

DAHENG IMAGING  
SINCE 1991



31 Years Dedicated to Machine Vision!



About Us

# Welcome



Daheng Science & Technology Tower

Founded in 1991, DAHENG IMAGING is a leading supplier for professional imaging components as well as machine vision solutions. Since its founding, the company has been dedicated to the advancement of imaging & vision technologies and delivered a range of own-developed vision products with many proprietary innovations. Being a know-how company with long history in machine vision industry, DAHENG IMAGING deserves trusts from counterparts all over the world and has established close cooperation. After over three decades of rapid growth, DAHENG IMAGING becomes one of the most famous and successful vision company in China. As core asset of public company DAHENG TECH ( stock symbol: 600288), DAHENG IMAGING is committed to providing our customers with cutting edge technology, high quality products and perfect service.



Automated Imaging Association

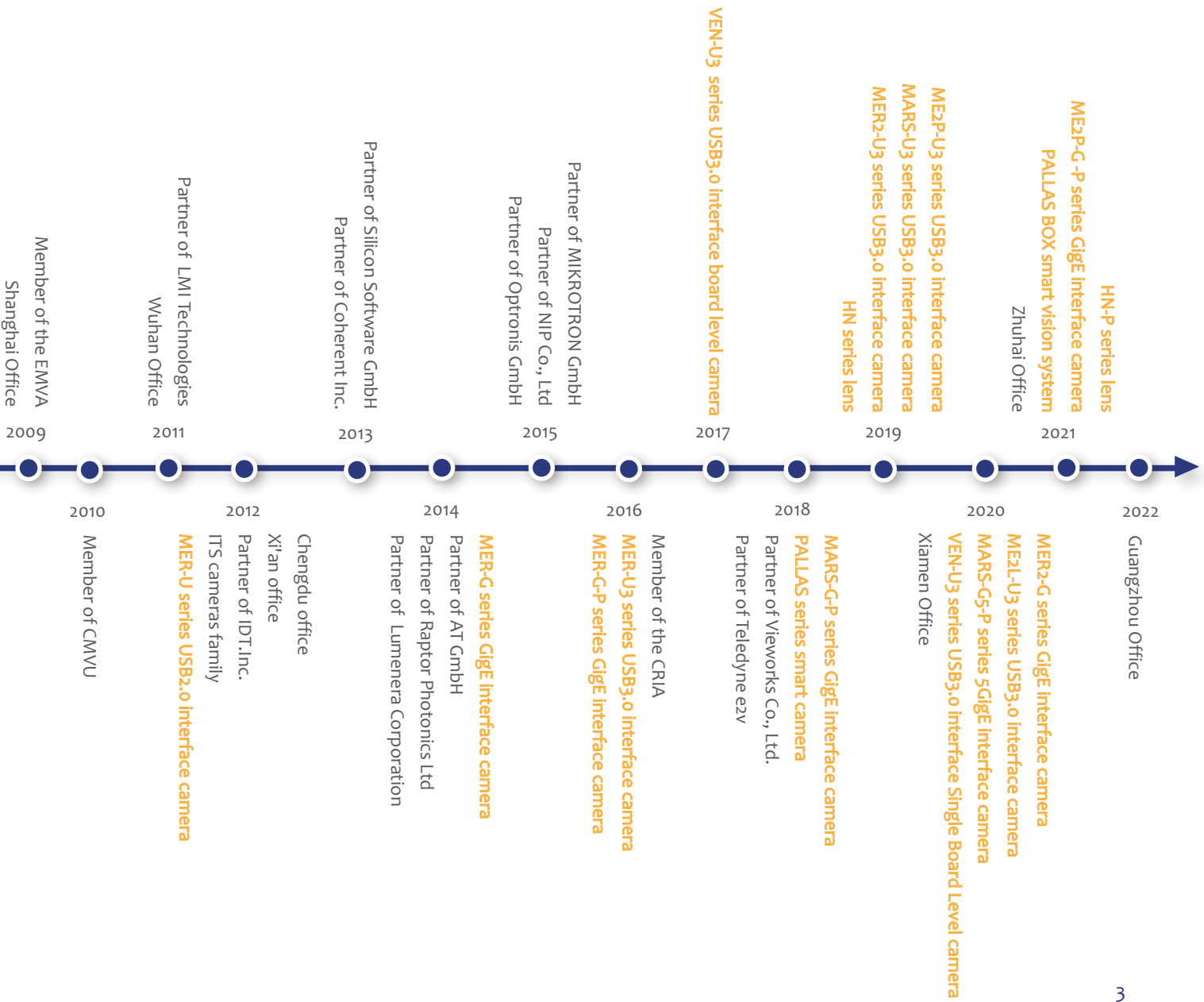


ISO9001:2000

# Our Story



Dedicated to Machine Vision



# Our Philosophies

## Integrity

Being honest and having strong moral principles are at the heart of our culture. We firmly believe that sincerity will lead to mutual benefit and keeping promises is the foundation of our characteristics and business ethics.

## People Oriented

We respect Human Values and regard employees as our most valuable assets. All of our efforts aim to finally serve people, and we carefully hear voices of each partner. We really enjoy seeing customers' ideas come to life, employees' dreams are turned into realities, and partners' wishes come true. And such kinds of successful stories spread throughout the country and the whole world.

