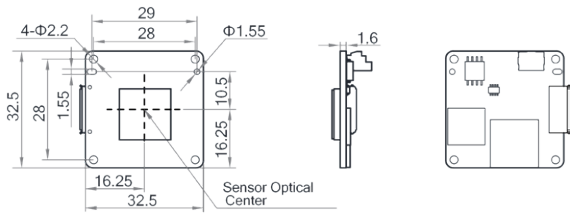
Specifications

Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power supply	Label
MV-CB013-A0UM-B	HK	1/2"	4.8 μm	Global	1280 × 1024	201 fps	NE: 9 μs~10 sec	Typ. 1.6 W@5 VDC	A
MV-CB013-A0UM-C	HK	1/2"	4.8 μm	Global	1280 × 1024	201 fps	NE: 9 μs~10 sec	Typ. 1.6 W@5 VDC	B
MV-CB013-A0UM-S	HK	1/2"	4.8 μm	Global	1280 × 1024	201 fps	NE: 9 μs~10 sec	Typ. 1.6 W@5 VDC	C
MV-CB013-A0UMM-C	HK	1/2"	4.8 μm	Global	1280 × 1024 × 2	100 fps	NE: 9 μs ~ 10 sec	Typ. 2.3 W@5 VDC	D
MV-CB013-A0UC-C	HK	1/2"	4.8 μm	Global	1280 × 1024	201 fps	NE: 9 μs~10 sec	Typ. 2.8 W@5 VDC	B
MV-CB013-A0UC-S	HK	1/2"	4.8 μm	Global	1280 × 1024	201 fps	NE: 9 μs~10 sec	Typ. 2.8 W@5 VDC	C
MV-CB016-10UM-B	IMX273	1/2.9"	3.45μm	Global	1440*1080	249fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 1.5 W@5 VDC	A
MV-CB016-10UM-C	IMX273	1/2.9"	3.45μm	Global	1440*1080	249fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 1.5 W@5 VDC	B
MV-CB016-10UM-S	IMX273	1/2.9"	3.45μm	Global	1440*1080	249fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 1.5 W@5 VDC	C
MV-CB016-10UC-B	IMX273	1/2.9"	3.45μm	Global	1440*1080	249fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 1.5 W@5 VDC	A
MV-CB016-10UC-C	IMX273	1/2.9"	3.45μm	Global	1440*1080	249fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 1.5 W@5 VDC	B
MV-CB016-10UC-S	IMX273	1/2.9"	3.45μm	Global	1440*1080	249fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 1.5 W@5 VDC	C
MV-CB050-11UC-C	IMX264	2/3"	3.45 μm	Rolling	2448 × 2048	60 fps	USE: 1 μs ~ 14 μs NE: 15 μs ~ 10 sec	Typ. 2.8 W@5 VDC	E
MV-CB060-10UM-B	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	60.9 fps	NE: 8 μs~1 sec	Typ. 1.5 W@5 VDC	A
MV-CB060-10UM-S	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	60.9 fps	NE: 8 μs~1 sec	Typ. 1.5 W@5 VDC	B
MV-CB060-10UM-C	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	60.9 fps	NE: 8 μs~1 sec	Typ. 1.5 W@5 VDC	C
MV-CB060-10UC-B	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	60.9 fps	NE: 8 μs~1 sec	Typ. 1.8 W@5 VDC	A
MV-CB060-10UC-C	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	60.9 fps	NE: 8 μs~1 sec	Typ. 1.8 W@5 VDC	B
MV-CB060-10UC-S	IMX178	1/1.8"	2.4 μm	Rolling	3072 × 2048	60.9 fps	NE: 8 μs~1 sec	Typ. 1.8 W@5 VDC	C

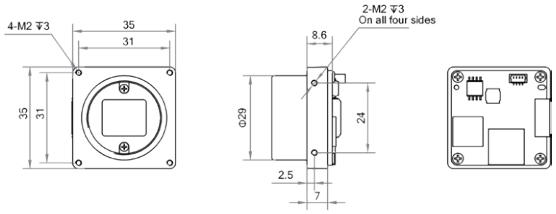
Model	Sensor model	Sensor size	Pixel size	Shutter mode	Resolution	Max. frame rate	Exposure time	Power supply	Label
MV-CB120-10UM-B	IMX226	1/1.7"	1.85 μm	Rolling	4032 × 3036	28 fps	NE: 11 μs~2 sec	Typ. 2.45 W@5 VDC	A
MV-CB120-10UM-C	IMX226	1/1.7"	1.85 μm	Rolling	4032 × 3036	28 fps	NE: 11 μs~2 sec	Typ. 2.45 W@5 VDC	B
MV-CB120-10UM-S	IMX226	1/1.7"	1.85 μm	Rolling	4032 × 3036	28 fps	NE: 11 μs~2 sec	Typ. 2.45 W@5 VDC	C
MV-CB120-10UC-B	IMX226	1/1.7"	1.85 μm	Rolling	4032 × 3036	21 fps	NE: 23 μs~2 sec	Typ. 2.45 W@5 VDC	A
MV-CB120-10UC-C	IMX226	1/1.7"	1.85 μm	Rolling	4032 × 3036	21 fps	NE: 23 μs~2 sec	Typ. 2.45 W@5 VDC	B
MV-CB120-10UC-S	IMX226	1/1.7"	1.85 μm	Rolling	4032 × 3036	21 fps	NE: 23 μs~2 sec	Typ. 2.45 W@5 VDC	C

Notice: USE: Ultra-short exposure mode
NE: Normal exposure mode

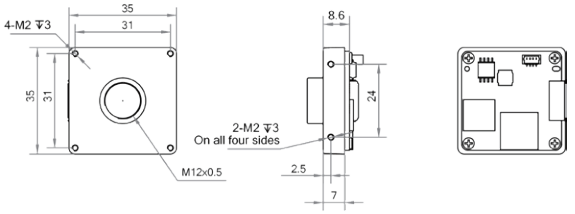
Dimension



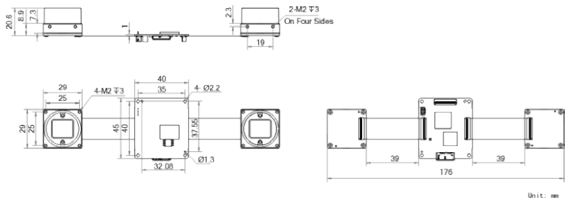
A



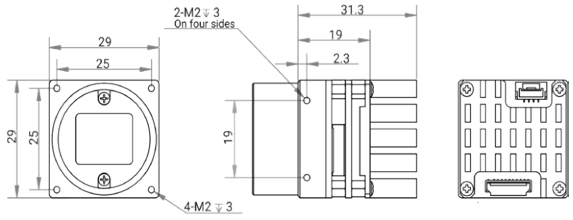
B



C



D

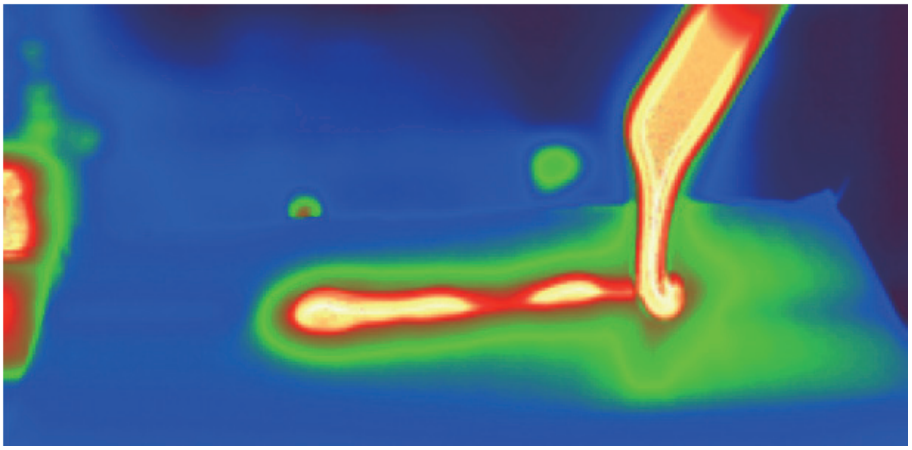


E

Unit:mm

Industrial Infrared Camera

The CI series is a high-performance infrared camera for industrial applications. Long wave products use high-sensitivity Vanadium Oxide uncooled detector, which can present temperature information and measure the temperature characteristics of objects. Short wave product is equipped with InGaAs sensors, covering visible light to shortwave bands, and has built-in image preprocessing. Suitable for applications in industries such as new energy, semiconductors, and agriculture.



Rich functions, suitable for industrial scenarios

Compatible with GigE Vision standard,support GenICam protocol

CI Series GigE Industrial Infrared Camera

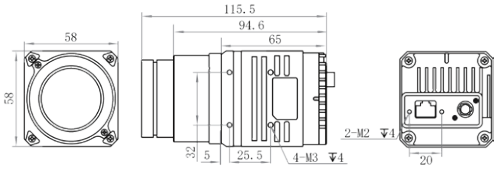
Specifications

Model	Observation/ Thermometry	Temperature measurement range	Temperature measurement accuracy	Spectral range	Resolution	Max. frame rate	NETD	Label
MV-CI003-GL-N6	Observation	/	/	8-14 μm	640 × 512	50 fps	< 35 mk (F1.0, 25°C)	A
MV-CI003-GL-N15	Observation	/	/	8-14 μm	640 × 512	50 fps	< 35 mk (F1.0, 25°C)	B
MV-CI003-GL-N25	Observation	/	/	8-14 μm	640 × 512	50 fps	< 35 mk (F1.0, 25°C)	C

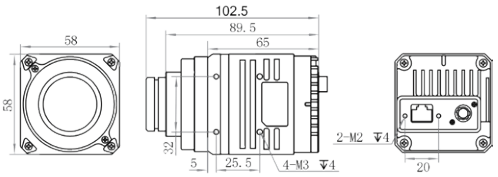
Model	Observation/ Thermometry	Temperature measurement range	Temperature measurement accuracy	Spectral range	Resolution	Max. frame rate	NETD	Label
MV-CI003-GL-N35	Observation	/	/	8-14 μm	640 × 512	50 fps	< 35 mk (F1.0, 25°C)	A
MV-CI003-GL-T6	Thermometry	-20°C -150°C /0°C -550°C	±2°C / read±2%(take great value)	8-14 μm	640 × 512	50 fps	< 50 mk (F1.0, 30°C)	D
MV-CI010-GS-NN *	/	/	/	0.9-1.7um	1024 × 1	9 kHz	/	/
MV-CI013-GS-NN	/	/	/	/	1280 × 1024	91 fps	/	E
MV-CI013-GS-TN *	/	/	/	0.4-1.7um	1280 × 1024	91 fps	/	F
MV-CI013-GS-TF	/	/	/	/	1280 × 1024	91 fps	/	G

Notice: * will be released soon. Lens replacement not supported

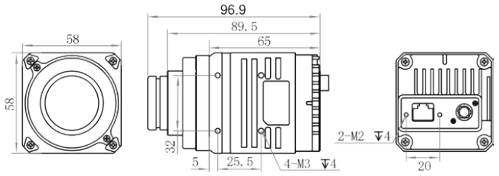
Dimension



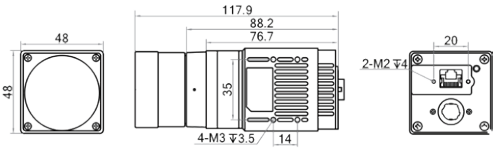
A



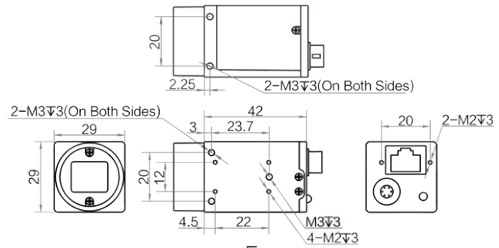
B



C



D



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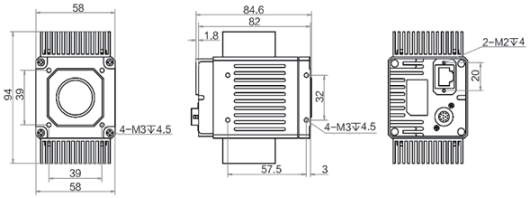

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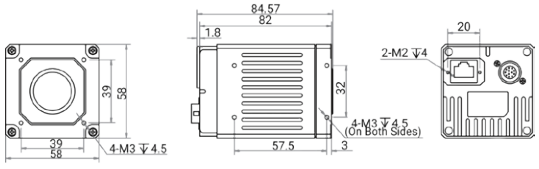
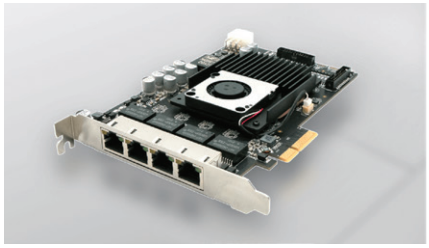


G

Unit:mm

Frame Grabber

Frame grabber is one of the core accessories in the machine vision system. It can provide customers with 1-stop solutions and product selection.



