THE IMAGINGSOURCE
TECHNOLOGY BASED ON STANDARDS

Cameras

Industrial

Asian Office

German Headquarters

" The Imaging Source strives to ensure its customers' competitive advantage by providing the most reliable vision solutions at excellent value.

US Office

About
The Imaging Source

Established in 1988, The Imaging Source is a leading manufacturer of high-performance industrial and board-level cameras for machine vision applications in production automation, quality assurance, logistics, medicine, science and security. The Imaging Source's comprehensive range of industrial cameras includes standard and OEM models as well as embedded vision solutions and zoom and autofocus cameras. Via offices in Germany, the US and Chinese Taipei, The Imaging Source is able to deliver personalized sales and support services for its customers all over the world.

🌐 www.theimagingsource.com

Machine Vision
Designed in Germany...

The Imaging Source manufactures a comprehensive range of USB 3.1, USB 3.0, USB 2.0, GigE, and MIPI industrial cameras with an extensive selection of sensors and lenses. With over one million cameras sold, our industrial cameras, embedded vision products, and converters are renowned for their high quality and ability to meet the performance requirements of demanding applications.

Decades of experience in hardware development and image processing allows us to create imaging products and user-friendly tools driven by our practical approach and our customers' requirements. Developers and system engineers prefer The Imaging Source cameras because of their competitive pricing, low integration costs and long service life.

With our development and production facilities in Bremen, Germany, we continue to grow, adding production facilities in Chinese Taipei, to best serve our growing markets in the Asia-Pacific region. With our sales and support office in the United States, as well as a strong network of distributors in Europe, USA and Asia, The Imaging Source serves customers across all time zones.
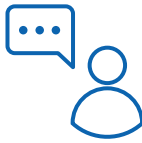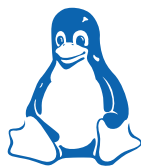
The Imaging Source Support

Industrial cameras consist of two basic components: hardware and software. The Imaging Source guarantees fast and efficient support for both components via our highly skilled support representatives and expert product developers. In addition to technical support for the hardware, we also provide assistance with software implementation.

Windows

The Imaging Source authors and supports device drivers, software development kits (SDKs), programming samples, extensions, end-user software and software tools for Microsoft Windows. All Windows software can be downloaded directly from our website:
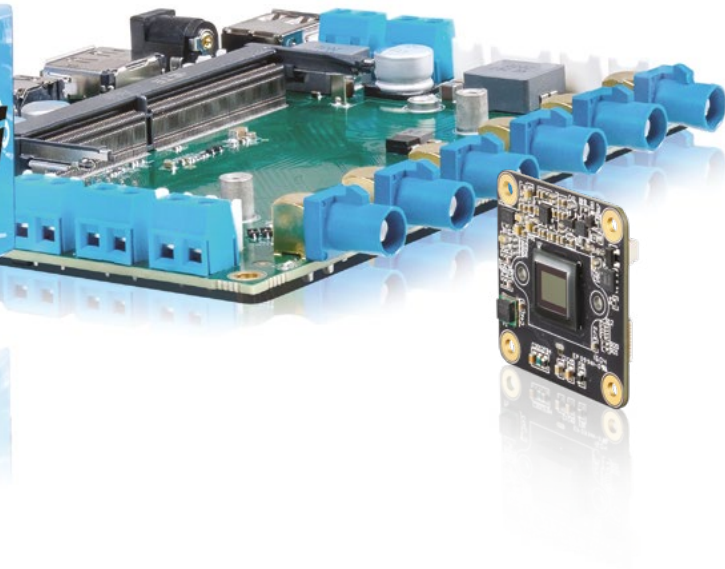
www.theimagingsource.com

Linux

The Imaging Source authors and supports open-source drivers and end-user software for Linux. The Linux source code, which is released under the Apache License 2.0, enables you to integrate all machine vision cameras into popular Linux distributions. The open-source code is available to download from GitHub:

www.github.com/TheImagingSource/tiscamera

Machine Vision
Manufactured in Asia

After a successful move into larger facilities in January 2022, the team at The Imaging Source Asia continues their growth trajectory with the addition of a new SMT production line, which helps address the rapidly increasing demand for industrial camera components.

The new line and dedicated SMT team enable The Imaging Source to supply high-quality PCBAs to its manufacturing lines, increasing efficiency and productivity, resulting in shorter lead times and better service for customers.
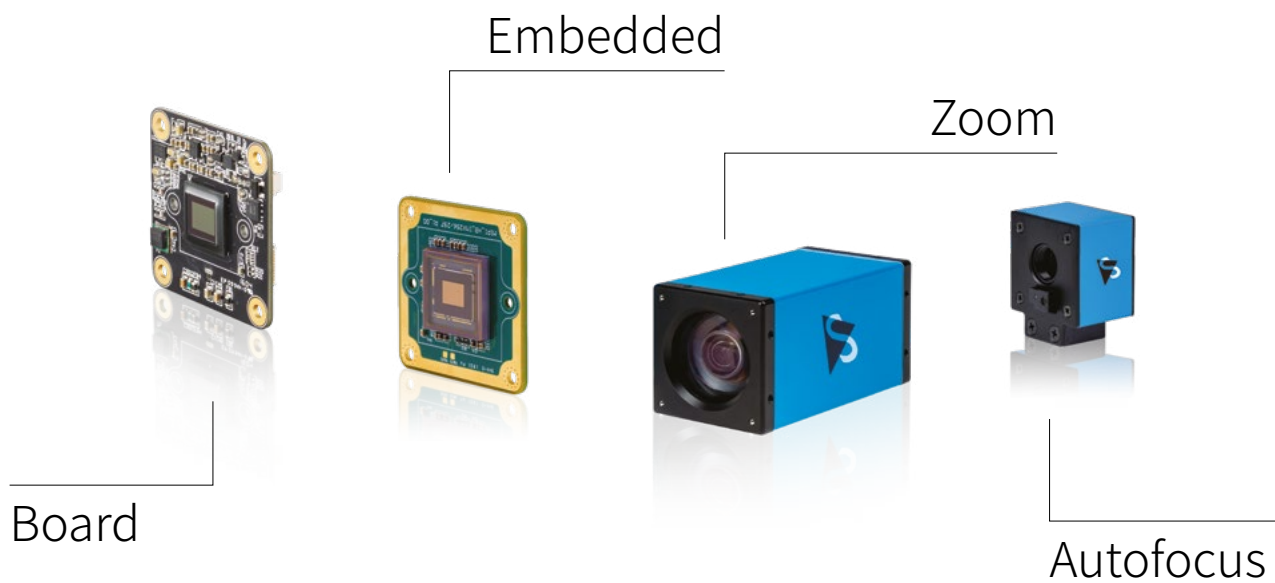

Industrial

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Zoom

Board

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Cameras

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38 Series
USB 3.1, GigE

This family of advanced-feature cameras offers the latest sensor technology for demanding machine vision applications.

38 Series cameras feature the newest Sony Pregius and Pregius S CMOS global-shutter sensors - the first Sony sensors specifically designed for machine vision applications.

All 38 Series cameras offer advanced feature sets including external trigger control, advanced readout functions (ROI, subsampling readout, multiple-frame set output) as well as image and color processing.

With resolutions of up to 24.5 MP, 38 Series cameras deliver high resolution and exceptional image quality for applications requiring a large field of view (e.g. intelligent traffic systems) as well as in high-speed machine vision applications such as production and factory automation.