## Keep Diligence

Just being diligence and pragmatism when working with our customers is a fundamental rule of our professionalism. We adopt a pragmatic approach to our business, admit the existence of imperfections and limitations of technologies, and constantly remind and motivate ourselves that we must pursue the best to satisfy requirements from customers and employees.





*Dedicated to Machine Vision*

### **Win-Win Cooperation**

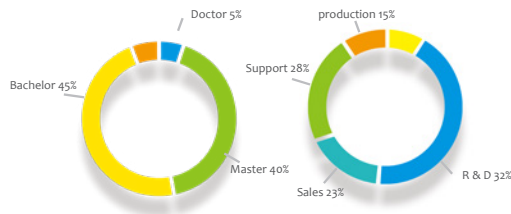
We treat every customer as one of our partners, refuse to play "zero-sum game" in the business, and believe that all participants in the game will become the winner. With a sincere heart, we always take a partner's responsibility to create values for our customers and then realize our own values in return.

### **Continuous Innovation**

From the date of establishment, we created so many "breakthroughs" which have already been recorded in the machine vision history of China. With a global vision and a natural sense of urgency, however, we clearly understand that "innovation capability" is the soul of a hi-tech company and the only way leading to cutting-edge technologies and products which deserve customers' trust and indeed improve productivity.

# Our Team

- Headquarters located in Beijing, based upon the strength of Chinese Academy of Sciences
- Having enterprise post-doctoral station dedicated to Machine Vision
- Having up to 900 employees by the end of 2021
- A large network for support and services has been established
- Featuring a R&D team with over 300 professionals, 40% of employees having master degree
- Proven innovation ability and patented technologies



# Our Promise

## 3-Year Warranty

DAHENG IMAGING offers a 3-year warranty for the camera. We make this unprecedented promise because we have unparalleled confidence in our products. We continually reinvest in research, development and superior manufacturing capabilities so that our customers can fully rely on the products we manufacture.





# Our Products

*Dedicated to Machine Vision*

## MERCURY2 Series



MERCURY2 series camera is DAHENG IMAGING's new generation area scan industrial digital camera, featuring compact design, outstanding performance, high definition and extremely low noise. MERCURY2 series camera supports more features with improved built-in ISP algorithms and provides multiple acquisition controls.

Thanks to the extremely compact, robust metal housings and locking screw connectors, the MERCURY2 cameras can secure the reliability of cameras deployed in harsh environments. The MERCURY2 series camera also has an outstanding price/performance ratio. The MERCURY2 family cameras are especially suitable for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

- GigE interface or USB3.0 interface
- Programmable ROI, increased frame rate with partial scan
- Gain, exposure and white balance programmable
- Auto gain, auto exposure and auto white balance
- Trigger mode: Frame Start /Frame Burst Start
- Four acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition / External trigger acquisition
- LUTs, storable user sets, Timer and Counter
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Light source preset, Color Transformation Control, Saturation and Noise Reduction
- Decimation, Binning, Reverse X/Y, Digital Shift, Black Level, Flat Field Correction and Defect Pixel Correction
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Support third-party software such as HALCON, MERLIC and LabVIEW
- Optimized software package for 32/64bit Windows, and support Linux, ARMv7, ARMv8 and Mac OS
- Regulations: CE, RoHS, GenICam, GigE Vision, USB Vision

\*Each model has different functions, please refer to the datasheet for more detailed information.

## MER2-G

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
MER2-041-302GM/C	GigE	720 × 540	302.3 fps	1/2.9" Sony IMX287 global shutter CMOS	6.9µm × 6.9µm	8/12bits	Mono/Color
MER2-051-120GM/C	GigE	808 × 608	120 fps	1/3.6" ON PYTHON 480 global shutter CMOS	4.8µm × 4.8µm	8/10bits	Mono/Color
MER2-134-90GM/C	GigE	1280 × 1024	90 fps	1/2" ON PYTHON 1300 global shutter CMOS	4.8µm × 4.8µm	8/10bits	Mono/Color
MER2-135-90GM/C	GigE	1280 × 1024	90 fps	1/2.7" SmartSens SC130GS global shutter CMOS	4.0µm × 4.0µm	8/10bits	Mono/Color
MER2-160-75GM/C	GigE	1440 × 1080	75.6 fps	1/2.9" Sony IMX273 global shutter CMOS	3.45µm × 3.45µm	8/12bits	Mono/Color
MER2-202-60GM/C	GigE	1600 × 1200	60 fps	1/1.8" Teledyne e2v EV76C570 global shutter CMOS	4.5µm × 4.5µm	8/10bits	Mono/Color
MER2-231-41GM/C	GigE	1920 × 1200	41 fps	1/1.2" Sony IMX249 global shutter CMOS	5.86µm × 5.86µm	8/10bits	Mono/Color
MER2-302-37GM/C	GigE	2048 × 1536	37.4 fps	1/1.8" Sony IMX265 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-503-23GM/C	GigE	2448 × 2048	23.5 fps	2/3" Sony IMX264 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-507-23GM/C	GigE	2592 × 1944	23.3 fps	1/2.5" ON AR0521 rolling shutter CMOS	2.2µm × 2.2µm	8/12bits	Mono/Color
MER2-507-23GM NIR	GigE	2592 × 1944	23.3 fps	1/2.5" ON AR0522 rolling shutter CMOS	2.2µm × 2.2µm	8/12bits	Mono, NIR
MER2-630-18GM/C	GigE	3088 × 2064	18.45 fps	1/1.8" Sony IMX178 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color
MER2-1220-9GM/C	GigE	4024 × 3036	9.63 fps	1/1.7" Sony IMX226 rolling shutter CMOS	1.85µm × 1.85µm	8/12bits	Mono/Color
MER2-2000-6GM/C	GigE	5496 × 3672	5.8 fps	1" Sony IMX183 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color

