

Vision Datum

Board-level Camera



GIG[®] **USB**[®]
VISION VISION

- Excellent Cost Performance
- Compatible with GigE Vision 、 USB3 Vision Protocol and GenICam Standard
- 4.8MP to 12MP resolution optional
- Global shutter, Rolling shutter CMOS
- Supports PoE (Some Models)

ABOUT US

Hangzhou Vision Datum Technology Co., Ltd. provides free of charge consultation for lenses, light sources, optical components and industrial cameras.

Hangzhou Vision Datum Technology Co., Ltd. is a professional machine vision high-tech expertise, committed to providing customers with mature machine vision software, hardware and other equipment. Vision Datum focuses on the research and development of machine vision applications, and its products cover industrial cameras, scientific cameras, high-definition frame grabbers, industrial FA lenses, telecentric lenses, machine vision light sources and image processing software. In addition, Vision Datum Engineering Department has a number of mature machine vision solutions based on industrial automation inspection, high-precision measurement and module recognition, which have been successfully applied to related machine vision projects.

Vision Datum's product portfolio provides customers with the widest selection of industrial cameras and lenses in the vision industry. We are committed to developing technologies that deliver business outcomes for our customers: cameras and lenses that are easy to use, easy to integrate, and have an excellent price/performance ratio.

VISION DATUM Mars Series

Board-Level Camera

For more info, pls visit:
www.visiondatum.com

Brief Introduction

With the development of science and technology, more and more demanding vision applications are produced, such as high-precision measurement and high-speed inspection. The Mars series cameras use all the top sensor manufacturers on the market, so you can easily find a Mars camera that suits your application and meets a wide variety of machine vision application requirements.

Mars series board-level industrial cameras cover GigE Gigabit

Applications

Defect Inspection;
Vision Localization;
Dimension Measurement;
Medical Image Detail Analysis;
Transportation Industry

Ethernet, USB3.0 and support GenICam, eliminating the need for secondary development. Mars series industrial cameras have excellent cost performance, which is very suitable for industrial, embedded, 3D, medical and other scenarios with higher space requirements..

Support a variety of lens interface options, bare board, C mount and M12 mount, among other features make the Mars series cameras suitable for most vision applications.

Features

Wide Range of Resolution

Resolution from 4.8MP-12MP for Various Applications

Multiple Interface

Bare board, C-mount and M12-mount

Excellent Cost Performance

Model	Sensor	Resolution [HxV pixels]	Frame Rate [Max. fps]	Pixel Size [μm^2]	Sensor Size	Data Bits	Color	Sensor Technology	Page
Mars800P-120gm-BC-CS	PYTHON480	800 x 600	120	4.8	1/3.6"	10	Mono	Global	4
Mars1300P-60gm-BC-CS	PYTHON1300	1280 x 1024	60	4.8	1/2"	10	Mono	Global	4
Mars6000S-18gm/gc-BC	IMX178	3072 x 2048	18	2.4	1/1.8"	12	Mono / Color	Rolling	4
Mars1300-201um-BC	SS	1280 x 1024	201	4	1/2.7"	10	Mono	Global	5
Mars1300P-208um/uc-BC	PYTHON1300	1280 x 1024	208	4.8	1/2"	10	Mono / Color	Global	5
Mars6000S-60um/uc-BC	IMX178	3840 x 2748	60	2.4	1/1.8"	10	Mono / Color	Rolling	6
Mars6000S-60uc-BS	IMX178	3840 x 2748	60	2.4	1/1.8"	10	Mono	Rolling	6
Mars4072S-30um/uc-BC	IMX226	4000 x 3000	30	1.85	1/1.7"	10	Mono / Color	Rolling	6

VISION DATUM Mars Series

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Specifications



Model	Mars800-120gm-BC-CS	Mars1300-60gm-BC-CS	Mars6000-18gm/gc-BC
Camera			
Resolution (H*V)	800 × 600	1280 × 1024	3072 × 2048
Sensor	PYTHON 480	PYTHON 1300	SONY IMX178
Sensor Size	1/3.6"	1/2"	1/1.8"
Sensor Technology	CMOS, Global	CMOS, Global	CMOS, Rolling
Pixel Size [μm]	4.8 × 4.8	4.8 × 4.8	2.4 × 2.4
Frame Rate[Max. fps]	120	75	18
Data Bits	10bit	10bit	12bit
Exposure Time	1us~1s	1us~1s	1us~1s
Dynamic Range	60dB	60dB	60dB
Color	Mono	Mono	Mono / Color
Image Format	Mono8/10/10Packed	Mono8/10/10Packed	Mono:Mono8/10/10Packed/12/12Packed Color:Mono8.BayerRG8/10/10Packed, BayerGB8/10/10Packed,YUV422Packed
Interface	GigE		
Synchronization	Via hardware trigger, via software trigger or free run		
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction		
Electrical			
Housing Size[L*W*H]	(A) 55 × 55 × 14 mm	(A) 55 × 55 × 14 mm	(B) 55 × 55 × 14 mm
Operating Temperature	-30~80 ° C (Storage), -30~50° C (Working)		
Lens Mount	CS-Mount	CS-Mount	C-Mount
Digital I/O	8Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1		
Power Input	8pin 1.25 pitch strip DC power supply, voltage range 6V~26V		
Power Consumption	2.8W@12V	2.8W@12V	2.8W@12V
Driver	Mars Series Camera Software Suite (iCentral) or 3rd party GigE Vision Software		
Operating System	Windows、Linux		
Conformity	GigE Vision, GenICam		