RJ45 or ix Industrial®
Interface Optional

Features

- Sony's latest Pregius and Pregius S sensors
- Advanced readout and image processing functions
- Resolutions up to 24.5 MP
- Ideal for applications production, automation, and metrology
- Easy integration via USB3 Vision and GigE Vision standards
- Free software tools and SDKs for Windows and Linux

38 Series USB 3.1 Cameras

Dimensions: 29 x 44 x 60 mm   Mass: 110 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 38UX267	8.8	4096 x 2160	1"	3.45 µm	35 fps	IMX267	Sony Pregius	global	Color | Mono
DxK 38UX255	8.8	4096 x 2160	1"	3.45 µm	42 fps	IMX255	Sony Pregius	global	Color | Mono
DxK 38UX304	12.3	4096 x 3000	1.1"	3.45 µm	26 fps	IMX304	Sony Pregius	global	Color | Mono
DxK 38UX253	12.3	4096 x 3000	1.1"	3.45 µm	30 fps	IMX253	Sony Pregius	global	Color | Mono
DxK 38UX542	16.1	5320 x 3032	1.1"	2.74 µm	23 fps	IMX542	Sony Pregius S	global	Color | Mono
DxK 38UX541	20.3	4504 x 4504	1.1"	2.74 µm	18 fps	IMX541	Sony Pregius S	global	Color | Mono
DxK 38UX540	24.5	5320 x 4600	1.2"	2.74 µm	15 fps	IMX540	Sony Pregius S	global	Color | Mono

38 Series GigE Cameras

Dimensions: 29 x 44 x 73 mm   Mass: 165 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 38GX267-a	8.8	4096 x 2160	1"	3.45 µm	13 fps	IMX267	Sony Pregius	global	Color | Mono
DxK 38GX304-a	12.3	4096 x 3000	1.1"	3.45 µm	9 fps	IMX304	Sony Pregius	global	Color | Mono
DxK 38GX542-a	16.1	5320 x 3032	1.1"	2.74 µm	7 fps	IMX542	Sony Pregius S	global	Color | Mono
DxK 38GX541-a	20.3	4504 x 4504	1.1"	2.74 µm	5 fps	IMX541	Sony Pregius S	global	Color | Mono
DxK 38GX540-a	24.5	5320 x 4600	1.2"	2.74 µm	4 fps	IMX540	Sony Pregius S	global	Color | Mono

[1] DxK: x = M (= monochrome) or F (= color)

37 Series
USB 3.1

Cost-optimized, standard-feature cameras provide flexible customization options for integrators and OEMs.

These streamlined, standard-feature cameras offer a reduced hardware footprint and are equipped with the latest global and rolling-shutter sensors from Sony and onsemi.

The Imaging Source's cost-optimized, single-board, 37 Series family offers several form factor variants (e.g. optional Hirose hardware trigger and I/Os), providing a flexible customization concept for integrators and OEMs.

With frame rates up to 539 fps and resolutions up to 12 MP, the robust and compact 37 Series serves as an adaptable platform for a wide range of imaging applications.

A Series   B Series

Features

- Variety of Sony and onsemi CMOS sensors
- Compact, standard-feature camera for cost-sensitive applications
- Frame rates of up to 539 fps
- Optional hardware trigger and I/O
- Easy integration via USB3 Vision standard
- Ships with Windows and Linux software

37 A Series Cameras

Dimensions: 36 x 36 x 25 mm   Mass: 70 g
**Dimensions: 42 x 42 x 25 mm   Mass: 76 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 37AUX287	0.4	720 x 540	1/2.9"	6.9 µm	539 fps	IMX287	Sony Pregius	global	Color | Mono
DxK 37AUX273	1.6	1140 x 1080	1/2.9"	3.45 µm	238 fps	IMX273	Sony Pregius	global	Color | Mono
DFK 37AUX462	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX462	Sony STARVIS	rolling	Color | -
DxK 37AUX290	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxK 37AUX252**	3.1	2048 x 1536	1/1.8"	3.45 µm	119 fps	IMX252	Sony Pregius	global	Color | Mono
DxK 37AUX265**	3.1	2048 x 1536	1/1.8"	3.45 µm	60 fps	IMX265	Sony Pregius	global	Color | Mono
DxK 37AUR0521	5.0	2592 x 1944	1/2.5"	2.2 µm	60 fps	AR0521	onsemi	rolling	Color | Mono
DxK 37AUX250**	5.0	2448 x 2048	2/3"	3.45 µm	75 fps	IMX250	Sony Pregius	global	Color | Mono
DxK 37AUX264**	5.0	2448 x 2048	2/3"	3.45 µm	75 fps	IMX264	Sony Pregius	global	Color | Mono
DxK 37AUX178	6.3	3072 x 2048	1/1.8"	2.4 µm	60 fps	IMX178	Sony STARVIS	rolling	Color | Mono
DxK 37AUX226	12.0	4000 x 3000	1/1.7"	1.85 µm	30 fps	IMX226	Sony STARVIS	rolling	Color | Mono

37 B Series Cameras (with Hardware Trigger)

Dimensions: 36 x 36 x 25 mm   Mass: 70 g
**Dimensions: 42 x 42 x 25 mm   Mass: 76 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 37BUX287	0.4	720 x 540	1/2.9"	6.9 µm	539 fps	IMX287	Sony Pregius	global	Color | Mono
DxK 37BUX273	1.6	1140 x 1080	1/2.9"	3.45 µm	238 fps	IMX273	Sony Pregius	global	Color | Mono
DFK 37BUX462	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX462	Sony STARVIS	rolling	Color | -
DxK 37BUX290	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxK 37BUX252**	3.1	2048 x 1536	1/1.8"	3.45 µm	119 fps	IMX252	Sony Pregius	global	Color | Mono
DxK 37BUX265**	3.1	2048 x 1536	1/1.8"	3.45 µm	60 fps	IMX265	Sony Pregius	global	Color | Mono
DxK 37BUR0521	5.0	2592 x 1944	1/2.5"	2.2 µm	60 fps	AR0521	onsemi	rolling	Color | Mono
DxK 37BUX250**	5.0	2448 x 2048	2/3"	3.45 µm	75 fps	IMX250	Sony Pregius	global	Color | Mono
DxK 37BUX264**	5.0	2448 x 2048	2/3"	3.45 µm	75 fps	IMX264	Sony Pregius	global	Color | Mono
DxK 37BUX178	6.3	3072 x 2048	1/1.8"	2.4 µm	60 fps	IMX178	Sony STARVIS	rolling	Color | Mono
DxK 37BUX226	12.0	4000 x 3000	1/1.7"	1.85 µm	30 fps	IMX226	Sony STARVIS	rolling	Color | Mono

[1] DxK: x = M (= monochrome) or F (= color)

33 Series
USB 3.0

With our widest selection of CMOS sensors, these compact, fully featured industrial cameras deliver outstanding sensitivity and image quality.

The Imaging Source's 33 Series portfolio offers the widest selection of global and rolling shutter CMOS sensors from Sony and onsemi.

With resolutions from 0.4 MP to 20 MP (frame rates up to 539 fps - more when using ROIs), this fully featured camera series delivers a value-driven imaging solution for nearly every machine vision application.

Also availiable with a GigE interface, these area-scan industrial cameras deliver high-performance imaging in a lightweight and compact form factor.

Features

- Broadest portfolio of global and rolling shutter sensors
- High frame rates (up to 539 fps)
- Exceptionally sensitive, low-noise imaging
- Compact form factor: 29 x 29 x 43 mm (65 g)
- ROIs, trigger and I/Os
- Free software tools and SDKs for Windows and Linux