### Mechanical Specifications

<b>Weight</b>	62 ~ 65g
<b>Dimensions</b>	29(W) × 29(H) × 29(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

<b>Power requirement</b>	12-24 VDC (8-PIN connector)
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	RJ45 with locked
<b>Power consumption</b>	<3W@24VDC

### Optical Specifications

<b>Lens mount</b>	C / CS – Mount
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## MER2-G-P

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
MER2-041-302GM/C-P	GigE PoE	720 × 540	302 fps	1/2.9" Sony IMX287 global shutter CMOS	6.9µm × 6.9µm	8/12bits	Mono/Color
MER2-051-120GM/C-P	GigE PoE	808 × 608	120 fps	1/3.6" ON PYTHON 480 global shutter CMOS	4.8µm × 4.8µm	8/10bits	Mono/Color
MER2-134-90GM/C-P	GigE PoE	1280 × 1024	90 fps	1/2" ON PYTHON 1300 global shutter CMOS	4.8µm × 4.8µm	8/10bits	Mono/Color
MER2-135-90GM/C-P	GigE PoE	1280 × 1024	90 fps	1/2.7" SmartSens SC130GS global shutter CMOS	4.0µm × 4.0µm	8/10bits	Mono/Color
MER2-160-75GM/C-P	GigE PoE	1440 × 1080	75 fps	1/2.9" Sony IMX273 global shutter CMOS	3.45µm × 3.45µm	8/12bits	Mono/Color
MER2-202-60GM/C-P	GigE PoE	1600 × 1200	60 fps	1/1.8" Teledyne e2v EV76C570 global shutter CMOS	4.5µm × 4.5µm	8/10bits	Mono/Color
MER2-231-41GM/C-P	GigE PoE	1920 × 1200	41 fps	1/1.2" Sony IMX249 global shutter CMOS	5.86µm × 5.86µm	8/10bits	Mono/Color
MER2-302-37GM/C-P	GigE PoE	2048 × 1536	37.4 fps	1/1.8" Sony IMX265 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-503-23GM/C-P	GigE PoE	2448 × 2048	23.5 fps	2/3" Sony IMX264 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-503-23GM-P POL	GigE PoE	2448 × 2048	23.5 fps	2/3" Sony IMX264 MZR global shutter CMOS	3.45µm × 3.45µm	8/10bits	Polarzation
MER2-507-23GM/C-P	GigE PoE	2592 × 1944	23.3 fps	1/2.5" ON AR0521 rolling shutter CMOS	2.2µm × 2.2µm	8/12bits	Mono/Color
MER2-507-23GM-P NIR	GigE PoE	2592 × 1944	23.3 fps	1/2.5" ON AR0522 rolling shutter CMOS	2.2µm × 2.2µm	8/12bits	Mono, NIR
MER2-630-18GM/C-P	GigE PoE	3088 × 2064	18.45 fps	1/1.8" Sony IMX178 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color
MER2-1220-9GM/C-P	GigE PoE	4024 × 3036	9.63 fps	1/1.7" Sony IMX226 rolling shutter CMOS	1.85µm × 1.85µm	8/12bits	Mono/Color
MER2-2000-6GM/C-P	GigE PoE	5496 × 3672	5.8 fps	1" Sony IMX183 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color

### Mechanical Specifications

<b>Weight</b>	75g
<b>Dimensions</b>	29(W) × 29(H) × 40.3(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

<b>Power requirement</b>	12-24 VDC (8-PIN connector) or PoE
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	RJ45 with locked
<b>Power consumption</b>	<3W@24VDC, <3.75W@PoE

### Optical Specifications

<b>Lens mount</b>	C / CS – Mount
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## MER2-u3