VISION DATUM Mars Series

Board-Level Camera

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Specifications



Model	Mars1300-201um-BC	Mars1300P-208um/uc-BC
Camera		
Resolution (H*V)	1280 × 1024	1280 × 1024
Sensor	SS	PYTHON 1300
Sensor Size	1/2.7"	1/2"
Sensor Technology	CMOS, Global	CMOS, Global
Pixel Size [μm]	4.0 × 4.0	4.8 × 4.8
Frame Rate[Max. fps]	201	208
Data Bits	10bit	10bit
Exposure Time	10μs ~ 1s	40μs ~ 1s
Dynamic Range	60dB	60dB
Color	Mono	Mono / Color
Image Format	Mono8/10/10Packed	Mono:Mono8/10/10Packed Color:BayerRG8/10/10Packed, BayerGB8/10/10Packed
Interface	USB3.0	
Synchronization	Via hardware trigger, via software trigger or free run	
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction	
Electrical		
Housing Size[L*W*H]	(C) 35 × 35 × 19mm	(C) 35 × 35 × 19mm
Operating Temperature	-30~80 ° C (Storage), -30~50° C (Working)	
Lens Mount	C-Mount	C-Mount
Digital I/O	5Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1	
Power Input	USB3.0 provides power supply	
Power Consumption	≈ 2.8W	≈ 3.4W
Driver	Mars Series Camera Software Suite (iCentral) or 3rd party USB3 Vision Software	
Operating System	Windows	
Conformity	USB3 Vision, GenICam	

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Board-Level Camera

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Specifications



Model	Mars6000S-60um/uc-BC	Mars6000S-60uc-BS	Mars4072S-30um/uc-BC
Camera			
Resolution (H*V)	3072 × 2048	3072 × 2048	4000 × 3000
Sensor	SONY IMX178	SONY IMX178	SONY IMX226
Sensor Size	1/1.8"	1/1.8"	1/1.7"
Sensor Technology	CMOS, Rolling	CMOS, Rolling	CMOS, Rolling
Pixel Size [μm]	2.4 x 2.4	2.4 x 2.4	1.85 x 1.85
Frame Rate[Max. fps]	60	60	30
Data Bits	10bit	10bit	10bit
Exposure Time	11us~1s	11us~1s	55us~1s
Dynamic Range	66dB	66dB	66dB
Color	Mono/ Color	Color	Mono/ Color
Image Format	Mono:Mono8/10/10Packed Color:BayerRG8/10/10Packed, BayerGB8/10/10Packed	BayerRG8/10/10Packed, BayerGB8/10/10Packed	Mono:Mono8/10/10Packed Color:BayerRG8/10/10Packed, BayerGB8/10/10Packed
Interface	USB3.0		
Synchronization	Via hardware trigger, via software trigger or free run		
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction		
Electrical			
Housing Size[L*W*H]	(C) 35 × 35 × 19mm	(D) 35 × 35 × 19mm	(C) 35 × 35 × 19mm
Operating Temperature	-30~80 ° C (Storage), -30~50° C (Working)		
Lens Mount	C-Mount	M12-Mount	C-Mount
Digital I/O	5Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1		
Power Input	USB3.0 provides power supply	USB3.0 provides power supply	USB3.0 provides power supply
Power Consumption	≈ 2.8W	≈ 2.8W	≈ 2.8W
Driver	Mars Series Camera Software Suite (iCentral) or 3rd party USB3 Vision Software		
Operating System	Windows		
Conformity	USB3 Vision, GenICam		

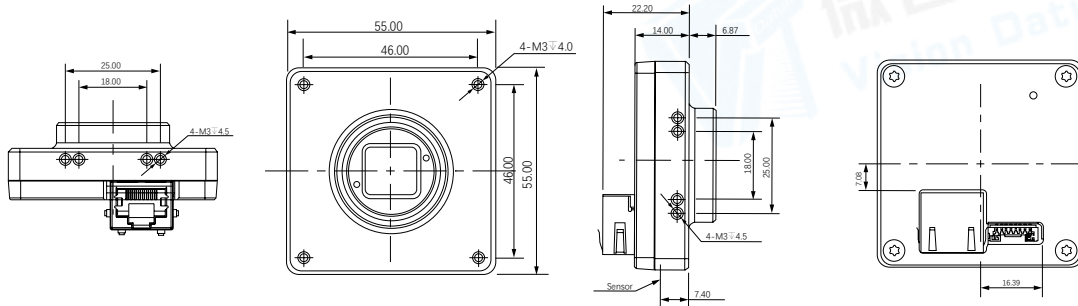
VISION DATUM Mars Series

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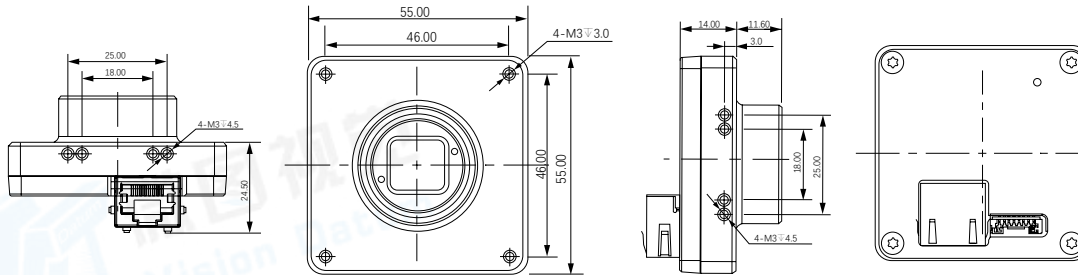
For more info, pls visit:
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Dimensions: (mm)