Optics   Embedded   Converters   Accessories   Software

33 Series USB 3.0 Cameras

Dimensions: 29 x 29 x 43 mm   Mass: 65 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 33UX287	0.4	720 x 540	1/2.9"	6.9 μm	539 fps	IMX287	Sony Pregius	global	Color | Mono
DxK 33UP1300	1.3	1280 x 1024	1/2"	4.8 μm	210 fps	P1300	onsemi	global	Color | Mono
DxK 33UX273	1.6	1440 x 1080	1/2.9"	3.45 μm	238 fps	IMX273	Sony Pregius	global	Color | Mono
DFK 33UX462	2.1	1920 x 1080	1/2.8"	2.9 μm	143 fps	IMX462	Sony STARVIS	rolling	Color | -
DxK 33UX290	2.1	1920 x 1080	1/2.8"	2.9 μm	143 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxK 33UX174	2.3	1920 x 1200	1/1.2"	5.86 μm	162 fps	IMX174	Sony Pregius	global	Color | Mono
DxK 33UX249	2.3	1920 x 1200	1/1.2"	5.86 μm	48 fps	IMX249	Sony Pregius	global	Color | Mono
DxK 33UR0234	2.3	1920 x 1200	1/2.6"	3.0 μm	100 fps	AR0234	onsemi	global	Color | Mono
DxK 33UX265	3.1	2048 x 1536	1/1.8"	3.45 μm	60 fps	IMX265	Sony Pregius	global	Color | Mono
DxK 33UX252	3.1	2048 x 1536	1/1.8"	3.45 μm	120 fps	IMX252	Sony Pregius	global	Color | Mono
DxK 33UX264	5.0	2448 x 2048	2/3"	3.45 μm	38 fps	IMX264	Sony Pregius	global	Color | Mono
DxK 33UR0521	5.0	2592 x 1944	1/2.5"	2.2 μm	60 fps	AR0521	onsemi	rolling	Color | Mono
DYK 33UX250	5.0	2448 x 2048	2/3"	3.45 μm	75 fps	IMX250MYR	Sony Polarsens	global	Color | -
DZK 33UX250	5.0	2448 x 2048	2/3"	3.45 μm	75 fps	IMX250MZR	Sony Polarsens	global	- | Mono
DxK 33UX547	5.0	2448 x 2048	1/1.8"	2.74 μm	74 fps	IMX547	Sony Pregius S	global	Color | Mono
DxK 33UX250	5.0	2448 x 2048	2/3"	3.45 μm	75 fps	IMX250	Sony Pregius	global	Color | Mono
DxK 33UX178	6.3	3072 x 2048	1/1.8"	2.4 μm	60 fps	IMX178	Sony STARVIS	rolling	Color | Mono
DxK 33UX546	8.1	2840 x 2840	2/3"	2.74 μm	46 fps	IMX546	Sony Pregius S	global	Color | Mono
DxK 33UJ003	10.7	3856 x 2764	1/2.3"	1.67 μm	14 fps	MT9J003	onsemi	rolling	Color | Mono
DxK 33UX226	12.0	4000 x 3000	1/1.7"	1.85 μm	30 fps	IMX226	Sony STARVIS	rolling	Color | Mono
DxK 33UX545	12.3	4096 x 3000	1/1.1"	2.74 μm	30 fps	IMX545	Sony Pregius S	global	Color | Mono
DxK 33UX183	20.0	5472 x 3648	1"	2.4 μm	18 fps	IMX183	Sony Exmor	rolling	Color | Mono

[1] DxK: x = M (= monochrome) or F (= color)

33 Series

GigE

With our widest selection of CMOS sensors, these compact, fully featured industrial cameras deliver outstanding sensitivity and image quality.

The Imaging Source's 33 Series portfolio offers the widest selection of global and rolling shutter CMOS sensors from Sony and onsemi.

With resolutions from 0.4 MP to 20 MP (frame rates up to 300 fps - more when using ROIs), this fully featured camera series delivers a value-driven imaging solution for nearly every machine vision application.

Also availiable with a USB 3.0 interface, these area-scan industrial cameras deliver high-performance imaging in a lightweight and compact form factor.

Features

- Broadest portfolio of global and rolling shutter sensors
- High frame rates and excellent image quality
- Compact form factor: 29 x 29 x 57 mm (65 g)
- Cable lengths of up to 100 m
- ROIs, trigger and I/Os
- Free software tools and SDKs for Windows and Linux

33 Series GigE Cameras

Dimensions: 29 x 29 x 57 mm   Mass: 65 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 33GX287	0.4	720 x 540	1/2.9"	6.9 µm	300 fps	IMX287	Sony Pregius	global	Color | Mono
DxK 33GV024	0.4	752 x 480	1/3"	6.0 µm	100 fps	MT9V024	onsemi	global	Color | Mono
DxK 33GR0134	1.2	1280 x 960	1/3"	3.75 µm	70 fps	AR0134	onsemi	global	Color | Mono
DxK 33GP1300	1.3	1280 x 1024	1/2"	4.8 µm	90 fps	P1300	onsemi	global	Color | Mono
DxK 33GX273	1.6	1440 x 1080	1/2.9"	3.45 µm	75 fps	IMX273	Sony Pregius	global	Color | Mono
DFK 33GX462	2.1	1920 x 1080	1/2.8"	2.9 µm	56 fps	IMX462	Sony STARVIS	rolling	Color | -
DxK 33GX290	2.1	1920 x 1080	1/2.8"	2.9 µm	56 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxK 33GX174	2.3	1920 x 1200	1/1.2"	5.86 µm	50 fps	IMX174	Sony Pregius	global	Color | Mono
DxK 33GX249	2.3	1920 x 1200	1/1.2"	5.86 µm	30 fps	IMX249	Sony Pregius	global	Color | Mono
DxK 33GR0234	2.3	1920 x 1200	1/2.6"	3.0 µm	50 fps	AR0234	onsemi	global	Color | Mono
DxK 33GX265	3.1	2048 x 1536	1/1.8"	3.45 µm	36 fps	IMX265	Sony Pregius	global	Color | Mono
DxK 33GX547	5.0	2448 x 2048	1/1.8"	2.74 µm	24 fps	IMX547	Sony Pregius S	global	Color | Mono
DxK 33GX264	5.0	2448 x 2048	2/3"	3.45 µm	24 fps	IMX264	Sony Pregius	global	Color | Mono
DxK 33GR0521	5.0	2592 x 1944	1/2.5"	2.2 µm	22 fps	AR0521	onsemi	rolling	Color | Mono
DYK 33GX250	5.0	2448 x 2048	2/3"	3.45 µm	24 fps	IMX250MYR	Sony Polarsens	global	Color | -
DZK 33GX250	5.0	2448 x 2048	2/3"	3.45 µm	24 fps	IMX250MZR	Sony Polarsens	global	- | Mono
DFK 33GP006	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P006	onsemi	rolling	Color | -
DMK 33GP031	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	- | Mono
DxK 33GX178	6.3	3072 x 2048	1/1.8"	2.4 µm	19 fps	IMX178	Sony STARVIS	rolling	Color | Mono
DxK 33GX546	8.1	2840 x 2840	2/3"	2.74 µm	14 fps	IMX546	Sony Pregius S	global	Color | Mono
DxK 33GX226	12.0	4000 x 3000	1/1.7"	1.85 µm	9 fps	IMX226	Sony STARVIS	rolling	Color | Mono
DxK 33GX545	12.3	4096 x 3000	1/1.1"	2.74 µm	9 fps	IMX545	Sony Pregius S	global	Color | Mono
DxK 33GX183	20.0	5472 x 3648	1"	2.4 µm	6 fps	IMX183	Sony Exmor	rolling	Color | Mono

[1] DxK: x = M (= monochrome) or F (= color)

27 Series
USB 3.0

Compact, standard-feature cameras for cost-sensitive applications.

For especially cost-sensitive applications, the 27 Series family delivers a reliable and compact, value-driven imaging solution.

As the predecessor to the 37 Series cameras, this USB 3.0 camera family features a variety of onsemi sensors with resolutions from 1.2 to 10.7 MP.

Hardware features include digital I/O strobe, binning and ROI. Cameras in the series are also available as board-level variants.