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
MER2-041-436U3M/C	USB3.0	720 × 540	438 fps	1/2.9" Sony IMX287 global shutter CMOS	6.9µm × 6.9µm	8/10bits	Mono/Color
MER2-135-208U3M/C	USB3.0	1280×1024	208.5fps	1/2.7" SmartSens SC130GS global shutter CMOS	4.0µm × 4.0µm	8/10bits	Mono/Color
MER2-160-227U3M/C	USB3.0	1440 × 1080	227 fps	1/2.9" Sony IMX273 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-230-168U3M/C	USB3.0	1920 × 1200	168 fps	1/1.2" Sony IMX174 global shutter CMOS	5.86µm × 5.86µm	8/10bits	Mono/Color
MER2-231-41U3M/C	USB3.0	1920 × 1200	41 fps	1/1.2" Sony IMX249 global shutter CMOS	5.86µm × 5.86µm	8/10bits	Mono/Color
MER2-301-125U3M/C	USB3.0	2048 × 1536	125 fps	1/1.8" Sony IMX252 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-302-56U3M/C	USB3.0	2048 × 1536	56 fps	1/1.8" Sony IMX265 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-502-79U3M/C	USB3.0	2448 × 2048	79.1fps	2/3" Sony IMX250 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-502-79U3M POL	USB3.0	2448 × 2048	79.1fps	2/3" Sony IMX250MZR global shutter CMOS	3.45µm × 3.45µm	8/10bits	Polarization
MER2-503-36U3M/C	USB3.0	2448 × 2048	36 fps	2/3" Sony IMX264 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-503-36U3M POL	USB3.0	2448 × 2048	36 fps	2/3" Sony IMX264MZR global shutter CMOS	3.45µm × 3.45µm	8/10bits	Polarization
MER2-630-60U3M/C	USB3.0	3088 × 2064	60 fps	1/1.8" Sony IMX178 rolling shutter CMOS	2.4µm × 2.4µm	8/10bits	Mono/Color
MER2-1220-32U3M/C	USB3.0	4024 × 3036	32.3 fps	1/1.7" Sony IMX226 rolling shutter CMOS	1.85µm × 1.85µm	8/12bits	Mono/Color
MER2-2000-19U3M/C	USB3.0	5496 × 3672	19.6 fps	1" Sony IMX183 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color
<b>MER2-U3-W90</b>							
MER2-630-60U3M/C-W90	USB3.0	3088 × 2064	60 fps	1/1.8" Sony IMX178 rolling shutter CMOS	2.4µm × 2.4µm	8/10bits	Mono/Color
MER2-1220-32U3M/C-W90	USB3.0	4024 × 3036	32.3 fps	1/1.7" Sony IMX226 rolling shutter CMOS	1.85µm × 1.85µm	8/12bits	Mono/Color
MER2-2000-19U3M/C-W90	USB3.0	5496 × 3672	19.6 fps	1" Sony IMX183 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color

### Mechanical Specifications

<b>Weight</b>	65g ~ 78g
<b>Dimensions</b>	MER2-U3: 29(W) × 29(H) × 29(L) mm MER2-U3-W90: 29(W) × 29(H) × 58.8(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

<b>Power requirement</b>	5 VDC (USB3.0)
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	USB3.0 with locked
<b>Power consumption</b>	<2.7W@5VDC

### Optical Specifications

<b>Lens mount</b>	C / CS – Mount
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## MER2-u3-L

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
MER2-041-436U3M/C-L	USB3.0	720 × 540	438 fps	1/2.9" Sony IMX287 global shutter CMOS	6.9µm × 6.9µm	8/10bits	Mono/Color
MER2-135-208U3M/C-L	USB3.0	1280×1024	208.5fps	1/2.7" SmartSens SC130GS global shutter CMOS	4.0µm × 4.0µm	8/10bits	Mono/Color
MER2-160-227U3M/C-L	USB3.0	1440 × 1080	227 fps	1/2.9" Sony IMX273 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-230-168U3M/C-L	USB3.0	1920 × 1200	168 fps	1/1.2" Sony IMX174 global shutter CMOS	5.86µm × 5.86µm	8/10bits	Mono/Color
MER2-231-41U3M/C-L	USB3.0	1920 × 1200	41 fps	1/1.2" Sony IMX249 global shutter CMOS	5.86µm × 5.86µm	8/10bits	Mono/Color
MER2-301-125U3M/C-L	USB3.0	2048 × 1536	125 fps	1/1.8" Sony IMX252 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-302-56U3M/C-L	USB3.0	2048 × 1536	56 fps	1/1.8" Sony IMX265 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-502-79U3M/C-L	USB3.0	2448 × 2048	79.1fps	2/3" Sony IMX250 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-503-36U3M/C-L	USB3.0	2448 × 2048	36 fps	2/3" Sony IMX264 global shutter CMOS	3.45µm × 3.45µm	8/10bits	Mono/Color
MER2-630-60U3M/C-L	USB3.0	3088 × 2064	60 fps	1/1.8" Sony IMX178 rolling shutter CMOS	2.4µm × 2.4µm	8/10bits	Mono/Color
MER2-1220-32U3M/C-L	USB3.0	4024 × 3036	32.3 fps	1/1.7" Sony IMX226 rolling shutter CMOS	1.85µm × 1.85µm	8/12bits	Mono/Color
MER2-2000-19 U3M/C-L	USB3.0	5496 × 3672	19.6 fps	1" Sony IMX183 rolling shutter CMOS	2.4µm × 2.4µm	8/12bits	Mono/Color

### Mechanical Specifications

<b>Weight</b>	61g
<b>Dimensions</b>	29(W) × 29(H) × 29(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

<b>Power requirement</b>	5 VDC (USB3.0)
<b>I/Os</b>	NULL
<b>Data interface</b>	USB3.0 with locked
<b>Power consumption</b>	<2.7W@5VDC

### Optical Specifications

<b>Lens mount</b>	C / CS – Mount
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## ME2P-G-P