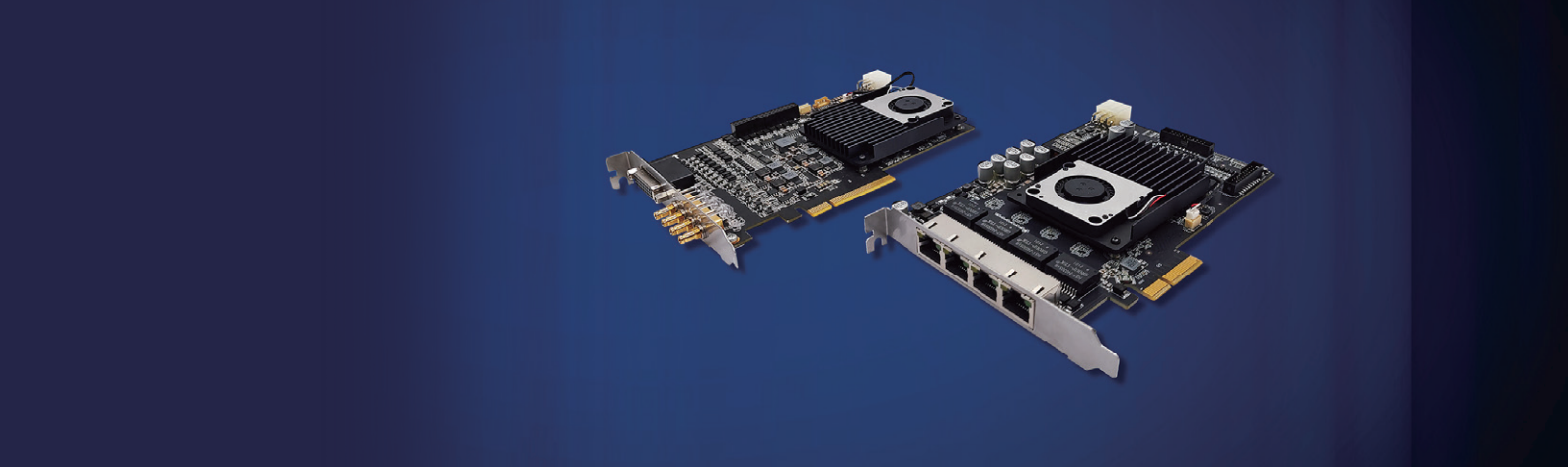
Rich interfaces to meet different protocol applications

Full technical support system

Specifications

CE KC RoHS

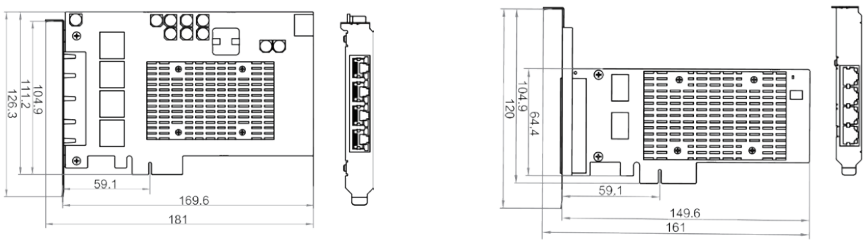
Camera type supported	Model	Interconnect	Delivery bandwidth	Interface(Optical module equipped additionally)	Camera connection speed	Power consumption
GigE industrial camera	MV-GE1004	PCI-E gen2 × 4	1720 MB/s (max. transmission bandwidth), 1600 MB/s (sustained transmission bandwith)	4 × RJ45	1 Gbps	Typ. 10 W (without PoE)
	MV-GE1104	PCI-E gen2 × 4	1720 MB/s (max. transmission bandwidth), 1600 MB/s (sustained transmission bandwith)	4 × RJ45	1 Gbps	Typ. 10 W (without PoE)
	MV-GE1104P	PCI-E gen2 × 4 PCI-E gen2 x 2link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	1 Gbps	Typ. 10 w (without PoE)
	MV-GE2002	PCI-E gen2 × 4 PCI-E gen2 x 2link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 4.3 W
	MV-GE2002P	PCI-E gen2 × 4 PCI-E gen2 x 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 7.5 W (without PoE)
	MV-GE2004	PCI-E gen2 × 4 PCI-E gen2 x 2link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 5.5 W
	MV-GE2004P	PCI-E gen2 × 4 PCI-E gen2 x 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 9 W (without PoE)
	MV-GE2202	PCI-E gen2 × 4	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 2 W
	MV-GE2202P	PCI-E gen2 × 4	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 2 W (without PoE)
	MV-GE2204	PCI-E gen2 × 4	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 3 W
	MV-GE2204P	PCI-E gen2 × 4	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 3 W (without PoE)



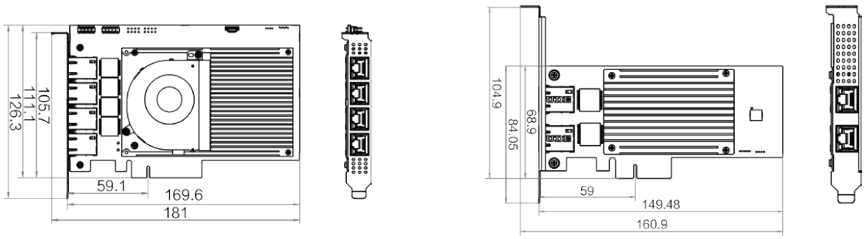
Camera type supported	Model	Interconnect	Delivery bandwidth	Interface(Optical module equipped additionally)	Camera connection speed	Power consumption
10GigE & XoF industrial Camera	MV-GT1002	PCI-E gen2 × 8	3900 MB/s (max. transmission bandwidth), 3350 MB/s (sustained transmission bandwidth)	2 × RJ45	10 Gbps	Typ. 19.2 W
	MV-GT1004	PCI-E gen2 × 8	3900 MB/s (max. transmission bandwidth), 3350 MB/s (sustained transmission bandwidth)	4 × RJ45	10 Gbps	Typ. 24 W
10 GigE Fiber industrial camera	MV-GT2001	PCI-E gen3 × 4	31.5 Gbps (max. transmission bandwidth), 20 Gbps (sustained transmission bandwidth)	RJ45 ×1	1000/10000 Mbps	Typ. 7 W
	MV-GT2002	PCI-E gen3 × 4	31.5 Gbps (max. transmission bandwidth), 20 Gbps (sustained transmission bandwidth)	RJ45 × 2	1000/10000 Mbps	Typ. 12 W
	MV-GS1004	PCI-E gen2 × 8	3900 MB/s (max. transmission bandwidth), 3350 MB/s (sustained transmission bandwidth)	4 × SFP	10 Gbps	Typ. 20 W
Camera Link industrial camera	MV-GC1102IOL	PCI-E gen2 x 4	1720 MB/s (max. transmission bandwidth), 1600 MB/s (sustained transmission bandwith)	2 × SDR	6.8 Gbps	Typ. 10 W (without PoCL)
	MV-GC1002-V2	PCI-E gen2 x 4	1720 MB/s (max. transmission bandwidth), 1600 MB/s (sustained transmission bandwith)	2 × SDR	6.8 Gbps	Typ. 10 W (without PoCL)
CXP-6 connector industrial camera	MV-GX1004	PCI-E gen2 × 8	3900 MB/s (max. transmission bandwidth), 3350 MB/s (sustained transmission bandwidth)	4 × DIN 1.0/2.3	1.25/2.5/3.125/5/6.25Gbps (CXP-1/2/3/5/6)	Typ. 20 W (without PoCXP)
CXP-6/CXP-12 connector industrial camera	MV-GY1004	PCI-E gen3 × 8	7800 MB/s (max. transmission bandwidth), 6700 MB/s (sustained transmission bandwidth)	4 × HD-BNC	1.25/2.5/3.125/5/6.25/10/12.5Gbps (CXP-1/2/3/5/6/10/12)	Typ. 20 W (without PoCXP)

Camera type supported	Model	Interconnect	Delivery bandwidth	Interface(Optical module equipped additionally)	Camera connection speed	Power consumption
GigE industrial camera	MV-GE2002	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 4.3 W
	MV-GE2004	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 5.5 W
	MV-GE2002P	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 7.5 W (without PoE)
	MV-GE2004P	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 9 W (without PoE)
	MV-GE2202	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 2 W
	MV-GE2204	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 3 W
	MV-GE2202P	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	2 × RJ45	10/100/1000 Mbps	Typ. 2 W (without PoE)
	MV-GE2204P	PCI-E gen2 × 4, PCI-E gen2 × 2 link	860 MB/s (max. transmission bandwidth), 800 MB/s (sustained transmission bandwith)	4 × RJ45	10/100/1000 Mbps	Typ. 3 W (without PoE)
USB industrial camera	MV-GU2104	PCI-E gen2 x 4	1720 MB/s (max. transmission bandwidth), 1600 MB/s (sustained transmission bandwith)	USB3.0 type-A	Max. 5 Gbps	Typ. 6 W (without USB power supply) Typ. 24 W (with USB power supply)
10 GigE industrial camera	MV-GT2001	PCI-E gen2 × 4	1000 MB/s (max. transmission bandwidth), 1000 MB/s (sustained transmission bandwith)	1 × RJ45	10 Gbps	Typ. 7 W
	MV-GT2002	PCI-E gen2 × 8	2000 MB/s (max. transmission bandwidth), 2000 MB/s (sustained transmission bandwith)	2 × RJ45	10 Gbps	Typ. 10W