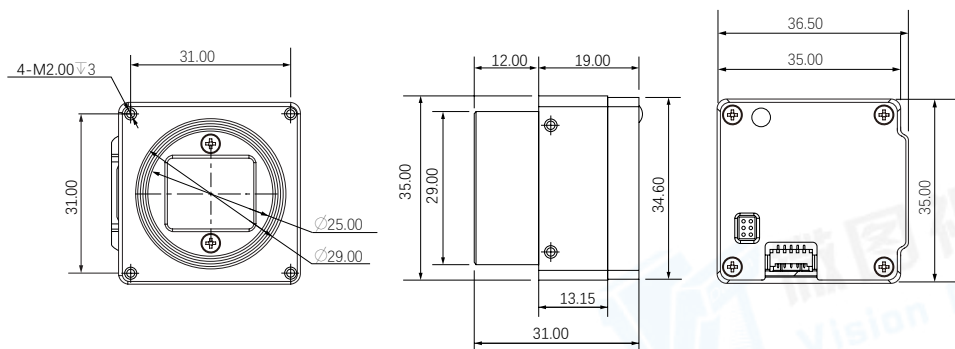
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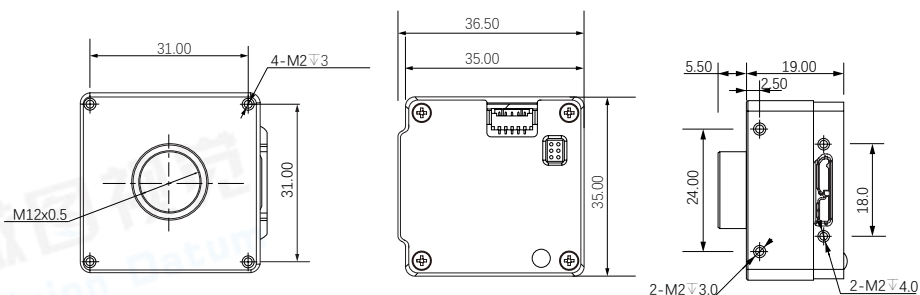
B:



C:



D:



VISION DATUM LEO Series

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Brief Introduction

With more than a decade of hard work and experience in the field of industrial camera and components, Vision Datum has developed a variety of professional products for different applications and market demands.

LEO series industrial camera is equipped with the latest generation of sensors from Sony and Onsemi. Each camera has undergone strict tests of stability, consistency and robustness to ensure a more stable long-term uninterrupted working state. Its diverse data transmission interfaces and wide range of optional resolutions help customers to find specific products for their applications.

Applications

Autopilot
Drones
Deep Learning
Space-limited Logistics/Industrial Testing

LEO series board-level industrial camera conforms GenICam™, GigE Vision® and USB3 Vision® protocol, can smoothly connected to HALCON, Vision Pro and other third-party software without the secondary development.

LEO series board-level industrial cameras with excellent cost performance and ideal for various inspections, measurements and high-speed imaging applications. The board-level industrial camera has been praised by customers for its outstanding performance in airborne, vehicle-mounted and embedded vision applications.

Features

- Excellent Cost Performance
- USB3.0 / GigE Interface
- Compact Design
- Advanced I/O Control

