

ContrasTech

Board-level Camera



GIG VISION **USB** 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 Contrastech Co., Ltd. provides free of charge consultation for lenses, light sources, optical components and industrial cameras.

Hangzhou Contrastech Co., Ltd. is a professional machine vision high-tech expertise, committed to providing customers with mature machine vision software, hardware and other equipment. Contrastech 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, Contrastech 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.

Contrastech'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.

ContraTech Mars Series

Board-Level Camera

For more info, pls visit:
www.contrastech.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 |

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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 | | |

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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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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 | | |

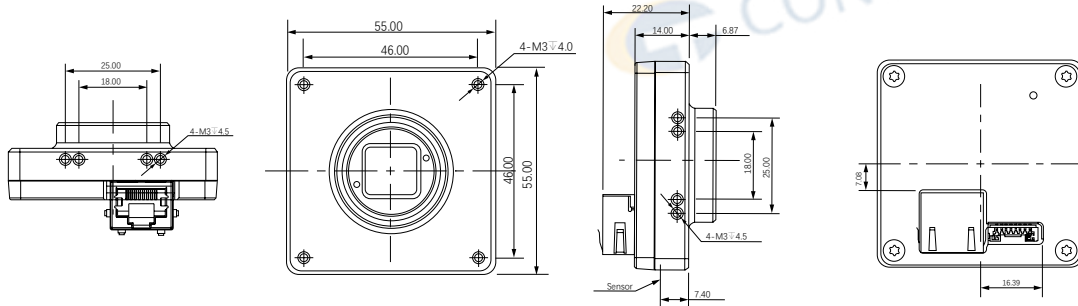
ContraTech Mars Series

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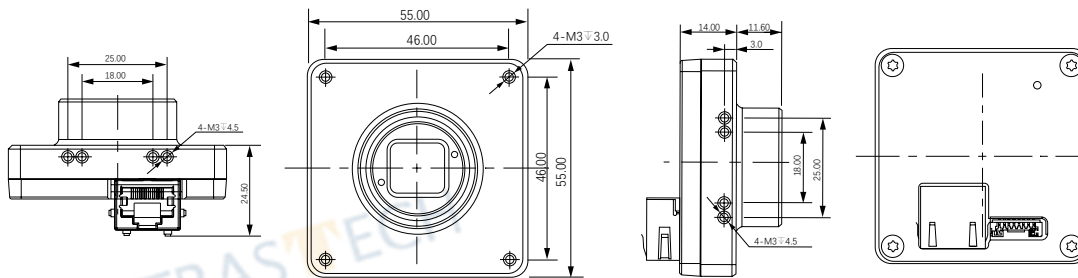
For more info, pls visit:
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Dimensions: (mm)

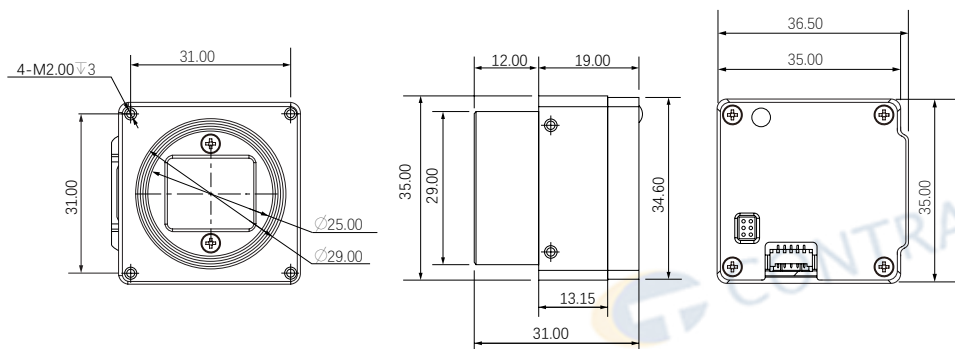
A:



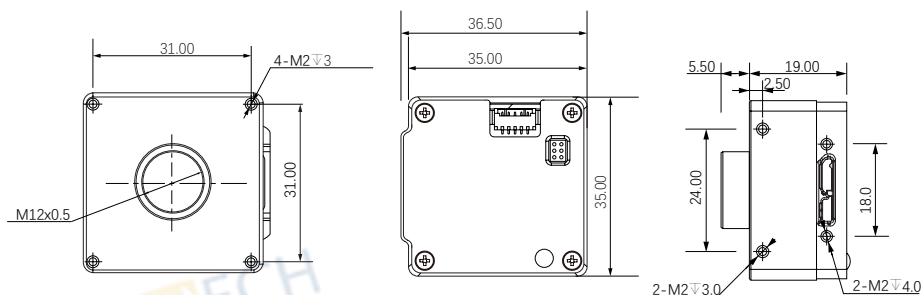
B:



C:



D:



ContraTech LEO Series

Board-Level Camera

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Brief Introduction

With more than a decade of hard work and experience in the field of industrial camera and components, ContraTech 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.

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.

Applications

Autopilot
Drones
Deep Learning
Space-limited Logistics/Industrial Testing

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 |

ContraTech 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

ContrasTech 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 | |

ContraTech LEO Series

Board-Level Camera

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

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 | | |

ContrasTech LEO Series

Board-Level Camera

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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

ContraTech LEO Series

Board-Level Camera

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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 | |

ContrasTech LEO Series

Board-Level Camera

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www.contrastech.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 | |

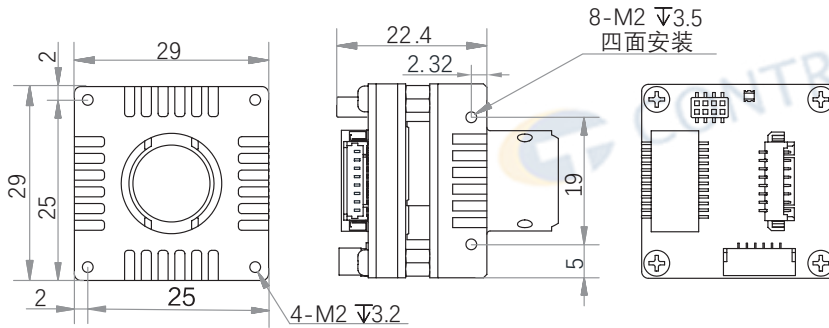
ContraTech LEO Series

Board-Level Camera

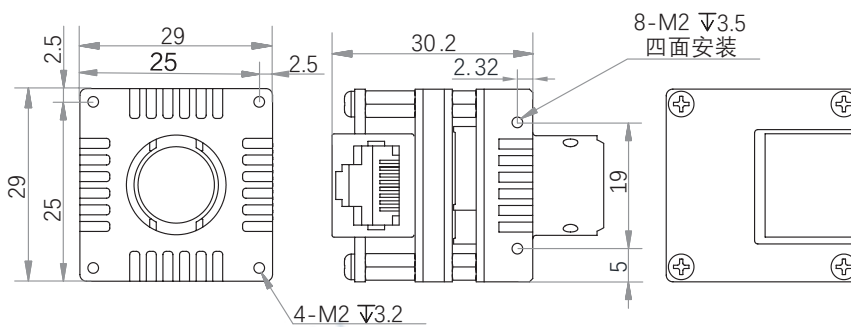
For more info, pls visit:
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Dimensions: (mm)