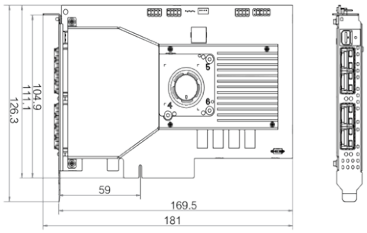
Dimension



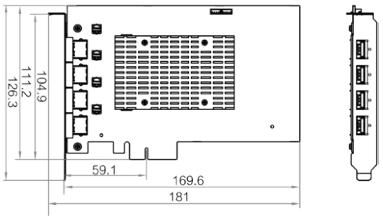
GigE industrial camera



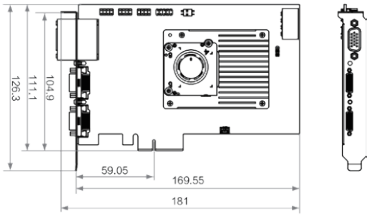
10 GigE Fiber industrial camera



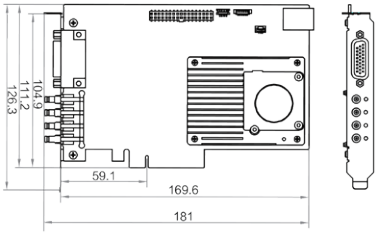
XoF industrial Camera



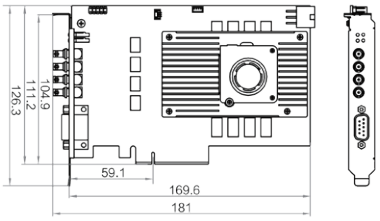
USB industrial camera



Camera Link industrial camera



CXP-6 connector industrial camera

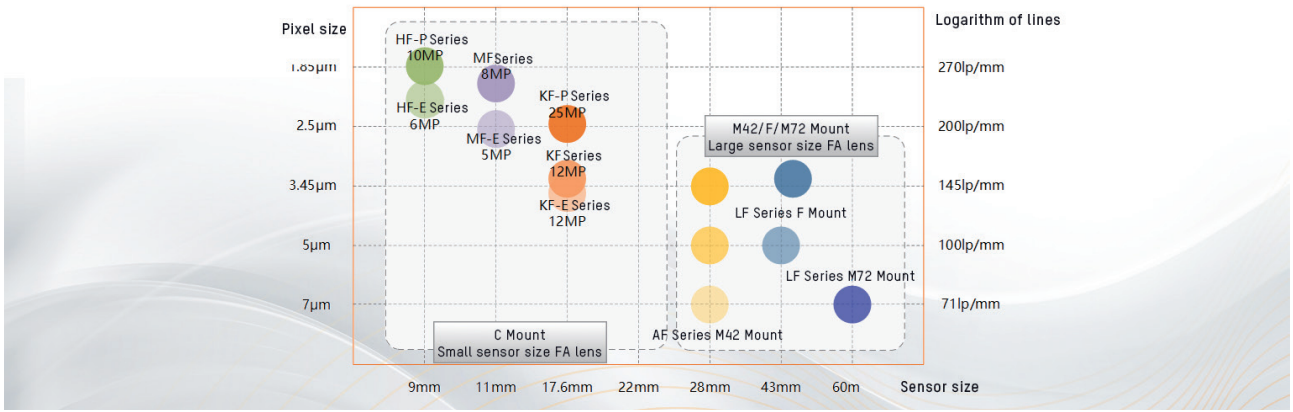


CXP-12 connector industrial camera

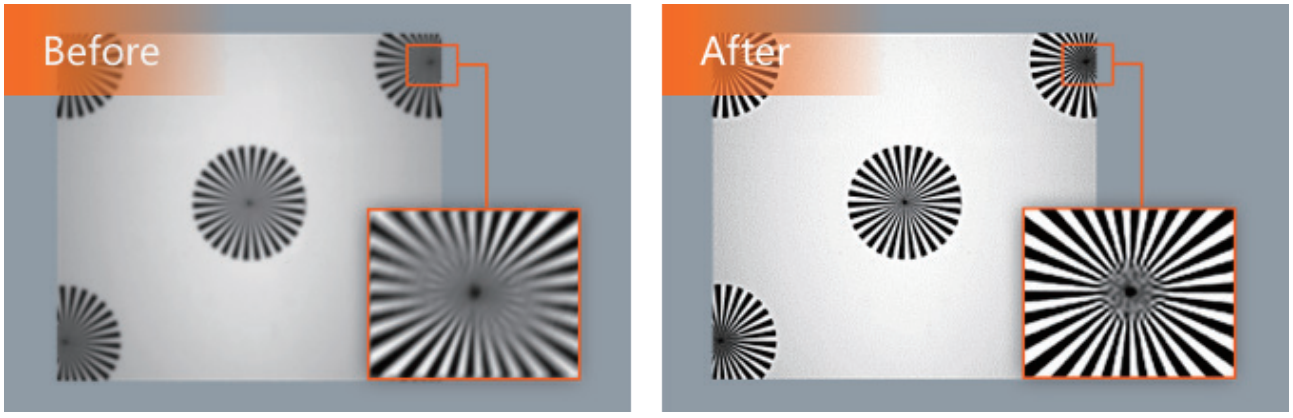
Unit:mm

Lens

Self-developed FA series lens especially for vision application characteristics, has the design concept of high performance and low cost. The product features high definition, better image center-edge definition consistency, and higher relative illumination to provide better choices.



Wide sensor size coverage



High resolution with great imaging consistency

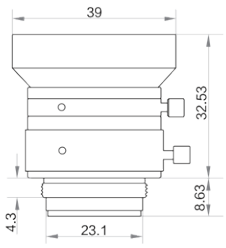
HF-E Series (1/1.8" 6MP)

RoHS

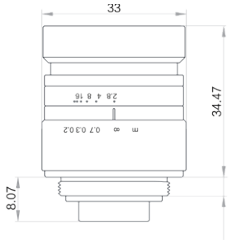
Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-HF0628M-6MPE	6 mm	F2.8~F16	-0.103%	73.49°	63.11°	44.59°	0.1	M37.5 × P0.5	C	A
MVL-HF0828M-6MPE	8 mm	F2.8~F16	0.049%	58.50°	49.46°	34.19°	0.1	M30.5 × P0.5	C	B
MVL-HF1228M-6MPE	12 mm	F2.8~F16	-0.005%	40.94°	34.14°	23.17°	0.1	M27 × P0.5	C	C
MVL-HF1628M-6MPE	16 mm	F2.8~F16	-0.018%	31.28°	25.94°	17.48°	0.1	M27 × P0.5	C	D
MVL-HF2528M-6MPE	25 mm	F2.8~F16	-0.028%	20.32°	16.77°	11.24°	0.2	M27 × P0.5	C	E
MVL-HF3028M-6MPE	30 mm	F2.8~F16	-0.031%	16.99°	14.01°	9.38°	0.2	M27 × P0.5	C	F
MVL-HF4028M-6MPE	40 mm	F2.8~F16	-0.024%	12.78°	10.53°	7.04°	0.25	M27 × P0.5	C	G
MVL-HF5028M-6MPE	50 mm	F2.8~F16	0.030%	9.72°	7.84°	5.24°	0.25	M30.5 × 0.5	C	H

Dimension



A



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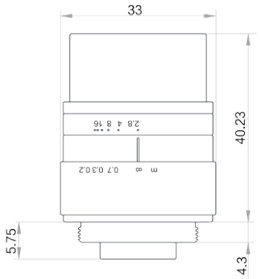

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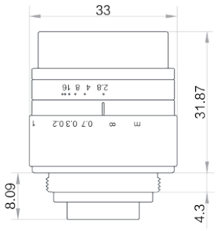
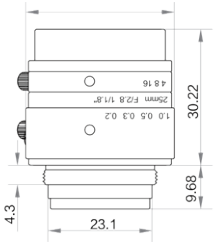
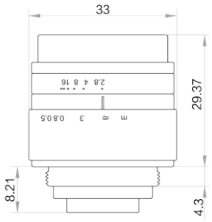


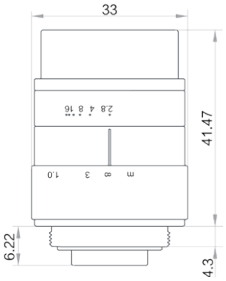
D



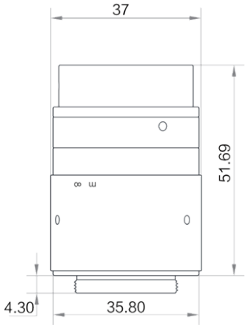
E



F



G



H

Unit:mm

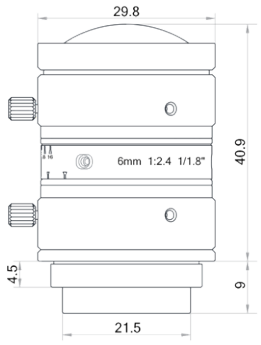
HF-P Series (1/1.8" 10MP)

RoHS

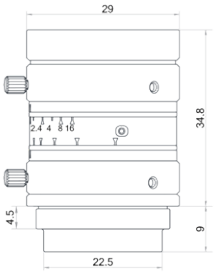
Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-HF0624M-10MP	6 mm	F2.4~F16	0.37%	72.96°	62.46°	44.05°	0.1	/	C	A
MVL-HF0824M-10MP	8 mm	F2.4~F16	-0.67%	58.81°	49.56°	34.04°	0.1	M27 × 0.5	C	B
MVL-HF1224M-10MP	12 mm	F2.4~F16	0.15%	40.2°	33.6°	22.9°	0.1	M27 × 0.5	C	C
MVL-HF1624M-10MP	16 mm	F2.4~F16	-0.02%	30.17°	25.07°	16.92°	0.1	M27 × 0.5	C	D
MVL-HF2524M-10MP	25 mm	F2.4~F16	-0.01%	19.67°	16.19°	10.85°	0.1	M27 × 0.5	C	E
MVL-HF3524M-10MP	35 mm	F2.4~F16	0.01%	13.47°	11.03°	7.34°	0.15	M27 × 0.5	C	F
MVL-HF5024M-10MP	50 mm	F2.4~F16	0.03%	9.10°	7.48°	5.00°	0.3	M27 × 0.5	C	G

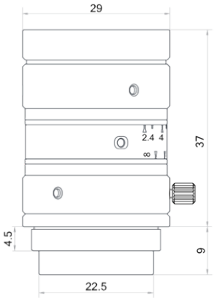
Dimension



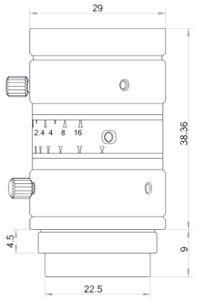
A



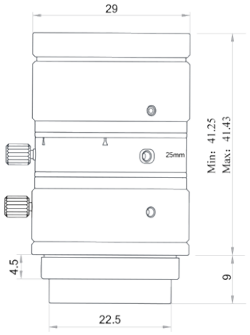
B



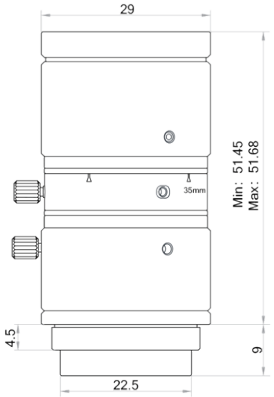
C



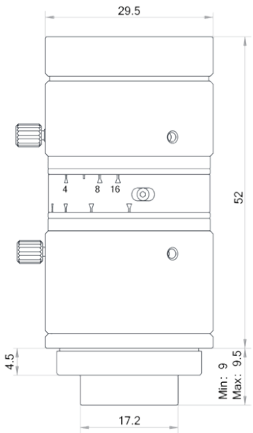
D



E



F



G

Unit:mm

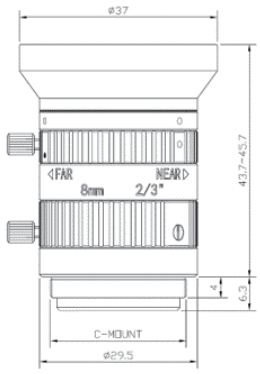
MF-E Series (2/3" 5MP)

RoHS

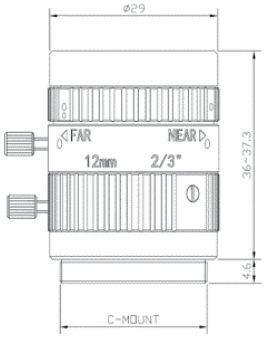
Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-MF0824M-5MPE	8 mm	F2.4~F16	2.03%	69.46°	55.57°	41.68°	0.10m	M35.5×0.5	C-Mount	A
MVL-MF1224M-5MPE	12 mm	F2.4~F16	-0.16%	49.67°	39.09°	33.08°	0.25m	M27×0.5	C-Mount	B
MVL-MF1618M-5MPE	16 mm	F1.8~F16	0.98%	38.98°	30.75°	25.08°	0.20m	M27×0.5	C-Mount	C
MVL-MF2518M-5MPE	25 mm	F1.8~F16	0.77%	24.26°	18.78°	15.63°	0.20m	M27×0.5	C-Mount	D
MVL-MF3518M-5MPE	35 mm	F1.8~F16	0.02%	17.46°	13.43°	11.26°	0.25m	M27×0.5	C-Mount	E
MVL-MF5028M-5MPE	50 mm	F2.8~F16	0.08%	12.83°	9.86°	8.26°	0.40m	M27×0.5	C-Mount	F