A Series   B Series

Features

- Cost-optimized onsemi CMOS sensors
- Compact, standard-feature camera for cost-sensitive applications
- Optional hardware trigger and I/O
- Proven design with USB 3.0 interface
- Free software tools and SDKs for Windows and Linux

27 A Series Cameras

Dimensions: 36 x 36 x 25 mm   Mass: 70 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 27AUR0135	1.2	1280 x 960	1/3"	3.75 µm	60 fps	AR0135	onsemi	global	Color | Mono
DFK 27AUP006	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P006	onsemi	rolling	Color | -
DMK 27AUP031	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	- | Mono
DxK 27AUJ003	10.7	3856 x 2764	1/2.3"	1.67 µm	7 fps	MT9J003	onsemi	rolling	Color | Mono

27 B Series Cameras (with Hardware Trigger)

Dimensions: 36 x 36 x 25 mm   Mass: 70 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 27BUR0135	1.2	1280 x 960	1/3"	3.75 µm	60 fps	AR0135	onsemi	global	Color | Mono
DFK 27BUP006	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P006	onsemi	rolling	Color | -
DMK 27BUP031	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	- | Mono
DxK 27BUJ003	10.7	3856 x 2764	1/2.3"	1.67 µm	7 fps	MT9J003	onsemi	rolling	Color | Mono

[1] DxK: x = M (= monochrome) or F (= color)

2 Series (One4All)
USB 2.0

Reliable and compact industrial cameras for standard machine vision applications requiring USB 2.0 interface.

The Imaging Source's USB 2.0 board cameras feature powerful onsemi CMOS sensors with resolutions ranging from 0.4 to 5 MP and are the perfect choice for very cost-sensitive USB 2.0 machine vision projects.

Equipped with a broad feature set (e.g. binning, windowing and high-speed readout), these cameras deliver a substantial reduction in image noise levels and provide exceptional image quality even in poor or fluctuating lighting conditions. Specific models are available with a variety of input, output, strobe and trigger options.

Board-level variants with standard and angled connector options are also available. For more information on these board cameras, please contact our sales team.

A Series   B Series

Features

- Variety of onsemi CMOS sensors available
- Cost-optimized imaging solution
- Trigger and I/O inputs
- Proven design with USB 2.0 interface
- Free software tools and SDKs for Windows and Linux

2 A Series Cameras (One4All)

Dimensions: 36 x 36 x 25 mm   Mass: 70 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 22AUC03	0.4	744 x 480	1/3"	6.0 µm	76 fps	MT9V024	onsemi	global	Color | Mono
DxK 42AUC03	1.2	1280 x 960	1/3"	3.75 µm	25 fps	MT9M021	onsemi	global	Color | Mono
DxK 72AUC02	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P031	onsemi	rolling	Color | Mono

2 B Series Cameras (One4All, with Hardware Trigger)

Dimensions: 36 x 36 x 25 mm   Mass: 70 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 22BUC03	0.4	744 x 480	1/3"	6.0 µm	76 fps	MT9V024	onsemi	global	Color | Mono
DxK 42BUC03	1.2	1280 x 960	1/3"	3.75 µm	25 fps	MT9M021	onsemi	global	Color | Mono
DxK 72BUC02	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P031	onsemi	rolling	Color | Mono

[1] DxK: x = M (= monochrome) or F (= color)

37 Series
USB 3.1

These single-board cameras provide superb imaging and maximum flexibility for space-limited applications.

As with the 37 Series industrial cameras, these board-level versions feature Sony's STARVIS and Pregius sensors - the first sensors developed by Sony especially for industrial applications.

These USB3-Vision and GenICam-compliant board-level cameras deliver excellent image quality suitable for demanding machine vision tasks - making them a cost-effective solution for a range of applications such as intelligent traffic systems (ITS), optical inspection, medical engineering, logistics and more.

The cameras' small footprint (with PCB dimensions as small as 30 x 30 x 15 mm) and reversible Type-C port allow for easy integration into space-constrained designs.

Angled Connector [2]

Features

- Variety of Sony and onsemi CMOS sensors
- Small footprint: 30 x 30 x 15 mm
- Frame rates of up to 539 fps
- For additional connector options please contact us
- USB3 Vision and GenICam compliant
- Free software tools and SDKs for Windows and Linux

37 Series Board-Level Cameras

Dimensions: 30 x 30 x 15 mm   Mass: 7 g
**Dimensions: 36 x 36 x 15 mm   Mass: 7 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 37UX287-ML	0.4	720 x 540	1/2.9"	6.9 µm	539 fps	IMX287	Sony Pregius	global	Color | Mono
DxM 37UX273-ML	1.6	1140 x 1080	1/2.9"	3.45 µm	238 fps	IMX273	Sony Pregius	global	Color | Mono
DFM 37UX462-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX462	Sony STARVIS	rolling	Color | -
DxM 37UX290-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxM 37UX265-ML**	3.1	2048 x 1536	1/1.8"	3.45 µm	60 fps	IMX265	Sony Pregius	global	Color | Mono
DxM 37UX252-ML**	3.1	2048 x 1536	1/1.8"	3.45 µm	119 fps	IMX252	Sony Pregius	global	Color | Mono
DxM 37UX264-ML**	5.0	2448 x 2048	2/3"	3.45 µm	38 fps	IMX264	Sony Pregius	global	Color | Mono
DxM 37UR0521-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	60 fps	AR0521	onsemi	rolling	Color | Mono
DxM 37UX250-ML**	5.0	2448 x 2048	2/3"	3.45 µm	75 fps	IMX250	Sony Pregius	global	Color | Mono
DxM 37UX178-ML	6.3	3072 x 2048	1/1.8"	2.4 µm	60 fps	IMX178	Sony STARVIS	rolling	Color | Mono
DxM 37UX226-ML	12.0	4000 x 3000	1/1.7"	1.85 µm	30 fps	IMX226	Sony STARVIS	rolling	Color | Mono

[1] DxM: x = M (= monochrome) or F (= color)   [2] Available upon request, please contact our sales team.
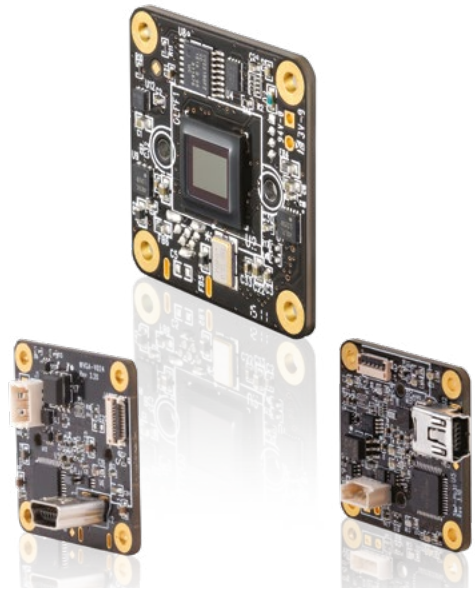
27 Series
USB 3.0

Space-saving, standard-feature cameras for cost-sensitive applications.

For especially cost-sensitive applications, the 27 Series family delivers a reliable and compact, value-driven imaging solution.

As the predecessor to our 37 Series cameras, this USB 3.0 camera family features a variety of onsemi sensors with resolutions from 1.2 to 10.7 MP.

Hardware features include digital I/O strobe, binning and ROI. Cameras of the series are also available as housed variants.

Angled Connector [2]

Features

- Cost-optimized onsemi CMOS sensors
- Small footprint: 30 x 30 x 10 mm
- Optional hardware trigger and I/O
- Proven design with USB 3.0 interface
- Free software tools and SDKs for Windows and Linux

27 Series Board-Level Cameras

Dimensions: 30 x 30 x 10 mm   Mass: 15 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 27UR0135-ML	1.2	1280 x 960	1/3"	3.75 µm	60 fps	AR0135	onsemi	global	Color | Mono
DFM 27UP006-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P006	onsemi	rolling	Color | -
DMM 27UP031-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	- | Mono
DxM 27UJ003-ML	10.7	3856 x 2764	1/2.3"	1.67 µm	7 fps	MT9J003	onsemi	rolling	Color | Mono

27 Series Board-Level Cameras (Angled Connector)

Dimensions: 30 x 30 x 10 mm   Mass: 15 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 27UR0135-MLA	1.2	1280 x 960	1/3"	3.75 µm	60 fps	AR0135	onsemi	global	Color | Mono
DFM 27UP006-MLA	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P006	onsemi	rolling	Color | -
DMM 27UP031-MLA	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	- | Mono
DxM 27UJ003-MLA	10.7	3856 x 2764	1/2.3"	1.67 µm	7 fps	MT9J003	onsemi	rolling	Color | Mono

[1] DxM: x = M (= monochrome) or F (= color)   [2] Available upon request, please contact our sales team.