Model	Sensor	Resolution [HxV pixels]	Frame Rate [Max. fps]	Pixel Size [μm^2]	Sensor Size	Data Bits	Color	Sensor Technology	Page
LEO 720S-125gm-BSW NEW	IMX297	1440 x 1080	125.2	6.9	1/2.9"	10	Mono	Global	9
LEO 720S-125gm/gc-BS	IMX297	1440 x 1080	125.2	6.9	1/2.9"	10	Mono / Color	Global	9
LEO 720S-125gm/gc-BC	IMX297	1440 x 1080	125.2	6.9	1/2.9"	10	Mono / Color	Global	9
LEO 1440S-65gm-BLW	IMX296	1440 x 1080	65.2	3.45	1/2.9"	8/10/12	Mono	Global	10
LEO 1440S-65gm/gc-BSW	IMX296	1440 x 1080	65.2	3.45	1/2.9"	8/10/12	Mono / Color	Global	10
LEO 1440S-65gm/gc-BS	IMX296	1440 x 1080	65.2	3.45	1/2.9"	8/10/12	Mono / Color	Global	11
LEO 1440S-65gm/gc-BC	IMX296	1440 x 1080	65.2	3.45	1/2.9"	8/10/12	Mono / Color	Global	11
LEO 6000S-30gm-BL	IMX178	3072 x 2048	30.7	2.4	1/1.8"	8/10/12	Mono	Rolling	12
LEO 6000S-30gm/gc-BSW	IMX178	3072 x 2048	30.7	2.4	1/1.8"	8/10/12	Mono / Color	Rolling	12
LEO 6000S-30gm/gc-BS	IMX178	3072 x 2048	30.7	2.4	1/1.8"	8/10/12	Mono / Color	Rolling	13
LEO 6000S-30gm/gc-BC	IMX178	3072 x 2048	30.7	2.4	1/1.8"	8/10/12	Mono / Color	Rolling	13
LEO 1300D-200um-BL	-	1280 x 1024	201	4.8	1/2"	10	Mono	Global	14
LEO 1300D-200um/uc-BS	-	1280 x 1024	201	4.8	1/2"	10	Mono / Color	Global	14
LEO 1300D-200um/uc-BC	-	1280 x 1024	201	4.8	1/2"	10	Mono	Global	14
LEO 5000S-60uc-BC NEW	IMX264	2448 x 2048	60	3.45	2/3"	12	Color	Global	15
LEO 6000-17um-BL	IMX178	3072 x 2048	17	2.4	1/1.8"	8/10/12	Mono	Rolling	16
LEO 6000-29uc-BL	IMX178	3072 x 2048	29	2.4	1/1.8"	8/10/12	Color	Rolling	17
LEO 6000-17um-BS	IMX178	3072 x 2048	17	2.4	1/1.8"	8/10/12	Mono	Rolling	16
LEO 6000-29uc-BS	IMX178	3072 x 2048	29	2.4	1/1.8"	8/10/12	Color	Rolling	17
LEO 6000-17um-BC	IMX178	3072 x 2048	17	2.4	1/1.8"	8/10/12	Mono	Rolling	16
LEO 6000-29uc-BC	IMX178	3072 x 2048	29	2.4	1/1.8"	8/10/12	Color	Rolling	17
LEO 4020-28um-BL	IMX226	4032 x 3036	28	1.85	1/1.7"	8/10/12	Mono	Rolling	18
LEO 4020-21uc-BL	IMX226	4032 x 3036	21	1.85	1/1.7"	8/10/12	Color	Rolling	19
LEO 4020-28um-BS	IMX226	4032 x 3036	28	1.85	1/1.7"	8/10/12	Mono	Rolling	18
LEO 4020-21uc-BS	IMX226	4032 x 3036	21	1.85	1/1.7"	8/10/12	Color	Rolling	19
LEO 4020-28um-BC	IMX226	4032 x 3036	28	1.85	1/1.7"	8/10/12	Mono	Rolling	18
LEO 4020-21uc-BC	IMX226	4032 x 3036	21	1.85	1/1.7"	8/10/12	Color	Rolling	19

VISION DATUM LEO Series

Board-Level Camera

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Specifications



Model	LEO 720S-125gm-BSW	LEO 720S-125gm/gc-BS	LEO 720S-125gm/gc-BC
Camera			
Resolution (H*V)	720 × 540		
Sensor	SONY IMX297		
Sensor Size	1/2.9"		
Sensor Technology	CMOS, Global		
Pixel Size [μm]	6.9 × 6.9		
Frame Rate[Max. fps]	125.2		
Data Bits	12bit		
Exposure Time	15μs~10s UltraShort exposure: 1μs ~ 14μs		
Dynamic Range	74dB		
Color	Mono	Mono / Color	Mono / Color
Image Format	Mono: Mono8/10/10Packed/12/12Packed Color: Mono8/10/12,Bayer RG8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed,RGB8,BGR8		
Interface	GigE ¹	GigE	
Synchronization	Via hardware trigger, via software trigger or free run		
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction		
Electrical			
Housing Size[L*W*H]	(E) 29 × 29 × 22.4 mm	(F) 29 × 29 × 30.2 mm	(G) 29 × 29 × 30.2 mm
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)		
Lens Mount	M12-Mount	M12-Mount	C-Mount
Digital I/O	6Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1		
Power Input	6-pin connector provides power, DC9-24V	6-pin connector provides power, DC9-24V(PoE)	
Power Consumption	2.5W @ 12V	Mono: 2.5W @ 12V Color: 2.6W @ 12V	Mono: 2.5W @ 12V Color: 2.6W @ 12V
Driver	LEO series camera software suite (iDatum) or third-party GigE Vision protocol software		
Operating System	Windows, Linux		
Conformity	GigE Vision, GenICam		

¹:Connect using a WTB (Wire-to-Board) connector

VISION DATUM LEO Series

Board-Level Camera

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Specifications



Model	LEO 1440S-65gm-BLW	LEO 1440S-65gm-BSW	LEO 1440S-65gc-BSW
Camera			
Resolution (H*V)	1440 × 1080		
Sensor	SONY IMX296		
Sensor Size	1/2.9"		
Sensor Technology	CMOS, Global		
Pixel Size [μm]	3.45 × 3.45		
Frame Rate[Max. fps]	65.2		
Data Bits	12bit		
Exposure Time	15μs~10s UltraShort exposure: 1μs ~ 14μs		
Dynamic Range	74 dB		
Color	Mono	Mono	Color
Image Format	Mono:Mono 8/10/10Packed/12/12Packed Color:Mono 8/10/12,Bayer RG 8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed,RGB8,BGR8		
Interface	GigE ¹		
Synchronization	Via hardware trigger, via software trigger or free run		
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction		
Electrical			
Housing Size[L*W*H]	(H) 29 × 29 × 21.2 mm	(E) 29 × 29 × 22.4 mm	
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)		
Lens Mount	M12-Mount	M12-Mount	
Digital I/O	6Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1		
Power Input	6-pin connector provides power, DC9-24V		
Power Consumption	2.6W @ 12V	2.6W @ 12V	2.7W @ 12V
Driver	LEO series camera software suite (iDatum) or third-party GigE Vision protocol software		
Operating System	Windows, Linux		
Conformity	GigE Vision, GenICam		