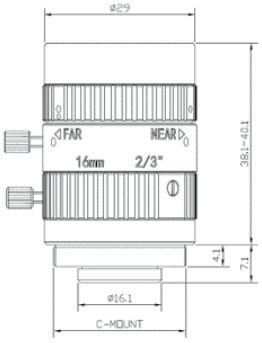
Dimension



A



B



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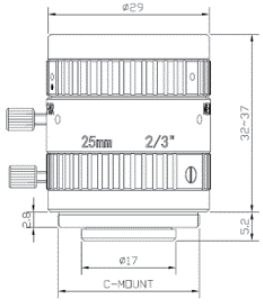

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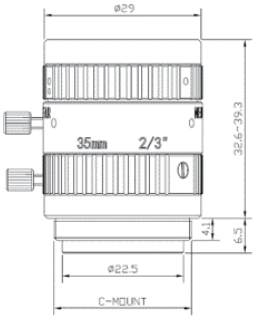

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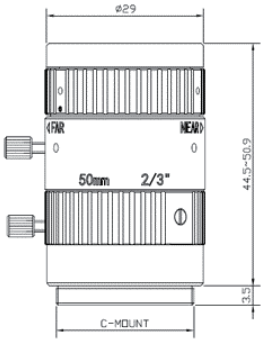


F

Unit:mm

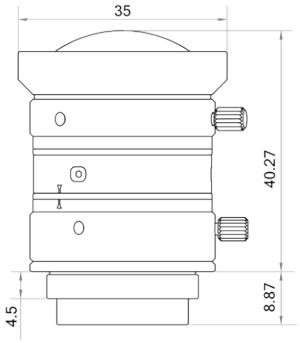
MF Series (2/3" 8MP)

RoHS

Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-MF0828M-8MP	8 mm	F2.8~F16	0.28%	68.46°	54.97°	47.06°	0.1	/	C	A
MVL-MF1228M-8MP	12 mm	F2.8~F16	0.28%	48.57°	37.88°	32.04°	0.1	M30.5 × 0.5	C	B
MVL-MF1628M-8MP	16 mm	F2.8~F16	0.33%	37.39°	28.9°	24.33°	0.1	M27 × 0.5	C	C
MVL-MF2528M-8MP	25 mm	F2.8~F16	0.01%	23.23°	17.78°	14.91°	0.1	M27 × 0.5	C	D
MVL-MF3528M-8MP	35 mm	F2.8~F16	0.02%	15.26°	11.65°	9.76°	0.15	M30.5 × 0.5	C	E
MVL-MF5028M-8MP	50 mm	F2.8~F16	0.01%	11.67°	8.81°	7.38°	0.4	M27 × 0.5	C	F

Dimension



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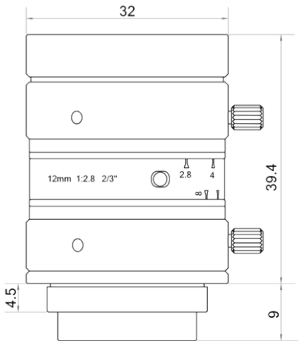
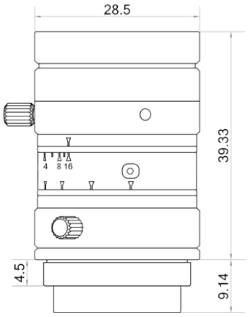


B



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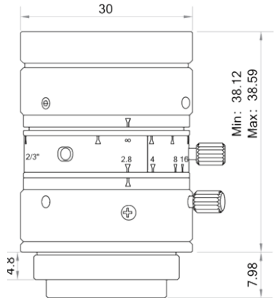

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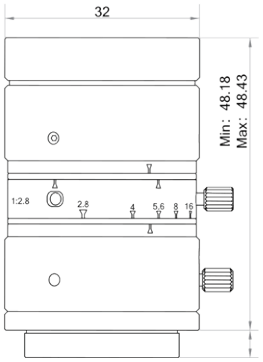

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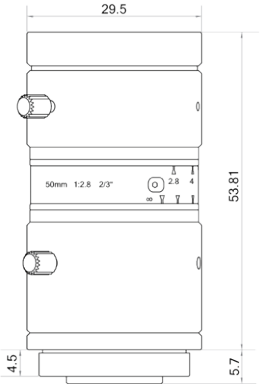


F

Unit:mm

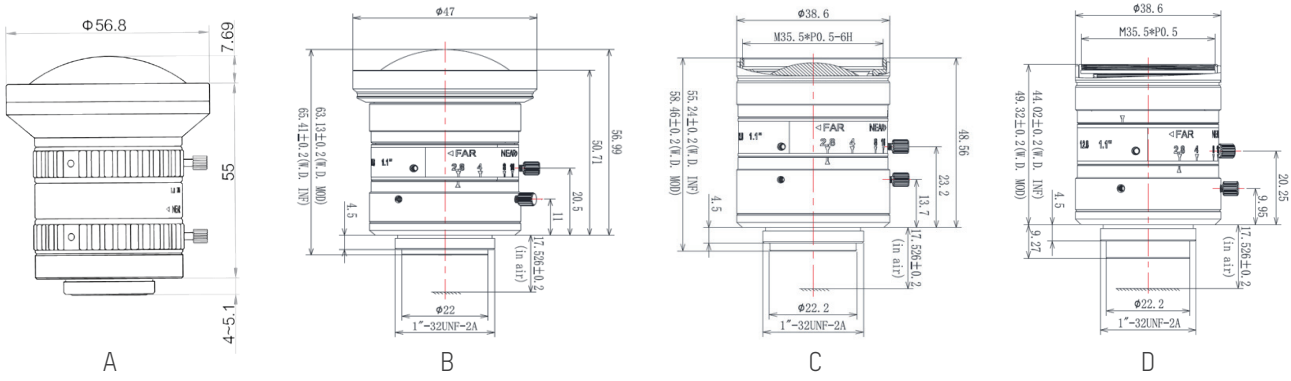
KF Series (1.1" 12MP)

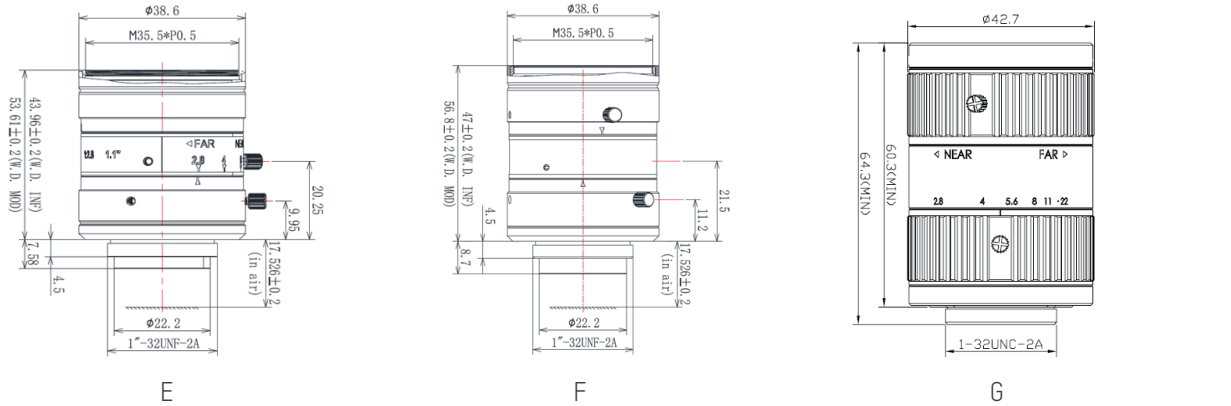
RoHS

Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-KF0818M-12MP	8 mm	F1.8 ~ C	-4.12%	90.06°	77.16°	61.3°	0.3 m	-	C	A
MVL-KF1228M-12MP	12 mm	F2.8 ~ F16	-1.79%	70.5°	59.8°	46.2°	0.1 m	-	C	B
MVL-KF1628M-12MP	16 mm	F2.8~F16	-1.30%	54.8°	44.9°	33.9°	0.1 m	M35.5×0.5	C	C
MVL-KF2528M-12MP	25 mm	F2.8~F16	0.40%	36.7°	29.6°	22.1°	0.15 m	M35.5 × 0.5	C	D
MVL-KF3528M-12MP	35 mm	F2.8~F16	-0.21%	26.7°	21.4°	15.9°	0.2 m	M35.5 × 0.5	C	E
MVL-KF5028M-12MP	50 mm	F2.8~F16	-0.05%	18.9°	15.1°	11.2°	0.3 m	M35.5 × 0.5	C	F
MVL-KF7528M-12MP	75 mm	F2.8 ~ F22	0.75%	12.2°	9.8°	7.3°	0.5 m	M39 × 0.5	C	G

Dimension





Unit:mm

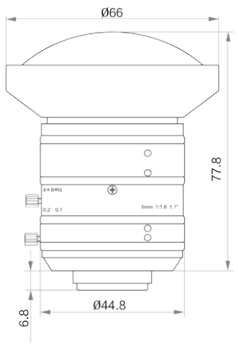
KF-E Series (1.1" 12MP)

RoHS

Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-KF0618M-12MPE	6 mm	F1.8~F16	2.50%	118.2°	104.9°	86.2°	0.1	/	C	A
MVL-KF0814M-12MPE	8 mm	F1.4~F16	5.50%	98.4°	84.8°	68°	0.1	M58 × 0.75	C	B
MVL-KF1228M-12MPE	12 mm	F2.8~F22	1.50%	66.7°	57°	45°	0.1	/	C	C
MVL-KF1628M-12MPE	16 mm	F2.8~F16	0.15%	55.6°	45.8°	35.3°	0.1	M43 × 0.75	C	D
MVL-KF2528M-12MPE	25 mm	F2.8~F22	0.10%	37.6°	30.4°	23°	0.1	M35.5 × 0.5	C	E
MVL-KF3528M-12MPE	35 mm	F2.8~F22	0.02%	28.3°	22.6°	17°	0.2	M35.5 × 0.5	C	F
MVL-KF5028M-12MPE	50 mm	F2.8~F22	0.04%	19.9°	15.9°	11.9°	0.3	M35.5 × 0.5	C	G

Dimension



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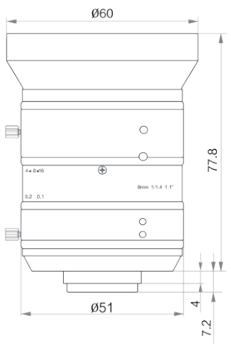
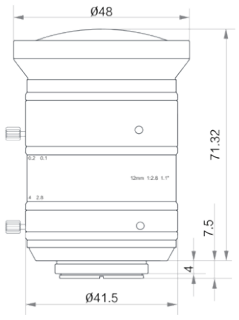


B



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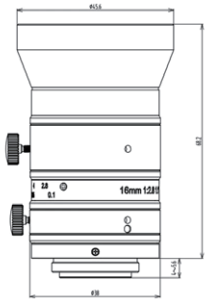

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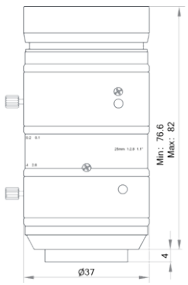
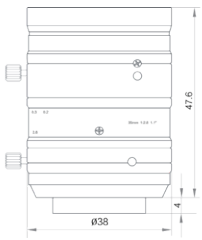


E



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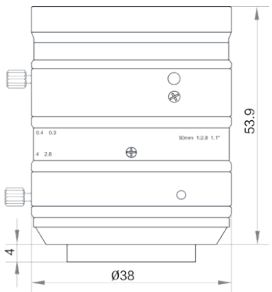