2 Series (One4All)
USB 2.0

Single-board cameras ideal for cost-sensitive USB 2.0 and OEM applications.

The Imaging Source's USB 2.0 board cameras feature onsemi CMOS sensors with resolutions ranging from 0.4 to 5 MP.

Also available with angled connectors, the small board-level form factor creates maximum flexibility for a wide range of space-limited applications.

Perfect for very cost-sensitive USB 2.0 machine vision projects, the cameras offer a broad feature set (e.g. binning, windowing and high-speed readout). Specific models are available with a variety of input, output, strobe and trigger options.

Angled Connector [2]

Features

- Variety of onsemi CMOS sensors available
- Cost-optimized imaging solution
- Trigger and I/O inputs
- Proven design with USB 2.0 interface
- Free software tools and SDKs for Windows and Linux

Optics   Embedded   Converters   Accessories   Software

2 Series Board-Level Cameras (One4All)

Dimensions: 30 x 30 x 15 mm   Mass: 7 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 22BUC03-ML	0.4	744 x 480	1/3"	6.0 µm	76 fps	MT9V024	onsemi	global	Color | Mono
DxM 42BUC03-ML	1.2	1280 x 960	1/3"	3.75 µm	25 fps	MT9M021	onsemi	global	Color | Mono
DMM 72BUC02-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P031	onsemi	rolling	- | Mono
DFM 72BUC02-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P006	onsemi	rolling	Color | -

2 Series Board-Level Cameras (One4All, Angled Connector)

Dimensions: 30 x 30 x 15 mm   Mass: 7 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 22BUC03-MLA	0.4	744 x 480	1/3"	6.0 µm	76 fps	MT9V024	onsemi	global	Color | Mono
DxM 42BUC03-MLA	1.2	1280 x 960	1/3"	3.75 µm	25 fps	MT9M021	onsemi	global	Color | Mono
DMM 72BUC02-MLA	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P031	onsemi	rolling	- | Mono
DFM 72BUC02-MLA	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P006	onsemi	rolling	Color | -

[1] DxM: x = M (= monochrome) or F (= color)   [2] Available upon request, please contact our sales team.

36 Series
MIPI® CSI-2 Single-Board Modules

Direct camera-to-processor connection for exceptionally efficient and compact embedded vision solutions.

The Imaging Source offers a wide range of high-performance MIPI CSI-2 cameras for embedded vision applications. The Imaging Source MIPI cameras feature the latest CMOS image sensors from Sony and onsemi (global and rolling shutter).

The MIPI CSI-2 protocol enables direct sensor-to-ISP connection, resulting in exceptionally low latencies and small hardware footprint.

The Imaging Source MIPI cameras are perfectly suited for single or multi-camera embedded vision applications for production-ready applications in automotive and IoT as well as for standard machine vision applications.

In addition, we also offer camera modules for direct use with our development kits.

28-Pin FFC/FPC Single-Board Connector

Features

- Resolution up to 8.3 MP; frame rates up to 120 fps
- Sony and onsemi sensors: Global and rolling shutter
- Low latency: Direct sensor-to-processor connection
- Small hardware footprint for production-ready embedded applications
- Complete driver packages for NVIDIA JetPack and tiscamera Linux SDK

36 M Series MIPI CSI-2: Single-Board Modules

Dimensions: 30 x 30 x 5.45 mm   Mass: 4 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 36MX297-ML	0.4	720 x 540	1/2.9"	6.9 μm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxM 36MX296-ML	1.6	1140 x 1080	1/2.9"	3.45 μm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DFM 36MX462-ML	2.1	1920 x 1080	1/2.8"	2.9 μm	120 fps	IMX462	Sony STARVIS	rolling	Color | -
DxM 36MX290-ML	2.1	1920 x 1080	1/2.8"	2.9 μm	120 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxM 36MR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 μm	120 fps	AR0234CS	onsemi	global	Color | Mono
DFM 36MX390-ML	2.3	1920 x 1200	1/2.6"	3.0 μm	50 fps	IMX390	Sony	rolling	Color | -
DxM 36MX335-ML	5.0	2592 x 1944	1/2.8"	2.0 μm	60 fps	IMX335	Sony STARVIS	rolling	Color | Mono
DxM 36MX415-ML	8.3	3840 x 2160	1/2.8"	1.45 μm	90 fps	IMX415	Sony STARVIS	rolling	Color | Mono

[1] DxM: x = M (= monochrome) or F (= color)

36 Series

MIPI® CSI-2 Modules: Ready for NVIDIA Developer Kits

MIPI CSI-2 camera modules for rapid embedded prototyping with NVIDIA developer kits.

With a wide range of high-performance CMOS sensors from Sony and onsemi, The Imaging Source offers MIPI CSI-2 cameras with 15-pin and 22-pin adapters for direct use with NVIDIA® Jetson™ and Raspberry Pi developer kits.

The MIPI CSI-2 protocol enables direct sensor-to-ISP connection, resulting in exceptionally low latencies and small hardware footprint.

These plug-and-play cameras for embedded vision prototyping shorten the path from specifiction to final product and their quick integration and hardware flexibility allows for camera model changes during the prototyping phase.

For validated (production-ready) embedded designs, we offer our single-board MIPI CSI-2 cameras.
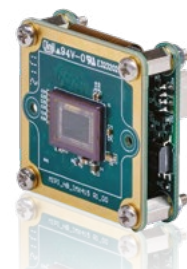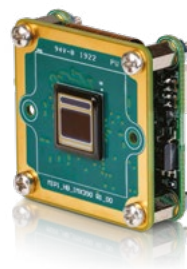
15-Pin Interface   22-Pin Interface

Features

- Resolution up to 8.3 MP; frame rates up to 120 fps
- Sony and onsemi sensors: Global and rolling shutter
- Low latency: Direct sensor-to-processor connection
- Connects directly to NVIDIA Jetson Nano, NVIDIA Jetson Xavier NX, and Raspberry Pi)
- Compete driver packages for NVIDIA JetPack and tiscamera Linux SDK

Optics   Embedded   Converters   Accessories   Software

36 V Series MIPI® CSI-2: 22-Pin Board Modules

Dimensions: 30 x 30 x 16.2 mm   Mass: 12 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 36VX297-ML	0.4	720 x 540	1/2.9"	6.9 µm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxM 36VX296-ML	1.6	1140 x 1080	1/2.9"	3.45 µm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DFM 36VX462-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	120 fps	IMX462	Sony STARVIS	rolling	Color | -
DxM 36VX290-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	120 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxM 36VR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	120 fps	AR0234CS	onsemi	global	Color | Mono
DFM 36VX390-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	50 fps	IMX390	Sony	rolling	Color | -
DxM 36VX335-ML	5.0	2592 x 1944	1/2.8"	2.0 µm	60 fps	IMX335	Sony STARVIS	rolling	Color | Mono
DxM 36VX415-ML	8.3	3840 x 2160	1/2.8"	1.45 µm	90 fps	IMX415	Sony STARVIS	rolling	Color | Mono

36 A Series MIPI CSI-2: 15-Pin Board Modules

Dimensions: 30 x 30 x 16.2 mm   Mass: 12 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 36AX297-ML	0.4	720 x 540	1/2.9"	6.9 µm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxM 36AX296-ML	1.6	1140 x 1080	1/2.9"	3.45 µm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DFM 36AX462-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	60 fps	IMX462	Sony STARVIS	rolling	Color | -
DxM 36AX290-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	60 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxM 36AR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	60 fps	AR0234CS	onsemi	global	Color | Mono
DFM 36AX390-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	25 fps	IMX390	Sony	rolling	Color | -
DxM 36AX335-ML	5.0	2592 x 1944	1/2.8"	2.0 µm	30 fps	IMX335	Sony STARVIS	rolling	Color | Mono
DxM 36AX415-ML	8.3	3840 x 2160	1/2.8"	1.45 µm	50 fps	IMX415	Sony STARVIS	rolling	Color | Mono

[1] DxM: x = M (= monochrome) or F (= color)

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36 Series
FPD-Link® III

FPD-Link III cameras offer the full functionality of MIPI® CSI-2 cameras and allow for cable lengths of up to 15 m.