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
ME2P-560-21GM/C-P	GigE PoE	2600 × 2160	21 fps	1/2" GMAX2505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-900-13GM/C-P	GigE PoE	4200 × 2160	13 fps	2/3" GMAX2509 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-1230-9GM/C-P	GigE PoE	4096 × 3000	9 fps	1.1" Sony IMX304 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color
ME2P-1840-6GM/C-P	GigE PoE	4058 × 4096	6.4 fps	1" GMAX2518 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2621-4GM/C-P	GigE PoE	5120 × 5120	4.5 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2621-4GM-P NIR	GigE PoE	5120 × 5120	4.5 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono, NIR
ME2P-2622-4GM/C-P	GigE PoE	5120 × 5120	4.5 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2622-4GM-P NIR	GigE PoE	5120 × 5120	4.5 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono, NIR
<b>Tilt-Shift Camera</b>							
ME2P-900-13GM/C-P-HF8	GigE PoE	4200 × 2160	13 fps	2/3" GMAX2509 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-900-13GM/C-P-VF8	GigE PoE	4200 × 2160	13 fps	2/3" GMAX2509 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-1230-9GM/C-P-HF8	GigE PoE	4096 × 3000	9 fps	1.1" Sony IMX304 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color
ME2P-1230-9GM/C-P-VF8	GigE PoE	4096 × 3000	9 fps	1.1" Sony IMX304 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color
ME2P-1840-6GM/C-P-HF8	GigE PoE	4058 × 4096	6.4 fps	1" GMAX2518 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-1840-6GM/C-P-VF8	GigE PoE	4058 × 4096	6.4 fps	1" GMAX2518 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2621-4GM/C-P-HF8	GigE PoE	5120 × 5120	4.5 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2621-4GM/C-P-VF8	GigE PoE	5120 × 5120	4.5 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color

### Mechanical Specifications

<b>Weight</b>	75 ~ 152g
<b>Dimensions</b>	36(W) × 31(H) × 50.6(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Optical Specifications

<b>Lens mount</b>	C / CS – Mount
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### Electrical Specifications

<b>Power requirement</b>	12-24 VDC (8-PIN connector) or PoE
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	RJ45 with locked
<b>Power consumption</b>	ME2P-560-21GM/C-P: < 4W @ 24VDC; < 4.25W @ PoE ME2P-900-13GM/C-P(-HF8/VF8): < 4W @ 24VDC; < 4.5W @ PoE ME2P-1230-9GM/C-P(-HF8/VF8): < 3.75W @ 24VDC; < 3.75W @ PoE ME2P-1840-6GM/C-P(-HF8/VF8): < 4.25W @ 24VDC; < 4.75W @ PoE ME2P-2621-4GM/C-P(-HF8/VF8): < 4.25W @ 24VDC; < 4.25W @ PoE ME2P-2621-4GM/C-P NIR: < 4.25W @ 24VDC; < 4.75W @ PoE ME2P-2622-4GM/C-P: < 4.25W @ 24VDC; < 4.25W @ PoE ME2P-2622-4GM/C-P NIR: < 4.25W @ 24VDC; < 4.75W @ PoE

## ME2P-U3

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
ME2P-900-43U3M	USB3.0	4200 × 2160	43.5 fps	2/3" GMAX2509 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono
ME2P-1230-23U3M/C	USB3.0	4096 × 3000	23.5 fps	1.1" Sony IMX304 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color
ME2P-1231-32U3M/C	USB3.0	4096 × 3000	32.1 fps	1.1" Sony IMX253 global shutter CMOS	3.45μm × 3.45μm	8/10bits	Mono/Color
ME2P-1840-21U3M/C	USB3.0	4508 × 4096	21.4 fps	1" GMAX2518 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2621-15U3M/C	USB3.0	5120 × 5120	15.1 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2621-15U3M NIR	USB3.0	5120 × 5120	15.1 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono, NIR
ME2P-2622-15U3M/C	USB3.0	5120 × 5120	15.1 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono/Color
ME2P-2622-15U3M NIR	USB3.0	5120 × 5120	15.1 fps	1.1" GMAX0505 global shutter CMOS	2.5μm × 2.5μm	8/12bits	Mono, NIR

### Mechanical Specifications

<b>Weight</b>	66g
<b>Dimensions</b>	36(W) × 31(H) × 38.8(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

<b>Power requirement</b>	5 VDC (USB3.0)
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	USB3.0 with locked
<b>Power consumption</b>	<3.5W@5VDC

### Optical Specifications

<b>Lens mount</b>	C / CS – Mount
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## MARS Series



The MARS series camera is DAHENG IMAGING's latest high resolution camera with large and high quality sensor. Thanks to the compact size, robust housing and locking screw connectors, the MARS series can secure the reliability of cameras deployed in harsh industrial environments.

The MARS series camera is featured in high resolution, high definition and low noise. The Gigabit Ethernet interface is used for long distance transmission. The MARS series is especially designed for industrial inspection, rail traffic, scientific research and 3D reconstruction and so on.

- Four acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition / External trigger acquisition
- Gain, exposure and white balance programmable
- Support auto gain, auto exposure and auto white balance
- Trigger mode: Frame Start /Frame Burst Start
- Decimation, Binning, Reverse X/Y, Digital Shift and Black Level
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Defect Pixel Correction and Flat Field Correction
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, and so on
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- The maximum transfer rate is up to 5Gbit/s and can be switched to 1Gbit/s and 2.5Gbit/s (Only for MARS-G5-P)
- Regulations: CE, RoHS, GenICam, GigE Vision, USB3 Vision, IEEE802.3af (PoE)
- Support a variety of 3rd-party software such as HALCON, MERLIC and LabVIEW
- Optimized software package for 32/64bit Windows, and support Linux, ARMv7, ARMv8 and Mac OS (Mac OS only for GigE)

\*Each model has different functions, please refer to the datasheet for more detailed information.