G

Unit:mm

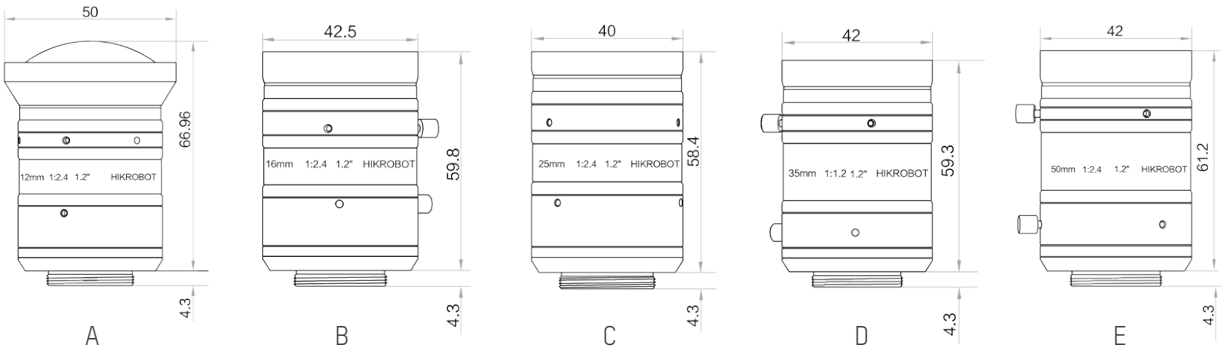
KF-P Series (1.2" 25MP)

RoHS

Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-KF1224M-25MP	12 mm	F2.4~F16	0.39%	76.37°	62.32°	55.34°	0.1	/	C	A
MVL-KF1624M-25MP	16 mm	F2.4~F16	0.07%	61.61°	48.82°	42.89°	0.1	M40.5 × 0.5	C	B
MVL-KF2524M-25MP	25 mm	F2.4~F16	-0.04%	40.80°	31.42°	27.34°	0.15	M37 × 0.5	C	C
MVL-KF3524M-25MP	35 mm	F2.4~F16	0.02%	29.48°	22.51°	19.54°	0.15	M40.5 × 0.5	C	D
MVL-KF5024M-25MP	50 mm	F2.4~F16	0.01%	20.60°	15.66°	13.57°	0.25	M40.5 × 0.5	C	E

Dimension



Unit:mm

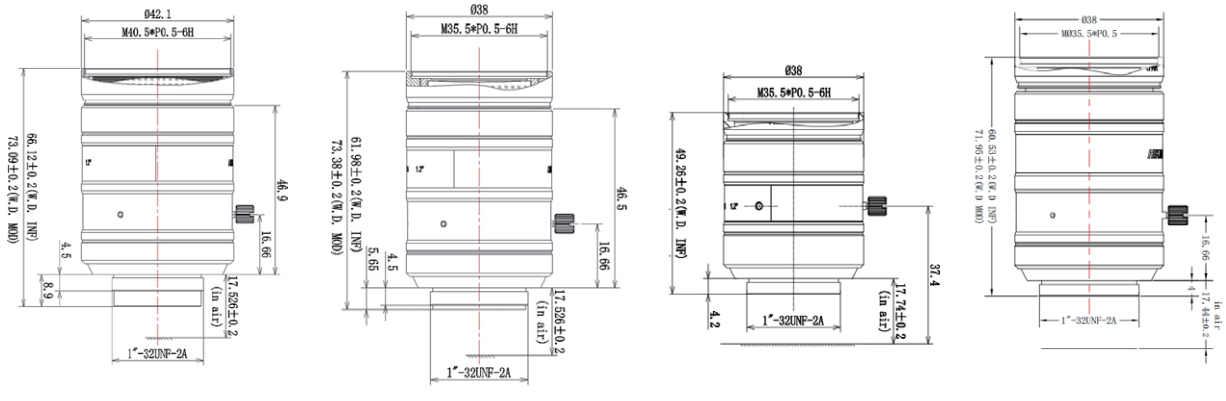
KF-P Anti Vibration Series (1.2" 25MP)

RoHS

Specifications

Model	Focal Length	F No.	Distortion	Field of View			M.O.D (m)	Filter Thread	Mount	Label
				D	H	V				
MVL-KF1640-25MP	16 mm	F4	-0.54%	61.7°	48.77°	42.83°	0.179x-0.001x	M40.5 × 0.5	C	A
MVL-KF2540-25MP	25 mm	F4	-0.54%	41.6°	32.04°	27.88°	0.285x-0.001x	M35.5 × 0.5	C	B
MVL-KF3540-25MP	35 mm	F4	-0.03%	29.3°	22.4°	19.5°	0.12 m	M35.5 × P0.5	C-Mount	C
MVL-KF5040-25MP	50 mm	F4	0.05%	20.6°	15.7°	13.6°	0.15 m	M35.5 × P0.5	C-Mount	D

Dimension



Unit:mm

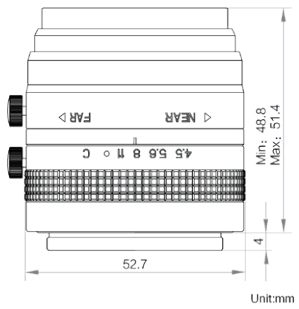
AF Series (Half Frame Lens)

RoHS

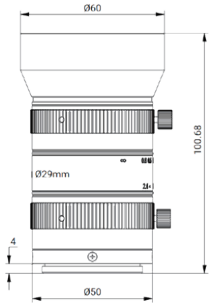
Specifications

Model	Focal Length	F No.	Distortion	Field of View	Magnification Range	Filter Thread	Mount	Label
MVL-AF2045M-M42	20 mm	F4.5 ~ C	0.20%	H (4K7μm, 28.7mm): 71°	0.1x ~ 0.02x	M43×0.75	M42×P1	A
MVL-AF2524M-M42	25 mm	F2.4 ~ F16	-0.34%	H (4K7μm, 28.7mm): 56°	0.143x ~ 0.001x	M58 × 0.75	M42 × P1	B
MVL-AF2840M-M42	28 mm	F4.0 ~ C	0.1%	H (4K7μm, 28.7mm): 53°	0.3x ~ 0.05x	M35 × 0.5	M42 × P1	C
MVL-AF3528M-M42	35 mm	F2.8 ~ F16	0.40%	H (4K7μm, 28.7mm): 44°	0.2x ~ 0.001x	M58×0.75	M42×P1	D
MVL-AF3528M-M42A	35 mm	F2.8 ~ F16	-0.16%	H (4K7μm, 28.7mm): 42°	0.164x ~ 0.001x	M52 × 0.75	M42 × P1	E
MVL-AF4028M-M42	40 mm	F2.8 ~ F22	0.62%	H (4K7μm, 28.7mm): 39°	0.22x ~ 0.04x	M37×0.75	M42×P1	F
MVL-AF5028M-M42A	50 mm	F2.8 ~ F16	0.52%	H (4K7μm, 28.7mm): 31°	0.26x ~ 0.001x	M46 × 0.75	M42 × P1	G
MVL-AF5040M-M42	50 mm	F4 ~ F22	0.21%	H (4K7μm, 28.7mm): 32°	0.33x ~ 0.01x	M52×0.75	M42×P1	H

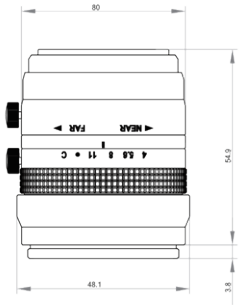
Dimension



A



B



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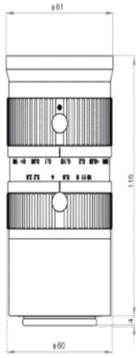

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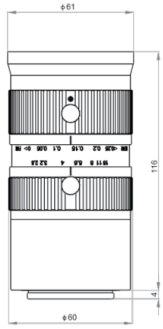

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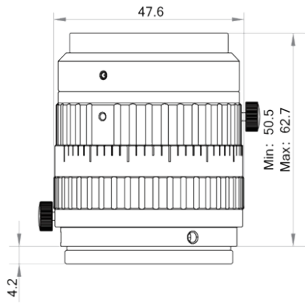
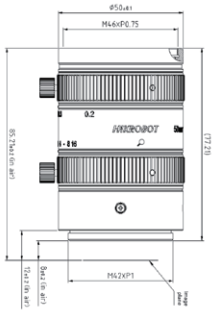
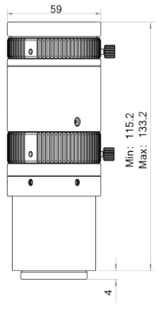


F



G



H

Unit:mm

LF Series (Large Image Circle Lens)

RoHS

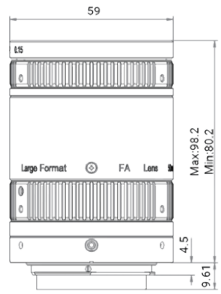
Specifications

Model	Focal Length	F No.	Distortion	Field of View			Magnification Range	Filter Thread	Mount	Label
				D	H	V				
MVL-LF5040M-F	50 mm	F4.0~F22	0.41%	65.41°	56.32°	39.20°	0.33x~0.01x	M52 × 0.75	F	A
MVL-LF5040M-F	50 mm	F4.0~F22	0.41%	30.41°	25.47°	17.13°	0.33x~0.01x	M52 × 0.75	F	A
MVL-LF5040M-F	50 mm	F4.0~F22	0.41%	30.41°	25.47°	17.13°	0.33x~0.01x	M52 × 0.75	F	A
MVL-LF6040M-0167V-M72	60 mm	F4.0 ~ F32	0.19%	H (8K7μm, 57.3mm): 44.51°			0.33x ~ 0.167x ~ 0.117x	M37 × P0.75	M72 × P0.75	D
MVL-LF6040M-0168V-M72	60 mm	F4.0 ~ F22	0.14%	H (8K7μm, 57.3mm): 44.47°			0.067x ~ 0.168x ~ 0.2x	M39 × P0.5	M72 × P0.75	E
MVL-LF8040M-021V-M72	80 mm	F4.0 ~ F22	-0.11%	H (8K7μm, 57.3mm): 32.97°			0.12x ~ 0.21x ~ 0.31x	M39 × 0.5	M72 × P0.75	F
MVL-LF3040M-005-M72 *	30mm	F4.0 ~ F16	-0.84%	H (8k7u, 57.3mm): 82.96°			0.14x ~ 0.05x ~ 0.03x	/	M72 × P0.75	G
MVL-LF4040M-01-M72	40 mm	F4 ~ F16	-0.42%	H (8K7μm, 57.4mm): 66.50°			0.29x~0.001x	M60 x 0.75	M72 x P0.75	H
MVL-LF6040M-013-M72	60 mm	F4 ~ F16	-0.45%	H (8K7μm, 57.4mm): 46.38°			0.28x~0.001x	M60 x 0.75	M72 x P0.75	I

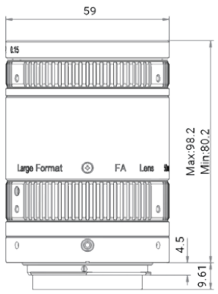
Notice: * will be released soon

Horizontal FOV: Calculated with a line scan camera (4K 7μm, chip horizontal size: 28.7mm)

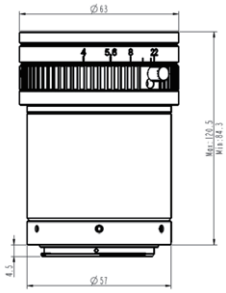
Dimension



A



B



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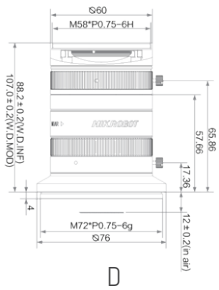