For embedded vision applications requiring cable lengths between sensor and computer platform of up to 15m, The Imaging Source offers FPD-Link III cameras (SerDes cameras) in several form factors. Image data, commands for triggers and I/Os as well as power supply are transmitted via a thin coaxial cable. The Imaging Source also offers adapter boards, serializers and deserializers to connect cameras to the desired target platform.

FPD-Link III cameras are suitable for both single and multi-camera applications in automotive, IoT and general machine-vision applications. The Imaging Source's FPD-Link III cameras feature the latest CMOS image sensors from onsemi and Sony (global and rolling shutter) and are compatible with a wide range of M12 lenses (C/CS mount lenses are also available).
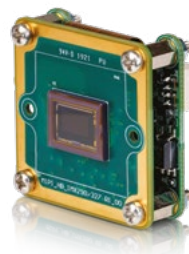
Board Module

IP67 Camera

C/CS-Mount Camera [2]

Features

- Wide range of Sony and onsemi CMOS sensors
- Compatible with NVIDIA® Jetson™ and Raspberry Pi 4 platforms
- Select system components to fit your application
- Trigger and I/O inputs
- MIPI CSI-2 / FPD-Link III drivers and Linux SDK

Optics   Embedded   Converters   Accessories   Software

36 C Series FPD-Link III Board Modules

Dimensions: 30 x 30 x 27.5 mm   Mass: 12 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 36CX297-ML	0.4	720 x 540	1/2.9"	6.9 µm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxM 36CX296-ML	1.6	1140 x 1080	1/2.9"	3.45 µm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DFM 36CX462-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	60 fps	IMX462	Sony STARVIS	rolling	Color | -
DxM 36CX290-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	60 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxM 36CR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	100 fps	AR0234CS	onsemi	global	Color | Mono
DFM 36CX390-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	50 fps	IMX390	Sony	rolling	Color | -
DxM 36CX335-ML	5.0	2592 x 1944	1/2.8"	2.0 µm	30 fps	IMX335	Sony STARVIS	rolling	Color | Mono
DxM 36CX415-ML	8.3	3840 x 2160	1/2.8"	1.45 µm	30 fps	IMX415	Sony STARVIS	rolling	Color | Mono

36 C Series FPD-Link III IP67 Cameras

Dimensions: 36 x 36 x 60.3 mm   Mass: 80 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 36CX297-I67	0.4	720 x 540	1/2.9"	6.9 µm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxK 36CX296-I67	1.6	1140 x 1080	1/2.9"	3.45 µm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DFK 36CX462-I67	2.1	1920 x 1080	1/2.8"	2.9 µm	60 fps	IMX462	Sony STARVIS	rolling	Color | -
DxK 36CX290-I67	2.1	1920 x 1080	1/2.8"	2.9 µm	60 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxK 36CR0234-I67	2.3	1920 x 1200	1/2.6"	3.0 µm	100 fps	AR0234CS	onsemi	global	Color | Mono
DFK 36CX390-I67	2.3	1920 x 1200	1/2.6"	3.0 µm	50 fps	IMX390	Sony	rolling	Color | -
DxK 36CX335-I67	5.0	2592 x 1944	1/2.8"	2.0 µm	30 fps	IMX335	Sony STARVIS	rolling	Color | Mono
DxK 36CX415-I67	8.3	3840 x 2160	1/2.8"	1.45 µm	30 fps	IMX415	Sony STARVIS	rolling	Color | Mono

[1] DxM / DxK: x = M (= monochrome) or F (= color)   [2] Available upon request, please contact our sales team.

Industrial   Board   **Embedded**   Zoom & Autofocus   Customized & Unique   Microscopy

Edge Cameras
Standard, Wi-Fi

Compact, integrated imaging system to develop and run deep learning and AI vision applications.

Standard

Wi-Fi

The new edge camera family from The Imaging Source features an integrated imaging system, which combines an image sensor with the computing power of NVIDIA® Jetson Nano™ or NVIDIA® Jetson Xavier™ NX in a compact package.

Eight camera resolutions (36 M camera series) are offered with global and rolling shutter functionality from 0.4 MP to 8.3 MP. A Wi-Fi/Bluetooth module with two external antennae is also optionally available. The cameras are offered with either active or passive cooling.

The cameras are delivered with NVIDIA JetPack software, which offers extensive deep learning functionality as well as a host of additional tools and libraries. For general image processing tasks and deep learning applications, the HALCON software library can also be installed and used.

Features

- Platforms: NVIDIA Jetson Nano or NVIDIA Jetson Xavier NX
- Optional Wi-Fi/Bluetooth
- Eight camera resolutions (36 M series): 0.4 MP - 8.3 MP
- Global and rolling shutter sensors
- Delivered with NVIDIA JetPack software

Electrical and Mechanical Interfaces: Edge Camera

Processor	NVIDIA Jetson Nano system on module (SOM) or NVIDIA Jetson Xavier NX SOM
Color and Mono Camera Selection	www.theimagingsource.com/embedded-vision/mipi-csi-2-cameras/mipi-csi-2-board-cameras/
External Interface	1x USB 3.0
External Interface	1 GigE interface, RJ 45
External Interface	1x HDMI
External Interface	1x SD card
External Interface	12 pin Hirose connector, (power, CAN, UART/I2C, trigger, strobe/GPOUT)
Internal Interface	M.2 Key E for Wi-Fi Modem
Internal Interface	Fan (Molex PicoBlade)
Lens Mount	C mount
Fan Connector	Molex PicoBlade
Status Indicator	1x RGB LED
Supply Voltage	PoE+ or 12 pin Hirose connector 12 – 24 V / 30 W
Dimensions	115 mm x 58 mm
Weight	850 g / 30 oz without lens

Industrial   Board   Embedded   **Zoom & Autofocus**   Customized & Unique   Microscopy

Z Series
GigE Zoom Cameras

Maintain perfect resolution even when imaging objects of varying sizes and distances with Z Series zoom cameras.

Z Series Z20   Z Series Z30   Z Series Z12

For the versatile imaging of different-sized objects, or when multiple images at differing magnifications are required, The Imaging Source offers its Z-Series optical zoom cameras.

Featuring an integrated motorized lens for software-controlled adjustment of focal length (zoom), aperture and focus, the cameras are available with a selection of global and rolling shutter sensors.

The optical zoom cameras provide a robust imaging solution for machine vision applications in industrial automation, quality assurance, in-line inspection, traffic (ITS), and surveillance.

Features

- Resolution: Up to 5 MP
- Selection of global and rolling shutter sensors
- Integrated motorized zoom, focus, and iris
- Cable lengths up to 100 m
- ROIs, trigger and I/Os
- Free software tools and SDKs for Windows and Linux

Optics   Embedded   Converters   Accessories   Software

Z Series Z12 Cameras

Dimensions: 50 x 50 x 103 mm   Mass: 330 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DxK Z12G445	1.2	1280 x 960	1/3"	3.75 µm	30 fps	ICX445	Sony	global	Color	Mono
DxK Z12GX236	2.3	1920 x 1200	1/2.8"	2.8 µm	41 fps	IMX236	Sony Exmor	rolling	Color	Mono
DxK Z12GP031	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	Color	Mono

Z Series Z20 Cameras

Dimensions: 71 x 71 x 147 mm   Mass: 691 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DxK 39GX265-Z20	3.1	2048 x 1536	1/1.8"	3.45 µm	36 fps	IMX265	Sony Pregius	global	Color	Mono
DxK 39GX548-Z20	5.0	2448 x 2048	1/1.8"	2.74 µm	24 fps	IMX548	Sony Pregius S	global	Color	Mono

Z Series Z30 Camera

Dimensions: 60 x 60 x 116 mm   Mass: 330 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DxK Z30GP031	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	Color	Mono

[1] DxK: x = M (= monochrome) or F (= color)

AFU Series
Autofocus: USB

One-push autofocus produces sharp images despite fluctuations in working distance.