## MARS-G-P

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color	Lens mount
MARS-3140-3GM/C-P-M02	GigE PoE	6464 × 4852	3.4fps	1.8" Sony IMX342 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color	F
MARS-3140-3GM/C-P-M03	GigE PoE	6464 × 4852	3.4fps	1.8" Sony IMX342 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color	M42×1
MARS-3140-3GM/C-P-M06	GigE PoE	6464 × 4852	3.4fps	1.8" Sony IMX342 global shutter CMOS	3.45μm × 3.45μm	8/12bits	Mono/Color	Mo-mount

### Mechanical Specifications

<b>Weight</b>	292g
<b>Dimensions</b>	62(W) × 62(H) × 52.1(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10% ~ 80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

<b>Power requirement</b>	12 VDC-10%~ 24 VDC+10% or PoE
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	RJ45 with locked
<b>Power consumption</b>	<5.5W@12VDC, <6W@ PoE

### Optical Specifications

<b>Lens mount</b>	MARS-3140-3GM/C-P-M02: F-Mount MARS-3140-3GM/C-P-M03: M42-Mount, flange distance is 12mm MARS-3140-3GM/C-P-M06: No-mount
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## MARS-G5-P

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color
MARS-1231-46G5M/C-P	5GigE	4096 × 3000	46fps	1.1" Sony IMX253 global shutter CMOS	3.45μm × 3.45μm	8/10bits	Mono/Color

### Mechanical Specifications

<b>Weight</b>	305g
<b>Dimensions</b>	62(W) × 62(H) × 53.2(L) mm

### Environmental Specifications

<b>Operating temp.</b>	0°C ~ +45°C
<b>Operating humidity</b>	10%~80%
<b>Storage temp.</b>	-20°C ~ +70°C

### Electrical Specifications

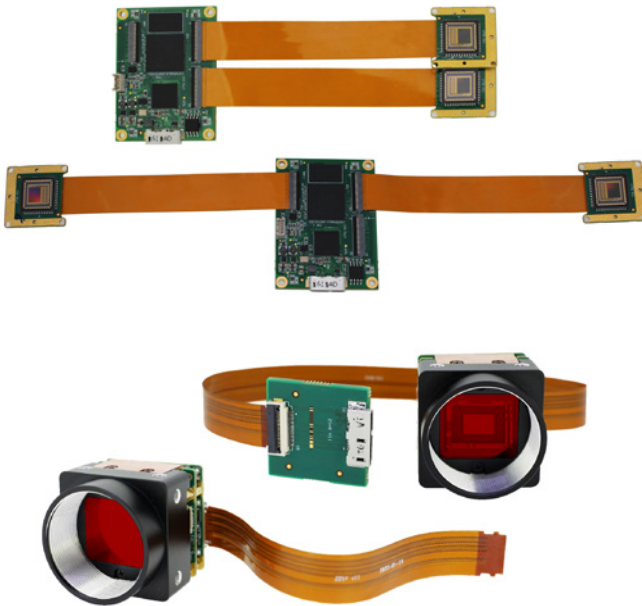
<b>Power requirement</b>	12 VDC-10%~ 24 VDC+10% or PoE
<b>I/Os</b>	Opto-isolated 1 input/1 output, 2 GPIOs
<b>Data interface</b>	RJ45 with locked
<b>Power consumption</b>	<9W@12VDC, <10.5W@PoE

### Optical Specifications

<b>Lens mount</b>	C Mount
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## VENUS Series

The VENUS series camera is DAHENG IMAGING's board level camera, providing an excellent choice for users with minimal space, low weight, low power consumption and low heat. The VENUS series camera is more flexible for installment and suitable for more applications. The camera is especially designed for binocular vision applications such as handheld 3D scanner, desktop 3D scanner and so on and has an outstanding price/performance ratio.



- Programmable ROI, increased frame rate with partial scan
- Gain, exposure and white balance programmable (white balance only for color models)
- Three acquisition controls: Continuous acquisition/ Software trigger acquisition/ External trigger acquisition
- Support Windows, Linux, Android, ARMv7, ARMv8, etc.
- Regulations: GenICam, USB3 Vision

### Dual sensor board level cameras

- Adjustable URB
- Hot plugging available
- FPC cables extension can be put in both sides or the same side
- The length of FPC cable can be extended up to 460mm

### Single sensor board level cameras

- Support auto gain, auto exposure and auto white balance (auto white balance only for color models)
- Color models support light source preset function
- Storable user sets
- Support Reverse X/Y (horizontal and vertical mirroring)
- 16KB data storage area for saving algorithm coefficients, parameter configuration, and so on

\*Each model has different functions, please refer to the datasheet for more detailed information.