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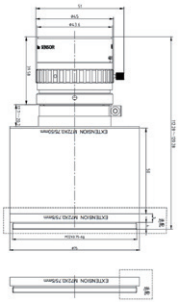
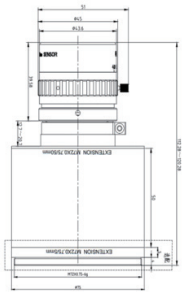


E



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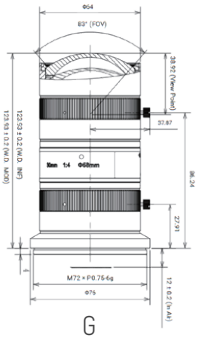

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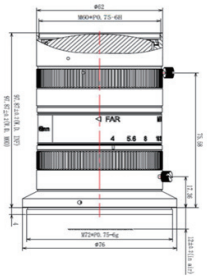

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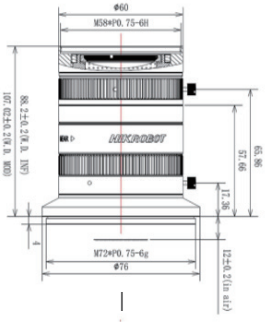
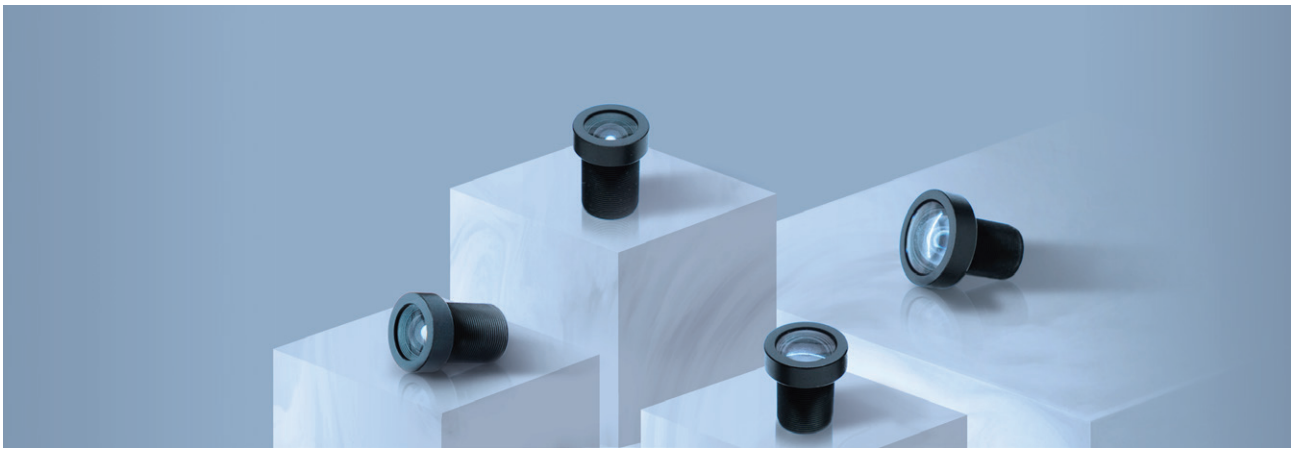


I

Unit:mm

M12 Lens

For embedded vision applications, M12 series lens adopts metal lens barrel and glass lens design under the premise of ensuring imaging performance, which improves product stability and adapts to harsh industrial environment.



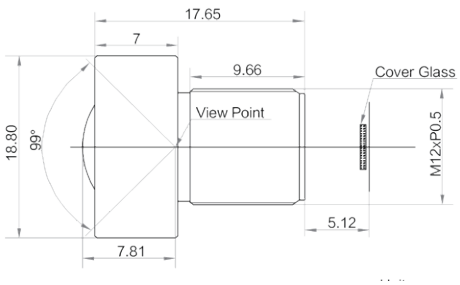
High resolution and low distortion

M12 Series Lens

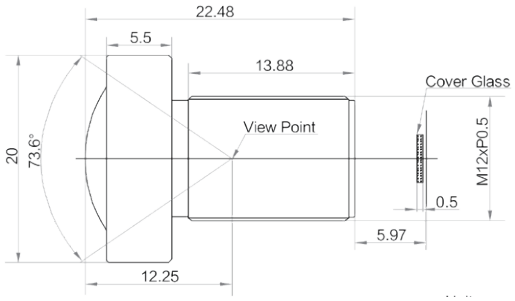
Specifications

Model	Focal Length	F No	Distortion	Magnification Range	Field of View			Mount	Label
					D	H	V		
MVL-HF0328-05S	3.37 mm	F2.8	<1%	100 ~ 850 mm	100°	86°	70°	S-Mount	A
MVL-HF0628-05S	6 mm	F2.8	0.50%	100 ~ 850 mm	73°	63°	45°	S-Mount	B
MVL-HF0828-05S	8 mm	F2.8	<0.3%	120 ~ 900 mm	58°	50°	34°	S-Mount	C
MVL-HF1228-05S	12 mm	F2.8	<0.2%	100 ~ 850 mm	41°	34°	23°	S-Mount	D
MVL-HF1628-05S	16 mm	F2.8	<0.1%	100~850 mm	31°	26°	17°	S-Mount	E
MVL-HF2528-05S	25 mm	F2.8	<0.05%	200 ~ 950 mm	20°	17°	11°	S-Mount	F

Dimension



A



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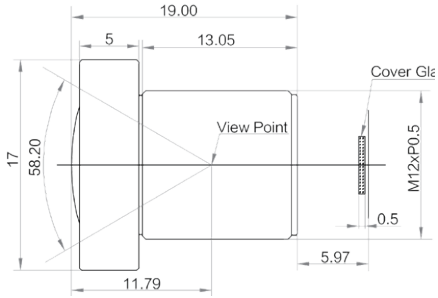
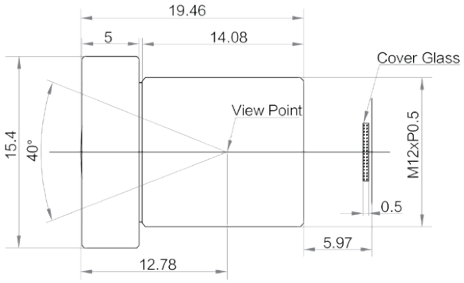


C



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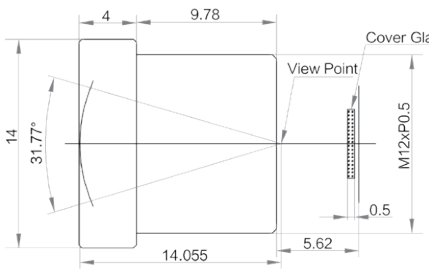

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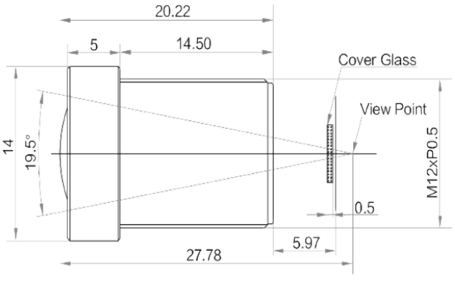


F

Unit:mm

Lens Selector

Please select or enter the related application parameters to find a suitable lens model. The lens selector supports multiple camera models, and automatically gives the related data to improve the efficiency of selection. If you have any questions, please contact technical support for services.

1 Sensor Size Confirmation

Option 1: Choose Hikrobot's camera series and model Option 2: Manually input sensor size

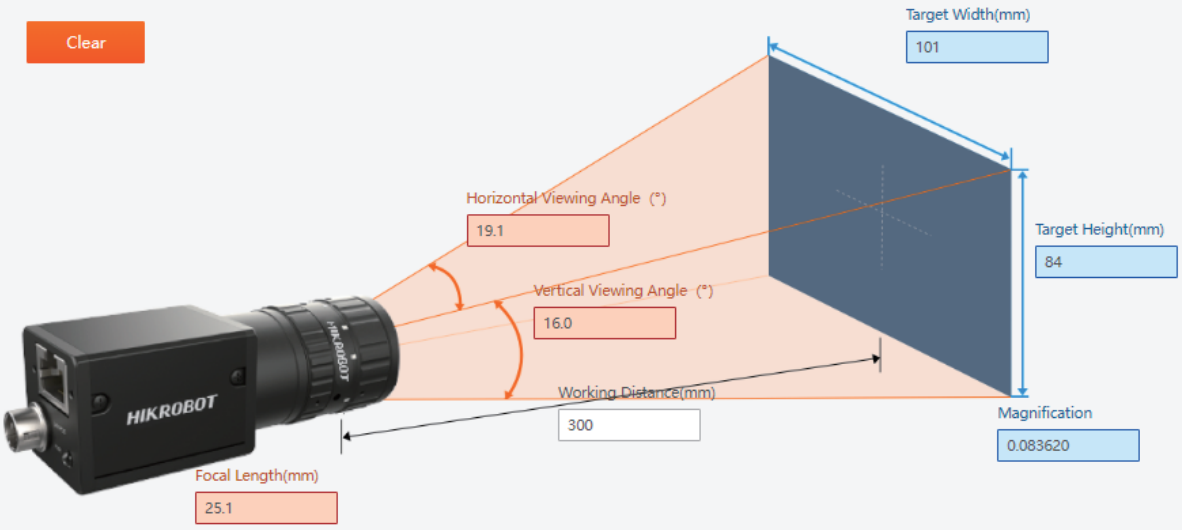
Camera Series: CS Area Scan Camera

Camera Model: MV-CS050-10GM-PRO, 5MP Area Scan Camera,GigE,IMX264,Mono,PRO

2 Input Working Conditions

Please enter as much data as possible, the system will automatically calculate the default value

Clear



※Approximate calculation result, for reference only

3 Selection Result Output

Show Selection Result

Lens Model	Focal Length	Working Dist...	Magnification	Extensio...	Target W...	Target H...	Image Size	Interface Type
MVL-MF2518M-5MPE	25	300	0.084	0	100.1	83.8	Φ11mm(2/3")	C Mount
MVL-MF3518M-5MPE	35	300	0.125	0	67.3	56.3	Φ11mm(2/3")	C Mount
MVL-MF2528M-8MP	25	300	0.086	0	97.8	81.8	Φ11mm(2/3")	C Mount
MVL-MF3528M-8MP	35	300	0.129	0	65.2	54.6	Φ11mm(2/3")	C Mount
MVL-KF2528M-12MPE	25	300	0.08	0	106	88.7	Φ17.6mm(1.1")	C Mount
MVL-KF2528M-12MP	25	300	0.079	0	106.6	89.2	Φ17.6mm(1.1")	C Mount
MVL-KF3528M-12MP	35	300	0.117	0	72.4	60.6	Φ17.6mm(1.1")	C Mount
MVL-KF3528M-12MPE	35	300	0.116	0	72.9	61	Φ17.6mm(1.1")	C Mount
MVL-KF2524M-25MP	25	300	0.08	0	106.1	88.7	Φ19.3mm(1.2")	C Mount
MVL-KF2540-25MP	25	300	0.08	0	105.8	88.5	Φ19.3mm(1.2")	C Mount

Scan now, experience instantly

Cables

To help industrial cameras work more stable, Hikrobot provides high-quality cable products including power line, I/O control line, data transmission line to fulfill diverse application needs.