In some vision system scenarios, maintaining exact working distances are virtually impossible, causing objects to move out of focus. For these applications, The Imaging Source offers a selection of USB 3.0 and USB 2.0 autofocus cameras.

Via software-driven one-push autofocus, the cameras produce sharp images despite fluctuations in working distance. Additional image control functions such as gain and exposure time can be adjusted automatically or manually via the included imaging software.

Highly-sensitive onsemi and Sony CMOS sensors deliver excellent image quality - even in poor lighting conditions. The cameras' compact dimensions ensure easy integration into new or existing applications.

USB 3.0   USB 2.0

Features

- onsemi and Sony CMOS sensors
- Windowing and high-speed readout
- M12 lens compatibility
- Free software for camera control
- Free software tools and SDKs for Windows and Linux

AFU Series USB 3.0 Cameras

Dimensions: 36 x 36 x 30 mm   Mass: 70 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK AFUX236-M12	2.3	1920 x 1200	1/2.8"	2.8 µm	54 fps	IMX236	Sony	rolling	Color | Mono
DxK AFUP031-M12	5.0	2592 x 1944	1/2.5"	2.2 µm	15 fps	MT9P031	onsemi	rolling	Color | Mono
DxK AFUX178-M12	6.3	3072 x 2048	1/1.8"	2.4 µm	22 fps	IMX178	Sony	rolling	Color | Mono
DxK AFUJ003-M12	10.7	3856 x 2764	1/2.3"	1.67 µm	7 fps	MT9J003	onsemi	rolling	Color | Mono

AFU Series USB 2.0 Cameras

Dimensions: 36 x 36 x 25 mm   Mass: 50 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxK 22AUC03-F	0.4	744 x 480	1/3"	6.0 µm	76 fps	MT9V024	onsemi	global	Color | Mono
DxK 72AUC02-F	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	MT9P031	onsemi	rolling	Color | Mono

AFU Series Cameras (with Integrated Lens)

Dimensions: 36 x 36 x 26 mm   Mass: 70 g
**Dimensions: 36 x 36 x 18 mm   Mass: 65 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Focal length	Interface	Shutter	Color | Mono
DFK AFU420-L62	41.4	7716 x 5360	2/3"	1.12 µm	110 fps	6.2 mm	USB 3.0	rolling	Color | -
DFK AFU050-L34**	5.0	2592 x 1944	1/4"	1.4 µm	60 fps	3.4 mm	USB 2.0	rolling	Color | -

[1] DxK: x = M (= monochrome) or F (= color)

Custom and OEM Cameras

Modify our standard industrial cameras for maximum precision and cost optimization.

Use The Imaging Source's over 30 years of experience in machine vision to create a customized imaging solution, perfectly tailored to your application requirements. With The Imaging Source's OEM camera service, customers may specify minor or major changes to casing design, PCB layout, connection type, location and pinning, as well as alterations to software drivers and end-user applications. The Imaging Source's customized camera solutions are guaranteed to meet the same high manufacturing standards as our ready-made cameras.

Features

- Mechanical, hardware, and software modifications
- Board-level or housed cameras
- Custom housing
- Free SDK for camera integration and image processing

DBK Variant

Color Camera without IR-Cut-Filter

Lens Options: Board-Level Cameras

Board without Lens   with M 12 Mount   with C/CS Mount

Z30 Zoom Camera with Lens Variants

with Filter Adapter   with Red Filter   with Close-Up Lens   with Polarizing Filter

Example: C-Mount to M12 Adapter

Unique Cameras

In a class by themselves, these cameras offer unique imaging solutions to suit special hardware or imaging requirements.

Not all visual inspection tasks can be performed with conventional imagers. For these special cases, The Imaging Source offers these specialized cameras as part of our standard product portfolio.

- USB and GigE cameras with Sony's Polarsens™ sensors to detect stress, rediuce glare, and improve image contrast.

- 42 MP imaging for high-resolution quality inspection

- USB 2 board-level cameras with Molex PicoBlade connectors for space-limited applications.

- Board-level cameras with GigE interface.
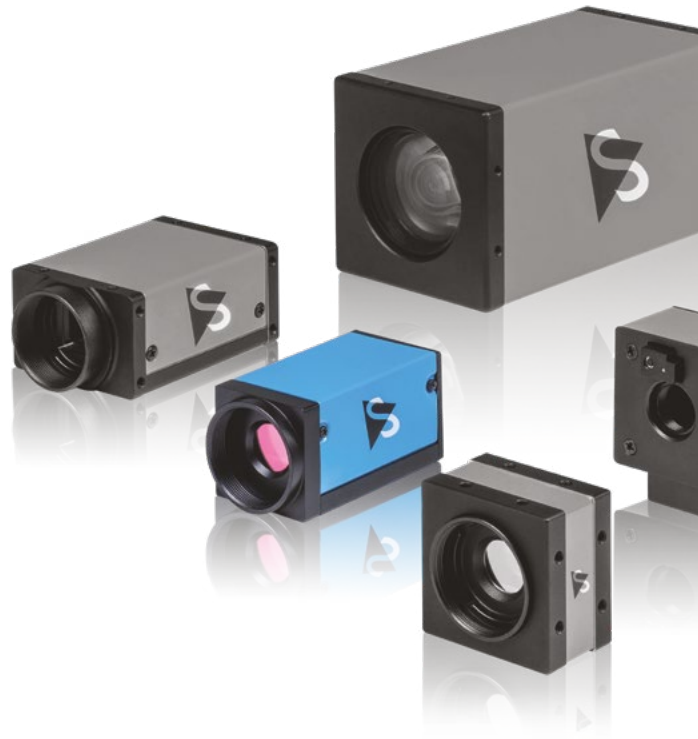
2 Series (One4All) USB 2.0 and 25 Series GigE Board-Level Cameras

Molex PicoBlade Connector

25 Series

33 Series GigE Polarsens Cameras

Dimensions: 29 x 29 x 57 mm   Mass: 65 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DYK 33GX250	5.0	2448 x 2048	2/3"	3.45 μm	24 fps	IMX250MYR	Sony Polarsens	global	Color	-
DZK 33GX250	5.0	2448 x 2048	2/3"	3.45 μm	24 fps	IMX250MZR	Sony Polarsens	global	-	Mono

33 Series USB 3.0 Polarsens Cameras

Dimensions: 29 x 29 x 43 mm   Mass: 65 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DYK 33UX250	5.0	2448 x 2048	2/3"	3.45 μm	75 fps	IMX250MYR	Sony Polarsens	global	Color	-
DZK 33UX250	5.0	2448 x 2048	2/3"	3.45 μm	75 fps	IMX250MZR	Sony Polarsens	global	-	Mono

42 Megapixel Camera

Dimensions: 36 x 36 x 26 mm   Mass: 70 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DFK AFU420-CCS	41.4	7716 x 5360	2/3"	1.12 μm	110 fps	N/A	N/A	rolling	Color	-

[1] DxK: x = M (= monochrome) or F (= color)

Microscope Cameras
USB 3.0, USB 3.1

A broad camera portfolio to suit a wide variety of microscopy applications.

With resolutions from 1.6 MP to 20 MP, The Imaging Source's range of high-quality microscope cameras support a wide variety of microscopy applications. Featuring Sony's latest STARVIS and Pregius sensors, the microscopy cameras are characterized by high sensitivity, high dynamic range, low noise and excellent color reproduction.