## VEN-U3

Model	Interface	Resolution(H×V)	Frame Rate	Sensor	Pixel Size	Pixel Bit Depth	Mono/ Color	Lens mount
VEN-161-61U3M/C-Mo1	USB3.0	1440 × 1080	61.2 fps	1/2.9" Sony IMX296 global shutter CMOS	3.45μm × 3.45μm	8/10 bits	Mono/Color	CS
VEN-161-61U3M/C-Mo5	USB3.0	1440 × 1080	61.2 fps	1/2.9" Sony IMX296 global shutter CMOS	3.45μm × 3.45μm	8/10 bits	Mono/Color	S
VEN-161-61U3M/C-Mo6	USB3.0	1440 × 1080	61.2 fps	1/2.9" Sony IMX296 global shutter CMOS	3.45μm × 3.45μm	8/10 bits	Mono/Color	No-mount
VEN-505-36U3M/C-Mo1	USB3.0	2592 × 1944	36.9fps	1/2.8" Sony IMX335 rolling shutter CMOS	2.0μm × 2.0μm	8/10 bits	Mono/Color	CS
VEN-505-36U3M/C-Mo5	USB3.0	2592 × 1944	36.9fps	1/2.8" Sony IMX335 rolling shutter CMOS	2.0μm × 2.0μm	8/10 bits	Mono/Color	S
VEN-505-36U3M/C-Mo6	USB3.0	2592 × 1944	36.9fps	1/2.8" Sony IMX335 rolling shutter CMOS	2.0μm × 2.0μm	8/10 bits	Mono/Color	No-mount
VEN-830-22U3M/C-Mo1	USB3.0	3840 × 2160	22fps	1/1.8" Sony IMX334 rolling shutter CMOS	2.0μm × 2.0μm	8/10 bits	Mono/Color	CS
VEN-830-22U3M/C-Mo5	USB3.0	3840 × 2160	22fps	1/1.8" Sony IMX334 rolling shutter CMOS	2.0μm × 2.0μm	8/10 bits	Mono/Color	S
VEN-830-22U3M/C-Mo6	USB3.0	3840 × 2160	22fps	1/1.8" Sony IMX334 rolling shutter CMOS	2.0μm × 2.0μm	8/10 bits	Mono/Color	No-mount
VEN-134-90U3M/C-D	USB3.0	1280 × 1024 × 2	90 fps	1/2" ON PYTHON 1300 global shutter CMOS	4.8μm × 4.8μm	8/10 bits	Mono/Color	C/CS/SNo-mount
VEN-134-90U3M-D NIR	USB3.0	1280 × 1024 × 2	90 fps	1/2" ON PYTHON1300 global shutter CMOS	4.8μm × 4.8μm	8/10 bits	Mono, NIR	C/CS/SNo-mount
VEN-302-56U3M/C-S	USB3.0	2048 × 1536	56 fps	1/1.8" Sony IMX265 global shutter CMOS	3.45μm × 3.45μm	8bits/10bits	Mono/Color	C/No-mount
VEN-230-168U3M/C-FPC	FPC	1920 × 1200	168 fps	1/1.2" Sony IMX174 global shutter CMOS	5.68μm × 5.68μm	8bits/10bits	Mono/Color	C
VEN-301-125U3M/C-FPC	FPC	2048 × 1536	125 fps	1/1.8" Sony IMX252 global shutter CMOS	3.45μm × 3.45μm	8bits/10bits	Mono/Color	C

### Mechanical Specifications

#### Weight

7 ~ 36g

VEN-U3-Mo1: 35(W)×35(H)×15.2(L) mm

VEN-U3-Mo5: 35(W)×35(H)×15.1(L) mm

VEN-U3-Mo6: 35(W)×35(H)×8.1(L) mm

#### Dimensions

VEN-302-56U3M/C-S: 29(W)×29(H)×20.2(L) mm

VEN-U3-FPC: 29(W)×29(H)×25.1(L) mm

VEN-134-90U3M/C-D (VEN-134-90U3M-D NIR):

Main board: 54.0mm × 40.0mm × 6.4mm

Sensor board: 25.4mm × 25.4mm × 6.1mm

### Electrical Specifications

**Power requirement** 5 VDC (USB3.0)

**I/Os** 1 input, 1 input / output

**Data interface** USB3.0 or FPC

**Power consumption** VEN-U3 (single sensor): <2.7W@5VDC  
VEN-U3 (double sensors): <3.5W@5VDC

### Environmental Specifications

**Operating temp.** 0°C ~ +45°C

**Operating humidity** 10% ~ 80%

**Storage temp.** -20°C ~ +70°C

### Optical Specifications

**Lens mount** C / CS / S / No-mount

# LENS

- Designed for machine vision applications
- High optical performance, 6~50mm focal length is optional
- Low distortion
- 6~25 megapixels
- Compact and light weight
- Easy installation
- 1/1.8"~1.2" sensor size, suitable for most industrial cameras on market