¹:Connect using a WTB (Wire-to-Board) connector

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Specifications



Model	LEO 1440S-65gm/gc-BS	LEO 1440S-65gm/gc-BC
Camera		
Resolution (H*V)	1440 × 1080	
Sensor	SONY IMX296	
Sensor Size	1/2.9"	
Sensor Technology	CMOS, Global	
Pixel Size [μm]	3.45 × 3.45	
Frame Rate[Max. fps]	65.2	
Data Bits	12bit	
Exposure Time	15μs~10s UltraShort exposure: 1μs ~ 14μs	
Dynamic Range	74 dB	
Color	Mono / Color	
Image Format	Mono:Mono 8/10/10Packed/12/12Packed Color:Mono 8/10/12,Bayer RG 8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed,RGB8,BGR8	
Interface	GigE	
Synchronization	Via hardware trigger, via software trigger or free run	
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction	
Electrical		
Housing Size[L*W*H]	(F) 29 × 29 × 30.2 mm	(G) 29 × 29 × 30.2 mm
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)	
Lens Mount	M12-Mount	C-Mount
Digital I/O	6Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1	
Power Input	6-pin connector provides power, DC9-24V(PoE)	
Power Consumption	Mono: 2.6W @ 12V Color: 2.7W @ 12V	
Driver	LEO series camera software suite (iDatum) or third-party GigE Vision protocol software	
Operating System	Windows, Linux	
Conformity	GigE Vision, GenICam	

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Specifications



Model	LEO 6000S-30gm-BL	LEO 6000S-30gm/gc-BSW
Camera		
Resolution (H*V)	3072 × 2048	
Sensor	SONY IMX178	
Sensor Size	1/1.8"	
Sensor Technology	CMOS, Rolling	
Pixel Size [μm]	2.4 × 2.4	
Frame Rate[Max. fps]	19.1 Lossless Compression:30.7	
Data Bits	12bit	
Exposure Time	25μs~2.5s	
Dynamic Range	71.3 dB	
Color	Mono	Mono / Color
Image Format	Mono:Mono 8/10/10Packed/12/12Packed Color:Mono 8/10/12,Bayer RG8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed2,RGB8,BGR8	
Interface	GigE	GigE ¹
Synchronization	Via hardware trigger, via software trigger or free run	
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction	
Electrical		
Housing Size[L*W*H]	(I) 29 × 29 × 29 mm	(E) 29 × 29 × 22.4 mm
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)	
Lens Mount	M12-Mount	M12-Mount
Digital I/O	6Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1	
Power Input	6-pin connector provides power, DC9-24V(PoE)	6-pin connector provides power, DC9-24V
Power Consumption	2.3W @ 12V	2.6W @ 12V
Driver	LEO series camera software suite (iDatum) or third-party GigE Vision protocol software	
Operating System	Windows, Linux	
Conformity	GigE Vision, GenICam	

¹:Connect using a WTB (Wire-to-Board) connector

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Specifications



Model	LEO 6000S-30gm/gc-BS	LEO 6000S-30gm/gc-BC
Camera		
Resolution (H*V)	3072 × 2048	
Sensor	SONY IMX178	
Sensor Size	1/1.8"	
Sensor Technology	CMOS, Rolling	
Pixel Size [μm]	2.4 × 2.4	
Frame Rate[Max. fps]	19.1 Lossless Compression:30.7	
Data Bits	12bit	
Exposure Time	25μs~2.5s	
Dynamic Range	71.3 dB	
Color	Mono/ Color	Mono/ Color
Image Format	Mono:Mono 8/10/10Packed/12/12Packed Color:Mono 8/10/12,Bayer RG8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed2,RGB8,BGR8	
Interface	GigE	GigE
Synchronization	Via hardware trigger, via software trigger or free run	
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction	
Electrical		
Housing Size[L*W*H]	(F) 29 × 29 × 30.2 mm	(G) 29 × 29 × 30.2 mm
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)	
Lens Mount	M12-Mount 前盖	C-Mount
Digital I/O	6Pin:Opto-isolated input x 1, opto-isolated output x 1, and bi-directional custom non-isolated I/O x 1	
Power Input	6-pin connector provides power, DC9-24V(PoE)	
Power Consumption	Mono: 2.3W @ 12V Color: 2.6W @ 12V	
Driver	LEO series camera software suite (iDatum) or third-party GigE Vision protocol software	
Operating System	Windows, Linux	
Conformity	GigE Vision, GenICam	