Multiple types,diversified interface

Comprehensive performance, adapt to diverse scenarios

Data Cable

RoHS

Specifications

Interface type	Wire type	Model	End A connector	End B connector	Length
USB3.0 Cables	Standard	MV-ACU3-MBMs-AM-ST	Micro-B male (with screw)	A male	0.5m/1m/2m/3m
	Standard (angled)	MV-ACU3-MBMs(down)-AM-ST	Micro-B male (with screw), Angle (down)	A male	0.5m/1m/2m/3m
	Flexible	MV-ACU3-MBMs-AM-FL	Micro-B male (with screw)	A male	3m

Interface type	Wire type	Model	End A connector	End B connector	Length
USB3.0 Cables	Flexible(high shield)	MV-ACU3-MBMs-AM-FL(EMC)	Micro-B male (with screw)	A male	1m/3m
	Super flexible long distance (AOC)	MV-ACU3-MBMs-AM-SF	Micro-B male (with screw)	A male	3m/5m/7m/10m/15m/20m
GigE Cables	Standard	MV-ACG-RJ45s-RJ45-ST	RJ45 (with locking stud)	RJ45	1m/3m/5m/7m/10m/15m/30m/60m
	High flexible	MV-ACG-RJ45s-RJ45-HF	RJ45 (with locking stud)	RJ45	3m/5m/7m/10m/15m/30m
	Super flexible	MV-ACG-RJ45s-RJ45-SF	RJ45 (with locking stud)	RJ45	3m/5m/7m/10/15m
	Standard (angled)	MV-ACG-RJ45s(up)-RJ45-ST	RJ45 (with locking stud), Bend(up)	RJ45	3m/5m/15m
	High flexible (angled)	MV-ACG-RJ45s(up)-RJ45-HF	RJ45 (with locking stud), Bend(up)	RJ45	3m/5m/15m
10GigE Cables	Standard	MV-AC10G-RJ45s-RJ45-ST	RJ45 (with locking stud)	RJ45	3m/5m/10m
	High flexible	MV-AC10G-RJ45s-RJ45-HF	RJ45 (with locking stud)	RJ45	3m/5m/10m
10GigE Optical Fiber Jumper Cables	Standard	MV-AC10G-2LC-2LC-ST	2LC	2LC	3m/5m/10m
	High flexible	MV-AC10G-2LC-2LC-HF	LC	LC	3m/5m/7m/10m/15m
10GigE Optical Fiber Module	Standard SPF+ module	MV-AC10G-SFP-850-LC	2LC	2LC	-
100G Optical Fiber Jumper	QSFP28 jumper	MV-AC100G-MPO-MPO-ST	MPO	MPO	3m/5m/10m
100G Optical Fiber Module	QSFP28 module	MV-AC100G-QSFP28-850	MPO	-	-
Camera Link Cables	Standard	MV-ACCL-SDR-SDR-ST	SDR26	SDR26	3m/5m/7m
	High flexible	MV-ACCL-SDR-SDR-HF	SDR26	SDR26	3m/5m/7m
	High flexible	MV-ACCL-SDR-MDR-HF	SDR26	MDR26	3m/5m/7m
	Super flexible long distance (AOC)	MV-ACCL-SDR-SDR-AOC-xm-Base	SDR (HDR)	SDR (HDR)	8m/10m/15m/20m
	Super flexible long distance (AOC)	MV-ACCL-SDR-SDR-AOC- xm-Full	SDR (HDR)	SDR (HDR)	8m/10m/15m/20m
	Super flexible long distance (AOC)	MV-ACCL-SDR-MDR-AOC-xm-Base	SDR (HDR)	MDR	8m/15m
	Super flexible long distance (AOC)	MV-ACCL-SDR-MDR-AOC-xm-Full	SDR (HDR)	MDR	8m/15m
CoaXPress Cables	Standard CXP-6	MV-ACXP6-DIN-DIN-ST	Din 1.0/2.3	Din 1.0/2.3	3m/5m/10m
	Standard CXP-6	MV-ACXP6-DIN-BNC-ST	Din 1.0/2.3	BNC	3m/5m/10m
	High flexible CXP-6	MV-ACXP6-DIN-DIN-HF	Din 1.0/2.3	Din 1.0/2.3	3m/5m/10m
	High flexible CXP-6	MV-ACXP6-DIN-BNC-HF	Din 1.0/2.3	BNC	3m/5m/10m
	High flexible CXP-6	MV-ACXP6-DIN-HDBNC-HF	Din 1.0/2.3	HD-BNC	3m/5m/10m
	High flexible CXP-6 (angled)	MV-ACXP6-DIN(up)-DIN-HF*	Din 1.0/2.3(up)	Din 1.0/2.3	1.5m/3m/5m/8m
	Standard CXP-12	MV-ACXP12-HDBNC-HDBNC-ST	HD-BNC	HD-BNC	3m/5m/10m
	High flexible CXP-12	MV-ACXP12-HDBNC-HDBNC-HF	HD-BNC	HD-BNC	3m/4m/5m/7m/10m
	High flexible CXP-12 (angled)	MV-ACXP12-HDBNC(up)-HDBNC-HF*	HD-BNC(up)	HD-BNC	3m/4m

Notice: * will be released soon x: represents the length of the cable

Camera Power Supply & IO Line

RoHS

Specifications

Interface type	Wire type	Model	End A connector	End B connector	Length
P7 6pin I/O & Power Cables	Standard	MV-ACP-H6p-open-ST	6pin P7 female	open	1m/3m/5m/7m/10m/15m/30m/60m
	High flexible	MV-ACP-H6p-open-HF	6pin P7 female	open	3m/5m/7m/10m/15m/30m
	Super flexible	MV-ACP-H6p-open-SF	6pin P7 female	open	3m/5m/7m/10m/15m
	Standard (angled)	MV-ACP-H6p(left)-open-ST	6pin P7 female(left)	open	3m/5m/15m
	High flexible (angled)	MV-ACP-H6p(left)-open-HF	6pin P7 female(left)	open	3m/5m/15m
	Super flexible	MV-ACP-H6p-open-SF *	P7 6-pin	open	3m/5m/7m/10m/15m
P10 12pin I/O & Power Cables	Standard	MV-ACP-H12p-open-ST	12pin P10 female	open	3m/5m/7m/10m/20m
	High flexible	MV-ACP-H12p-open-HF	12pin P10 female	open	3m/5m/7m/10m
Frame Grabber I/O Trigger Line	Standard (high shield)	MV-ACP-DB9F-open-ST(EMC)	DB9F	open	3m/5m/7m/10m
		MV-ACP-DB15F-open-ST(EMC)	DB15F	open	3m/5m/7m/10m
Frame Grabber Internal I/O Cascade Line	Standard	MV-ACP-TJC8x7-FL-0.6m	TJC8 9pin female(7 ports)		0.6m

Notice:* will be released soon

Power Cables

RoHS

Specifications

Interface type	Model	End A connector	End B connector	Length
AC Power Cord	AC power cables,CCC_open_C13_0.8m	Open	C13 Plug	0.8 m
	AC power cables,CCC_E3p_C13_1.2m	E3p (CCC)	C13 Plug	1.2 m
	AC power cables,CCC_E3p_C13_1.5m	E3p (CCC)	C13 Plug	1.5 m
	AC power cables,CCC_E3p_C13_3m	E3p (CCC)	C13 Plug	3 m
	AC power cables,CCC_E3p_E75_2m	E4p (CCC)	E75 Plug	2 m
	AC power cables,CCC_E3p_open_2m	E4p (CCC)	Open	2 m
	AC power cables_GBP_E3p_C13_1.5m	E5p (GBP)	C13 Plug	1.5 m
	AC power cables_KOR_S2p_C13_1.5m	S2p (KOR)	C13 Plug	1.5 m
	AC power cables_ARG_S3p_C13_1.5m	S3p (ARG)	C13 Plug	1.5 m
	AC power cables_ITA_S3p_C13_1.5m	S3p (ITA)	C13 Plug	1.5 m
	AC power cables_BRA_S3p_C13_1.5m	S3p (BRA)	C13 Plug	1.5 m
	AC power cables_JPN_S2p_C13_1.5m	S2p (JPN)	C13 Plug	1.5 m
	AC power cables_TWN_S3p_C13_1.5m	S3p (TWN)	C13 Plug	1.5 m
	AC power cables_EUR_E2p_C13_1.5	E2p (EUR)	C13 Plug	1.5 m
	AC power cables_USA_S3p_C13_1.5m	S3p (USA)	C13 Plug	1.5 m
	AC power cables_IND_E3p_C13_1.5m	E3p (IND)	C13 Plug	1.5 m
	AC power cables_ISR_E3p_C13_1.5m	E3p (ISR)	C13 Plug	1.5 m
Power Adapter	Power Adapter,ADS-26FSG-12 12024EPCN	Two-prong AC plug (CCC standard)	Open(2-pin)	1200 mm
	Power Adapter,ADS-12FG-12N 12012EPCN	Two-prong AC plug (CCC standard)	Open(2-pin)	1500 mm
	Power Adapter,ADS-12IM-12-4 12012E-H(DC Connector)	Two-prong AC plug (CCC standard)	DC connector (Φ5.5mmxΦ2.1mm x10mm)	1200 mm
	Power Adapter,ADS-26FSG-12 12024EPCN(DC Connector)	Two-prong AC plug (CCC standard)	DC connector (Φ5.5mm × Φ2.1mm × 10mm)	1200 mm
	Power Adapter,KPL-060F-VI	C14 Plug	Open(2-pin)	800 mm
	Power Adapter,KPL-060M-VI	C14 Plug	Open(2-pin)	1200 mm
All-in-one Power Adapter	MV-ACP-H6P-ADP12V2A/open-ST-4m	P7 6-pin aerospace connector (female) + open (4-pin)	Two-prong AC plug	End A: 4000 mm End B: 1000 mm
	MV-ACP-H12P-ADP24V1A-ST-4m	P10 12-pin aerospace connector (female)	Two-prong AC plug	End A: 4000 mm End B: 1000 mm
Switching Power Supplies	Switching Power Supply,LRS-50-12	Terminal block (220 VAC Input)	Terminal block	-
	Switching Power Supply,LRS-50-24	Terminal block (220 VAC Input)	Terminal block	-
	Switching Power Supply,LRS-75-48	Terminal block (220 VAC/DC Input)	Terminal block	-
	Switching Power Supply,LRS-150F-24	Terminal block (220 VAC/DC Input)	Terminal block	-

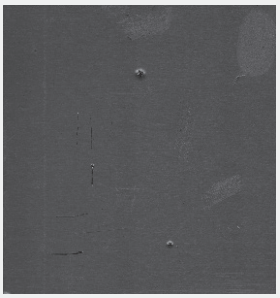
Industrial Products

High-Speed 2.5D Line Scan Vision Inspection System

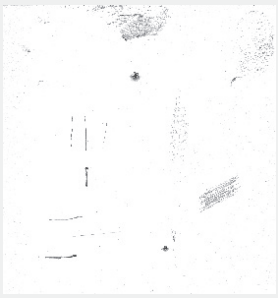
The high-speed 2.5D line scan vision inspection system adopts high-speed program-controlled stripe imaging technology to project the phase stripe onto the surface of the sample, and collects the information of the sample via the line scan camera. Combined with high-precision demodulation algorithm, it can get the height change information of the object's surface, and can show the defects such as scratches, stains, dents and bumps with higher contrast.

Key Features

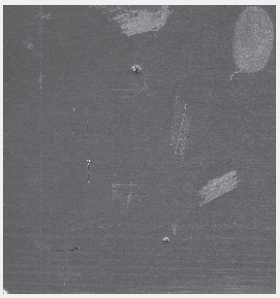
- Output multiple defects in a single capture, and accurately detect small scratches, dents and bumps, and other defects on the surface of the sample.
- Remove background interference and surface reflections, and provide depth information on the surface of the workpiece, applicable for defect detection in highly-reflective and transparent objects.
- Combined with VM to achieve 2.5D image and defect recognition.