## HN-P-6M

Model	Sensor Size	Focal Length(mm)	F/No.	Angle of View(H×V°)	Distortion(%)	Working Distance	Filter Thread(mm)	Mount	Dimensions(D×L)(mm)
HN-P-0628-6M-C1/1.8	1/1.8"	6	F2.8-F16	62.5 × 44.47	±0.81	0.1m-∞	M37.5×0.5	C	Φ39.0 × 32.5
HN-P-0828-6M-C2/3	2/3"	8	F2.8-F16	56.02 × 43.72	0.89	0.1m-∞	M30.5×0.5	C	Φ33.0 × 34.5
HN-P-1228-6M-C2/3	2/3"	12	F2.8-F16	39.00 × 29.92	0.51	0.1m-∞	M30.5×0.5	C	Φ33.0 × 41.2
HN-P-1628-6M-C2/3	2/3"	16	F2.8-F16	30.32 × 23.00	0.34	0.1m-∞	M30.5×0.5	C	Φ33.0 × 33.2
HN-P-2528-6M-C2/3	2/3"	25	F2.8-F16	20.40 × 15.50	0.2	0.2m-∞	M30.5×0.5	C	Φ33.0 × 31.2
HN-P-3528-6M-C2/3	2/3"	35	F2.8-F16	14.70 × 11.06	0.25	0.2m-∞	M30.5×0.5	C	Φ33.0 × 30.6
HN-P-5028-6M-C2/3	2/3"	50	F2.8-F16	9.60 × 7.24	0.13	0.25m-∞	M30.5×0.5	C	Φ36.8 × 51.7

## HN-P-10M

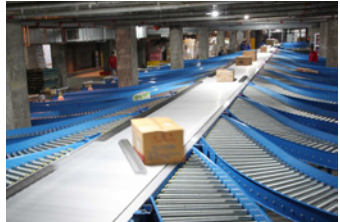
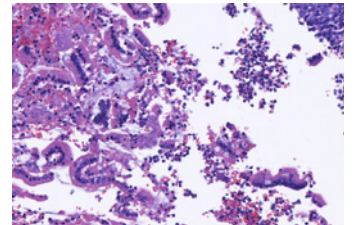
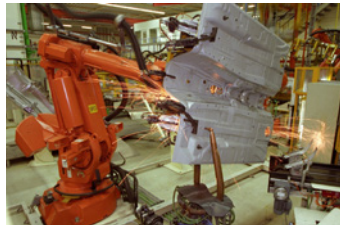
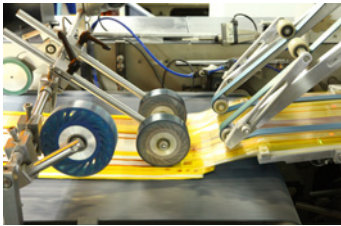
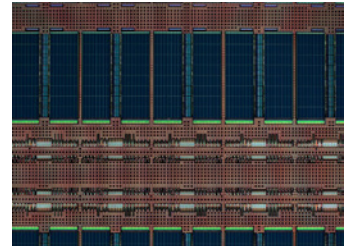
Model	Sensor Size	Focal Length(mm)	F/No.	Angle of View(H×V°)	Distortion(%)	Working Distance	Filter Thread(mm)	Mount	Weight(g)	Dimensions(D×L)(mm)
HN-P-0824-10M-C2/3	2/3"	8	F2.4-F16	57.5 × 44.9	±0.73	0.1m-∞	M37×0.5	C	102.4	Φ38.0 × 47.0
HN-P-1220-10M-C2/3	2/3"	12	F2-F16	39.3 × 30	±0.19	0.1m-∞	M28×0.5	C	104.3	Φ34.0 × 47.9
HN-P-1618-10M-C2/3	2/3"	16	F1.8-F14	29.8 × 22.6	±0.13	0.1m-∞	M27×0.5	C	89.9	Φ32.0 × 44.7
HN-P-2518-10M-C2/3	2/3"	25	F1.8-F16	18.3 × 13.8	±0.05	0.15m-∞	M27×0.5	C	63.6	Φ32.0 × 34.1
HN-P-3520-10M-C2/3	2/3"	35	F2-F16	12.9 × 9.7	±0.04	0.2m-∞	M30.5×0.5	C	97.9	Φ37.5 × 43.2
HN-P-5028-10M-C2/3	2/3"	50	F2.8-F16	8.7 × 6.5	±0.01	0.3m-∞	M30.5×0.5	C	93.0	Φ35.5 × 52.7

## HN-P-25M

Model	Sensor Size	Focal Length(mm)	F/No.	Angle of View(H×V°)	Distortion(%)	Focusing Range	Filter Thread(mm)	Mount	Dimensions(D×L)(mm)
HN-P-1224-25M-C1.2/1	1.2"	12	F2.4-F16	62.33 × 55.33	0.39	0.1m-∞	-	C	Φ50.00 × 66.96
HN-P-1624-25M-C1.2/1	1.2"	16	F2.4-F16	48.83 × 42.86	0.07	0.1m-∞	M40.5×0.5	C	Φ42.50 × 59.76
HN-P-2524-25M-C1.2/1	1.2"	25	F2.4-F16	31.42 × 27.32	-0.04	0.15m-∞	M37×0.5	C	Φ40.00 × 58.44
HN-P-3524-25M-C1.2/1	1.2"	35	F2.4-F16	22.51 × 19.53	0.015	0.15m-∞	M42.5×0.5	C	Φ42.0 × 59.32
HN-P-5024-25M-C1.2/1	1.2"	50	F2.4-F16	15.66 × 13.57	0.011	0.25m-∞	M42.5×0.5	C	Φ42.00 × 61.16

# Applications

*Dedicated to Machine Vision*







## Headquarters

Add.: 12F Daheng Science & Technology Tower, No.3 Suzhou Street, Haidian District, Beijing China, 100080

Tel.: +86 10 82828878

Fax.: +86 10 82828996

E-mail: [isales@daheng-imaging.com](mailto:isales@daheng-imaging.com)

<https://www.daheng-imaging.com/en/>



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