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Specifications



Model	LEO 1300D-200um-BL	LEO 1300D-200um/uc-BS	LEO 1300D-200um/uc-BC
Camera			
Resolution (H*V)	1280 × 1024		
Sensor	-		
Sensor Size	1/2"		
Sensor Technology	CMOS, Global		
Pixel Size [μm]	4.8 × 4.8		
Frame Rate[Max. fps]	201		
Data Bits	12bit		
Exposure Time	9μs~10s		
Dynamic Range	53 dB		
Color	Mono	Mono / Color	Mono / Color
Image Format	Mono:Mono 8/10/10Packed/12/12Packed Color:Mono 8/10/12,Bayer RG8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed2,RGB8,BGR8		
Interface	USB3.0		
Synchronization	Via hardware trigger, via software trigger or free run		
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction.		
Electrical			
Housing Size[L*W*H]	(J) 32.5 × 32.5 × 1.6 mm	(K) 32.5 × 32.5 × 8.6 mm	(L) 32.5 × 32.5 × 8.6 mm
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)		
Lens Mount	No-Mount	M12-Mount	C-Mount
Digital I/O	4Pin: 2 bidirectional custom non-isolation I/O		
Power Input	USB3.0 provides power supply		
Power Consumption	1.6W @ 5V	Mono:1.6W @ 5V Color:2.8W @ 5V	
Driver	LEO series camera software suite (iDatum) or third-party USB3 Vision protocol software		
Operating System	Windows, Linux		
Conformity	USB3 Vision, GenICam		

VISION DATUM LEO Series

Board-Level Camera

For more info, pls visit:
www.visiondatum.com

Specifications



Model	LEO 5000S-60uc-BC
Camera	
Resolution (H*V)	2448 × 2048
Sensor	SONY IMX264
Sensor Size	2/3"
Sensor Technology	CMOS, Global
Pixel Size [μm]	3.45 × 3.45
Frame Rate[Max. fps]	60
Data Bits	12bit
Exposure Time	15μs~10s UltraShort exposure: 1μs ~ 14μs
Dynamic Range	72 dB
Color	Color
Image Format	Mono 8/10/12,Bayer RG 8/10/10Packed/12/12Packed,YUV 422 Packed, YUV 422_YUYV_Packed,RGB 8, BGR 8
Interface	USB3.0 ¹
Synchronization	Via hardware trigger, via software trigger or free run
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Gamma Chart, Image Rollover, Raw, LUT
Electrical	
Housing Size[L*W*H]	(M) 29 × 29 × 31.3 mm
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)
Lens Mount	C-Mount
Digital I/O	4Pin: 2 bidirectional custom non-isolation I/O
Power Input	USB3.0 provides power supply
Power Consumption	2.7W @ 5V
Driver	LEO series camera software suite (iDatum) or third-party USB3 Vision protocol software
Operating System	Windows, Linux
Conformity	USB3 Vision, GenICam

¹:Use the FPC cable to connect the USB3.0 connector

VISION DATUM LEO Series

Board-Level Camera

For more info, pls visit:
www.visiondatum.com

Specifications



Model	LEO 6000-17um-BL/BS/BC	LEO 6000-29uc-BL/BS/BC
Camera		
Resolution (H*V)	3072 × 2048	
Sensor	SONY IMX178	
Sensor Size	1/1.8"	
Sensor Technology	CMOS, Rolling	
Pixel Size [μm]	2.4 × 2.4	
Frame Rate[Max. fps]	60.9	
Data Bits	12bit	
Exposure Time	8μs~1s	
Dynamic Range	66 dB	
Color	Mono	Color
Image Format	Mono: Mono 8/10/10Packed/12/12Packed Color: Mono 8/10/12,Bayer RG8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed2,RGB8,BGR8	
Interface	USB3.0	
Synchronization	Via hardware trigger, via software trigger or free run	
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction.	
Electrical		
Housing Size[L*W*H]	(J) 32.5 × 32.5 × 1.6 mm (K) 32.5 × 32.5 × 8.6 mm (L) 32.5 × 32.5 × 8.6 mm	
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)	
Lens Mount	BL:No-Mount BS:M12-Mount BC:C-Mount	
Digital I/O	4Pin: 2 bidirectional custom non-isolation I/O	
Power Input	USB3.0 provides power supply	
Power Consumption	1.5W @ 5V	1.8W @ 5V
Driver	LEO series camera software suite (iDatum) or third-party USB3 Vision protocol software	
Operating System	Windows, Linux	
Conformity	USB3 Vision, GenICam	

VISION DATUM LEO Series

Board-Level Camera

For more info, pls visit:
www.visiondatum.com

Specifications



Model	LEO 4020-28um-BL/BS/BC	LEO 4020-21uc-BL/BS/BC
Camera		
Resolution (H*V)	4032 × 3036	
Sensor	SONY IMX226	
Sensor Size	1/1.7"	
Sensor Technology	CMOS, Rolling	
Pixel Size [μm]	1.85 × 1.85	
Frame Rate[Max. fps]	28	21
Data Bits	12bit	
Exposure Time	11μs~2s	23μs~2s
Dynamic Range	70.5 dB	
Color	Mono	Color
Image Format	Mono:Mono 8/10/10Packed/12/12Packed Color:Mono 8/10/12,Bayer RG8/10/10Packed/12/12Packed, YUV422Packed,YUV422_YUYV_Packed2,RGB8	
Interface	USB3.0	
Synchronization	Via hardware trigger, via software trigger or free run	
Programmable Control [ISP]	Image Resolution, RGB gain, Exposure Time, Contrast, Gamma Chart, Image Rollover, Raw, LUT, Black Level Correction.	
Electrical		
Housing Size[L*W*H]	(J) 32.5 × 32.5 × 1.6 mm (K) 32.5 × 32.5 × 8.6 mm (L) 32.5 × 32.5 × 8.6 mm	
Operating Temperature	-30~70 ° C (Storage), 0~50° C (Working)	
Lens Mount	BL:No-Mount BS:M12-Mount BC:C-Mount	
Digital I/O	4Pin: 2 bidirectional custom non-isolation I/O	
Power Input	USB3.0 provides power supply	
Power Consumption	2.4W @ 5V	
Driver	LEO series camera software suite (iDatum) or third-party USB3 Vision protocol software	
Operating System	Windows, Linux	
Conformity	USB3 Vision, GenICam	