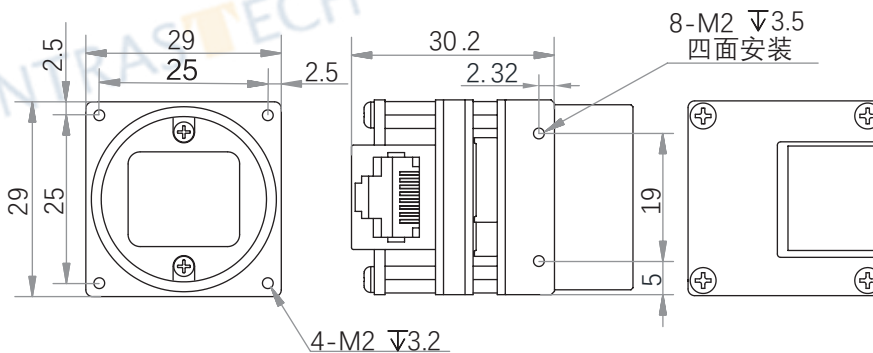
E:



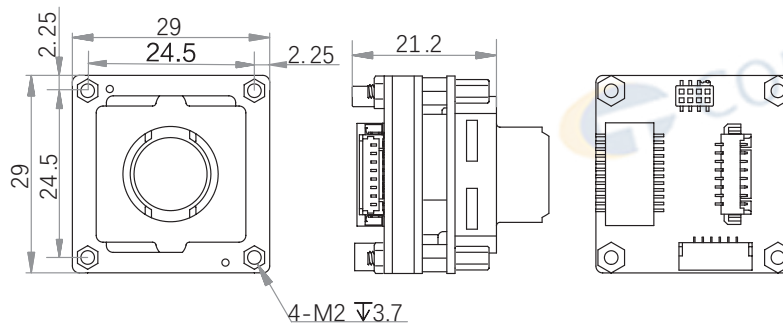
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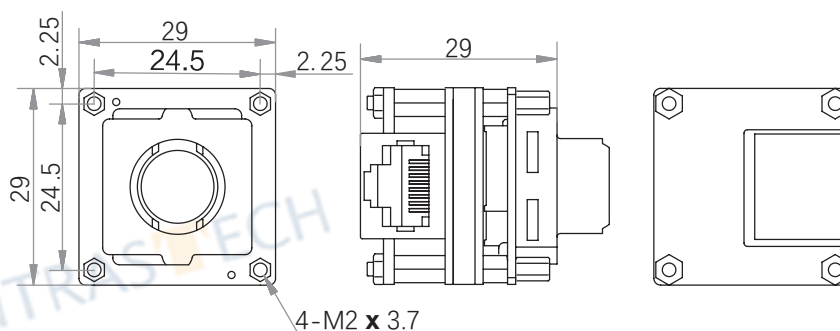
G:



H:



I:



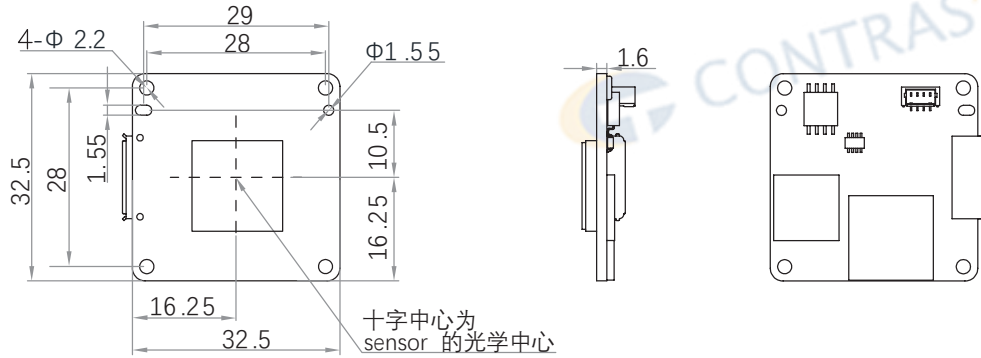
ContraTech LEO Series

Board-Level Camera

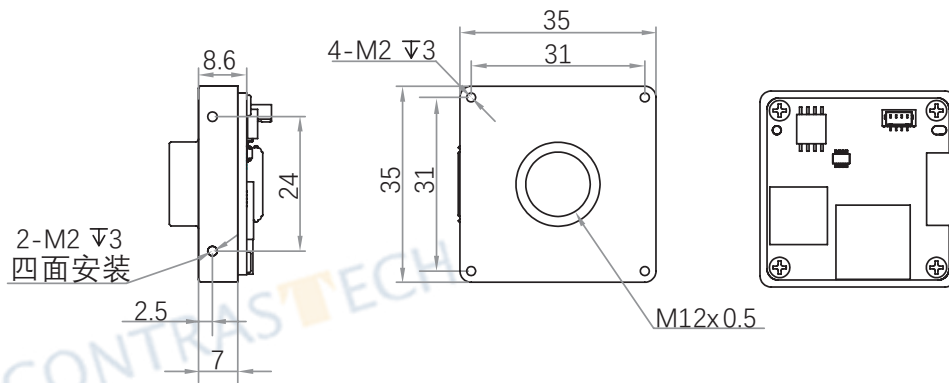
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Dimensions: (mm)

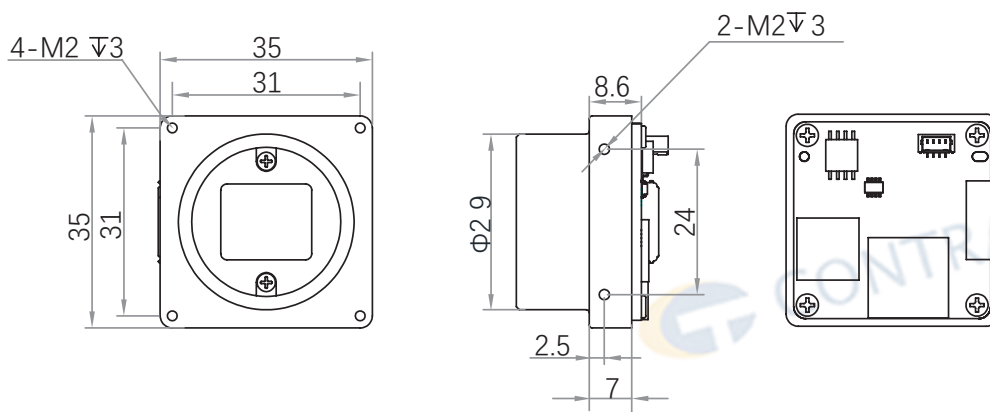
J:



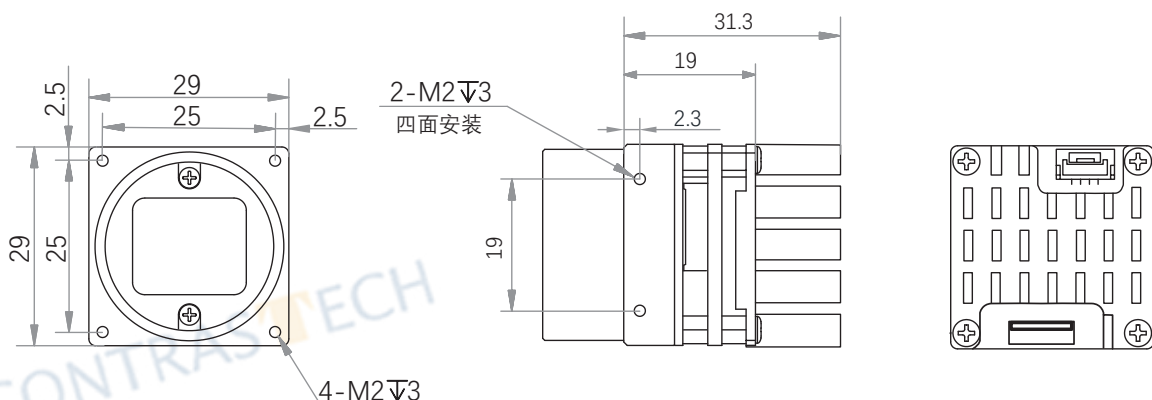
K:



L:



M:



Vision And More Available

让工业更智能，让视觉更简单！



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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