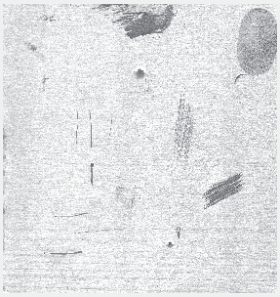
Normal



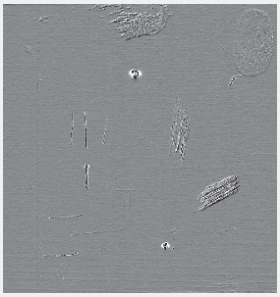
Specular



Diffuse



GlossRatio



Shape

Specifications

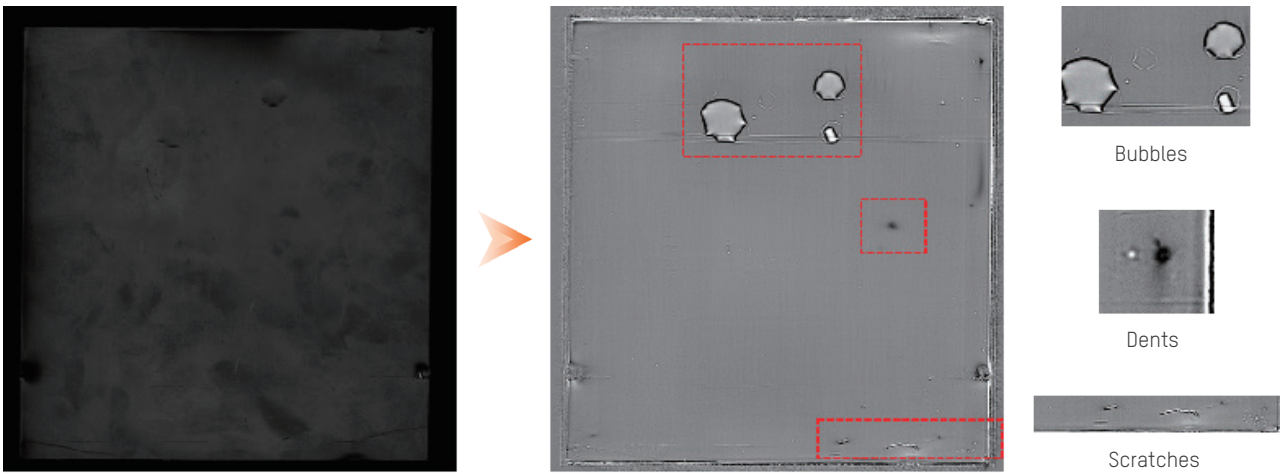
Model		MV-HLVS-4K200-L15	MV-HLVS-8K100-L15	MV-HLVS-8K200-L15	MV-HLVS-16K100-L15
Light Source	Emitting area	150mm×100mm			
	LED color	White			
	Communication method	Ethernet			
Camera	Pixel size	7um×7um	7um×7um	7um×7um	3.5um×3.5um
	Resolution	4096×2	8192×2	8192×2	16384×2
	Scanning rate	195kHz	100kHz	200kHz	120kHz
	Mono/color	Mono	Mono	Mono	Mono
	Data interface	Camera Link	Camera Link	XoFLink	XoFLink
	Pixel format	Mono 8	Mono 8	Mono 8	Mono 8

Model		MV-HLVS-4K200-L30	MV-HLVS-8K100-L30	MV-HLVS-8K200-L30	MV-HLVS-16K100-L30
Light Source	Emitting area	300mm×100mm			
	LED color	White			
	Communication method	Ethernet			
Camera	Pixel size	7um×7um	7um×7um	7um×7um	3.5um×3.5um
	Resolution	4096×2	8192×2	8192×2	16384×2
	Scanning rate	195kHz	100kHz	200kHz	120kHz
	Mono/color	Mono	Mono	Mono	Mono
	Data interface	Camera Link	Camera Link	XoFLink	XoFLink
	Pixel format	Mono 8	Mono 8	Mono 8	Mono 8

Case Study

Blue Film Battery Surface Defect Detection

- Application scenarios: Bubbles, dents, and scratches on the surface of the battery.
- Difficulty: Detection is interfered by reflections on the surface of the battery film.
- Result: Remove the surface reflection, and detect bubbles, dents, and scratches.

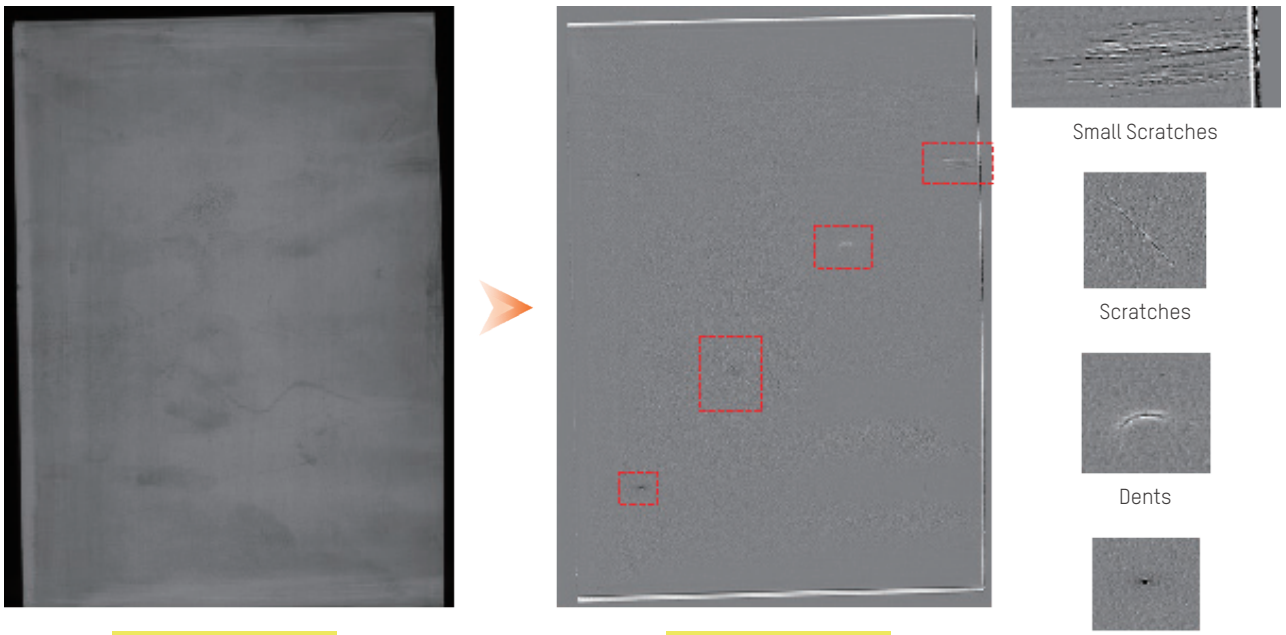


2D Image

2.5D Image

Lithium Battery Aluminum Casing Surface Defect Detection

- Application scenarios: Scratches, dents and dumps on the surface of the lithium battery aluminum casing.
- Difficulty: Detection is interfered by reflections on the metal surface.
- Result: Remove the surface reflection, and detect scratches, dents and dumps on the surface of aluminum plates.



2D Image

2.5D Image

Industrial Camera Client and Software Development Kit

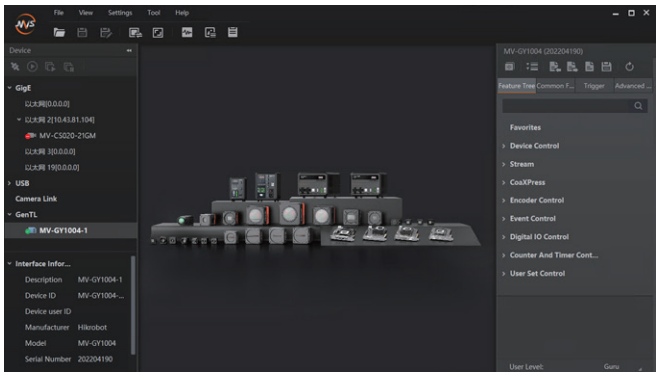
The industrial camera client and software development kit is based on the GenICam standard and follows the GigE Vision, USB3 Vision, Camera Link, CoaXPress and XoFLink protocols. The user can connect the industrial camera through the client or SDK, collect the camera image, and obtain and set the camera parameters. The software development kit contains SDK and sample programs, which can meet the diverse needs of users for secondary development.

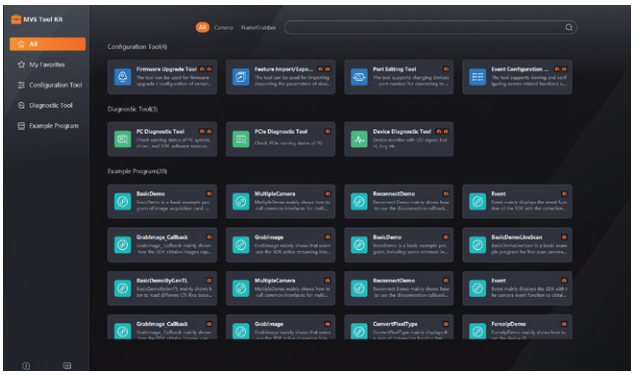
Performance characteristics

- High-performance GEV and U3V drivers improve image data transmission and processing capabilities.
- Provide GenTL standard library to access to industrial cameras, and support the control and image acquisition of self-developed frame grabbers, such as GigE frame grabber, Camera Link frame grabber, CoaXPress frame grabber, and XoFLink frame grabber.
- Abundant API interfaces are convenient for users to carry out secondary development quickly and effectively. Provide deep customization of API interfaces and UI interfaces at the same time.
- Integrate a variety of ISP algorithms to help users get the most appropriate image through image preprocessing
- Support the matching access of third-party software and provide DirectShow development kit
- Diverse sample programs, source code, and development documentation for quick access.
- Provide frame grabber SDK interface library and sample programs to support the control and image collection of self-developed frame grabber.

Supported Platforms	Supported Programing Languages
Windows 32/64bits X86/ARM Linux 32/64bits MacOS 64bits Android	C C++ C# VB.NET PYTHON Delphi JAVA

MVS





Download

Industrial camera client and software development kit can be downloaded by visiting the website of Hikrobot.
http://www.hikrobotics.com/service/soft.htm?type=1

Here is the QR code for the download link:

Parameter Interpretation

Sensor size

The diagonal size of CMOS, pixel size and resolution together determine the sensor size of camera.

Pixel size

The size of 1 pixel which is the smallest unit that makes up an image.

Shutter mode

Divided into global shutter and rolling shutter: the former starts and ends exposure for each line at the same time, and after the exposure is completed, the data is read out line by line; the latter reads out the data immediately after the end of a line of exposure, and the next line starts after it is completely read out.

Resolution

Determines the fineness of the image. In general, the higher the resolution of the image, the more pixels it contains, and the clearer the image will be.

Frame rate

The number of frames transmitted per second,in unit of fps.

Exposure time

The time that light hits the photosensitive chip from the time the shutter is open to the time it is closed. The brightness of the image can be changed by adjusting the exposure time.

Line rate

The number of horizontal scans per second, in unit of Hz.

Spectral range

responsive wavelength range of infrared camera.

NETD

The minimum temperature difference that the infrared camera can distinguish,in unit of mk.

Interconnect

The interface between the frame grabber and the industrial computer, commonly used interfaces include PCI, PCI-E.

Delivery bandwidth

The data transmission performance between the frame grabber and the industrial computer, the indicators include bus width, bus clock, and maximum transmission rate. The wider the bus width, the greater the clock frequency, and the faster the transmission rate, the more data transmitted per unit time.

Camera connection speed

Data transmission speed between camera and industrial computer or frame grabber.

Focal length

The distance from the rear principal plane of the optical system to the imaging plane, indicating the ability of the optical system to gather light.

F No.

The aperture on the camera lens is opened to the maximum and minimum range.
Aperture is a device used to control the amount of light that passes through the lens and enters the photosensitive surface of the camera.

Distortion

The degree of distortion of the image formed by the optical system on the object relative to the object itself.

Field of View(FOV)

Taking the lens as the vertex, the angle formed by the two edges of the maximum range where the object image of the measured target can pass through the lens.

M.O.D (m)

The closest acquisition distance of the lens.

Filter thread

The type of thread used to mount the filter on the front of the lens.

Lens mount

The type of mechanical interface the camera uses to connect the lens.

Hikrobot

Vision for Imagination

MACHINE VISION PRODUCT CATALOG

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