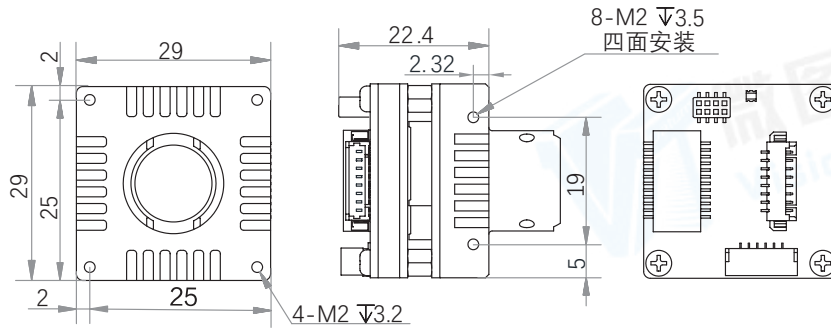
VISION DATUM LEO Series

Board-Level Camera

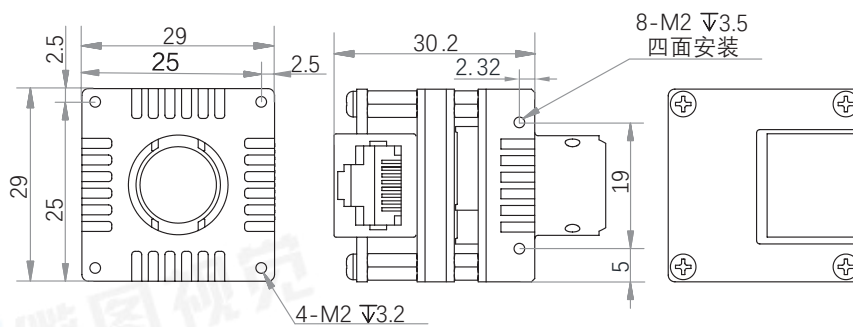
For more info, pls visit:
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Dimensions: (mm)

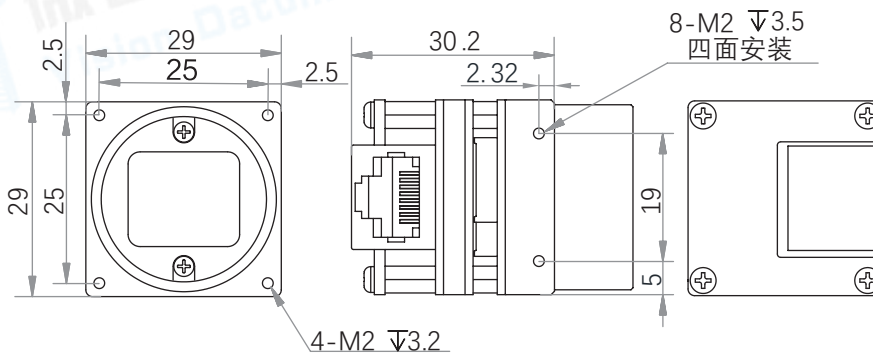
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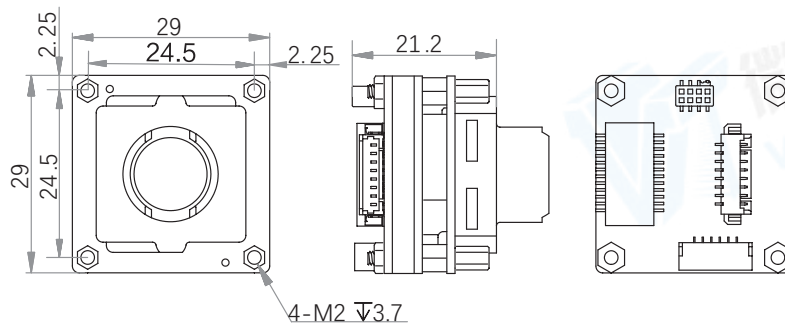
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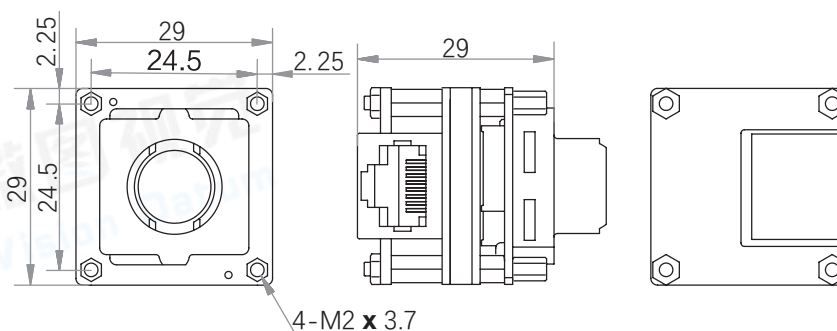
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H:



I:



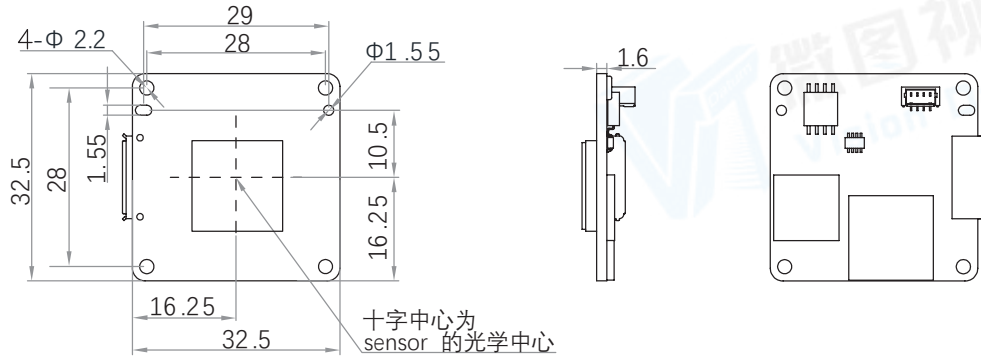
VISION DATUM LEO Series

Board-Level Camera

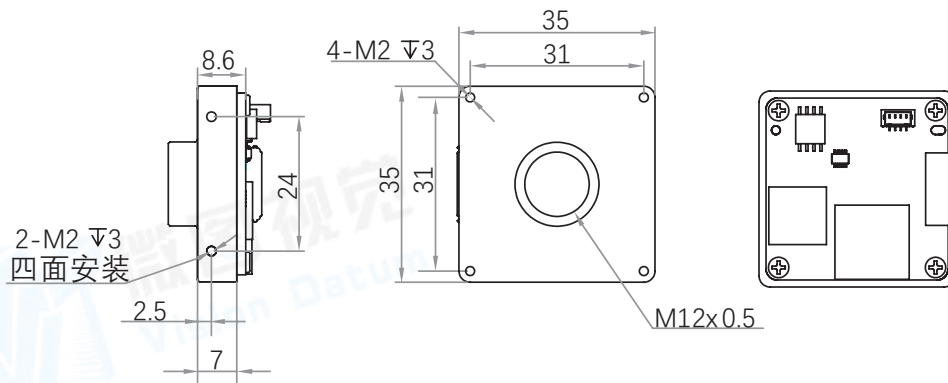
For more info, pls visit:
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Dimensions: (mm)

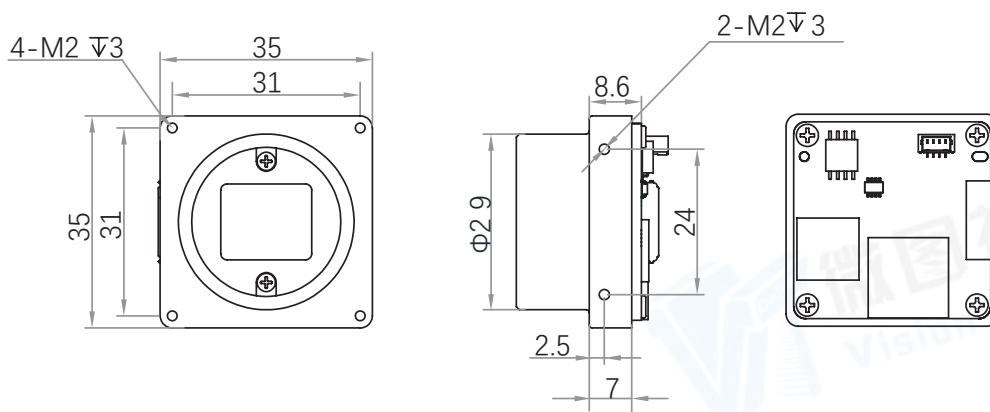
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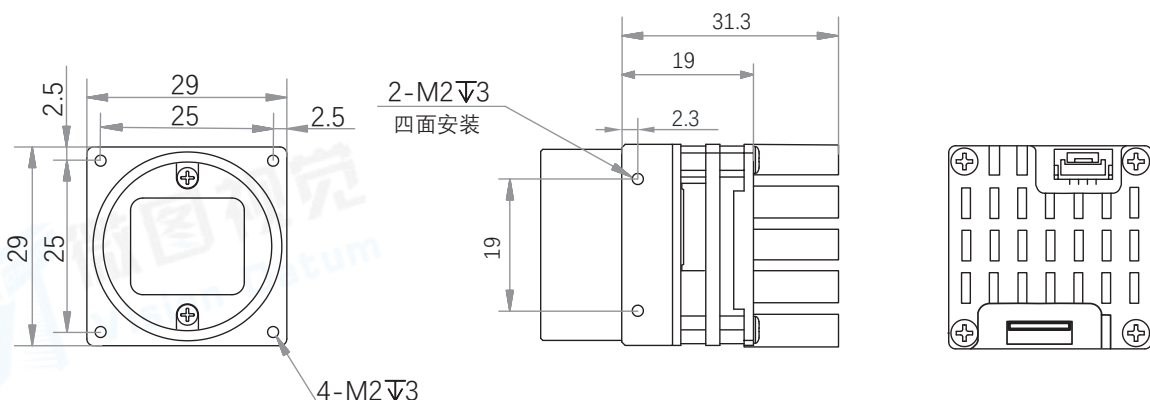
K:



L:



M:



Vision And More Available

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SWIR/LWIR Camera
Industrial Camera



Line Scan Camera Lens,
Macro Lens Industrial
Lens, SWIR Lens



Microscope



System Solution
No-programming Software

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