The Imaging Source' range of USB 3.0 and USB 3.1 color (also available as monochrome) microscope cameras are shipped with IC Measure - a user-friendly software for archiving, measurement, calibration and camera control. Via IC Measure, all camera settings, (e.g. exposure time, noise reduction, contrast, brightness and saturation) can be set and then saved for future applications. The cameras and included software are an unbeatable combination with an outstanding price-performance ratio.
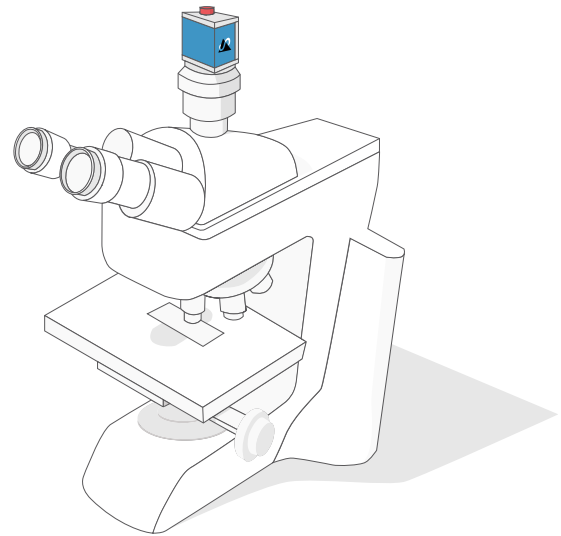
Features

- Resolutions: Up to 20 MP
- Frame rates: Up to 143 fps
- Latest Sony Pregius and STARVIS sensors
- Free IC Measure software
- Screen calibration and measurement
- Tools for measuring lengths, angles, circles and polygons

Optics   Embedded   Converters   Accessories   Software

Ocular Camera   33 Series   38 Series

Microscope Cameras

Dimensions: 29 x 29 x 43 mm   Mass: 65 g
**Dimensions: 29 x 44 x 60 mm   Mass: 110 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color	Mono
DFK MKU226-10x22	12.0	4000 x 3000	1/2.7"	1.85 µm	30 fps	IMX226CQJ	Sony STARVIS	rolling	Color	-
DFK 33UX249	2.3	1920 x 1200	1/1.2"	5.86 µm	48 fps	IMX249	Sony Pregius	global	Color	-
DFK 33UX290	2.1	1920 x 1080	1/2.8"	2.9 µm	143 fps	IMX290	Sony STARVIS	rolling	Color	-
DFK 33UX265	3.1	2048 x 1536	1/1.8"	3.45 µm	60 fps	IMX265	Sony Pregius	global	Color	-
DFK 33UX264	5.0	2448 x 2048	2/3"	3.45 µm	38 fps	IMX264	Sony Pregius	global	Color	-
DFK 38UX267**	8.8	4096 x 2160	1"	3.45 µm	35 fps	IMX267	Sony Pregius	global	Color	-
DFK 33UJ003	10.7	3856 x 2764	1/2.3"	1.67 µm	14 fps	MT9J003	onsemi	rolling	Color	-
DFK 33UX226	12.0	4000 x 3000	1/2.7"	1.85 µm	30 fps	IMX226	Sony STARVIS	rolling	Color	-
DFK 38UX253**	12.3	4096 x 3000	1.1"	3.45 µm	30 fps	IMX253	Sony Pregius	global	Color	-
DFK 33UX183	20.0	5472 x 3648	1"	2.4 µm	18 fps	IMX183	Sony Exmor	rolling	Color	-

[1] DxK: x = M (= monochrome) or F (= color)

Lenses
C/CS Mount

High-performance internal-focus lenses with variable aperture.

The Imaging Source's housed industrial cameras ship with either C- or CS-mounts, and we offer an extensive selection of suitable lenses—from high-end C-mount lenses to inexpensive CS-mount lenses.

Cost-optimized vision solutions can be realized with cameras using a small sensor and CS-mount lenses. These affordable lenses have a shorter flange focal distance, allowing for a smaller footprint. At the same time, CS-mount lenses' adjustable aperture increases overall system flexibility.

For vision applications requiring high-performance imaging, we recommend C-mount lenses. These industrial camera lenses typically consist of more optical elements which optimally resolve the newer, larger sensors with improved correction of common lens aberrations.

Features

- Type: C/CS mount
- Available focal lengths: 4 - 75 mm
- M-12 lenses are also available (see following pages)
- Additional accessories: Filters, extension tubes and rings

| Optics | Embedded | Converters | Accessories | Software |

TIS 5 MP and TIS Compact Lenses

TIS 5 MP

TIS Compact

TIS 1" and TIS Macro 1.1" Lenses

TIS 1"

TIS Macro 1.1"

High-End Lenses

High-End

Board Lenses
M12 (S-mount)

Robust, fixed-focus lenses with external focus adjustment.

Compact and lightweight M12 lenses are typically used in conjunction with board cameras. The M12 lenses' fixed aperture makes them more resistant to mechanical stresses such as vibrations or shocks.

Due to their smaller optical components and simpler focusing system, M12 lenses are also less expensive than C/CS-mount lenses. When used with CS-mount cameras, M12 lenses can also provide super wide-angle FOVs.

The board camera and M12 lens combination delivers one of the lightest and most compact industrial imaging solutions possible.

Features

- Type: M12 mount
- Available focal lengths: 1.4 - 50 mm
- C/CS mount lenses are also available (see previous pages)
- Over 50 lenses available

TIS Megapixel and TIS 2/3" Board Lenses

TIS Megapixel

TIS 2/3"

TIS Low Distortion and TIS Standard Board Lenses

TIS Low Distortion

TIS Standard

Lens Accessories
Tubes, Rings, and Filters

Accessories to improve vision system performance.

The primary task of any vision system's hardware is the production of high-contrast images, allowing for relevant image data extraction and reduced processing time. Optical filters for machine vision applications deliver significant improvements to image contrast. Bandpass filters, for example, greatly improve contrast in monochrome images while polarization filters reduce glare and surface reflections.

We are happy to help you with the selection of optical filters suitable for your machine vision application.

Tubes and Rings

Filters

Features

- Many filter types available
- Improved image contrast
- Glare reduction
- Low-cost solution to improve vision system performance

Tubes and Rings

Filters
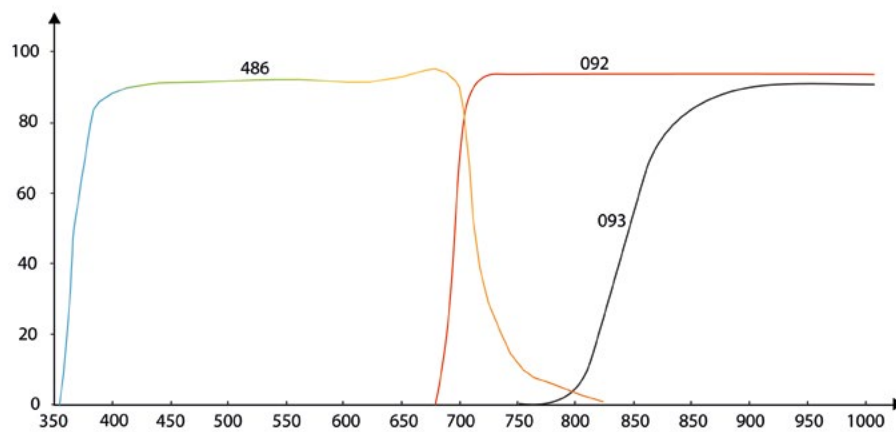
Embedded Vision Development Kits
Powered by NVIDIA® Jetson™

Develop prototypes for unique vision applications with The Imaging Source's Embedded Development Kits

The Imaging Source's embedded development kits for the NVIDIA® Jetson Nano™, and NVIDIA® Jetson Xavier™ NX platforms deliver plug-and-play efficiency for the rapid development of embedded vision and AI projects for applications in logistics, automation, industrial internet of things (IIoT), and other applications.

The Imaging Source offers a variety of camera modules, lenses and cables so developers can select the system components to suit their application requirements. Sony and onsemi sensors deliver exceptional image quality, color fidelity and ensure sustainable application design.

The Imaging Source supports these embedded platforms with proprietary MIPI® CSI-2 / FPD-Link® III drivers, deserializer boards and a Linux SDK.

Options for Embedded Development Kits: Platform, Interface, Sensor, Form Factor, Lens (Example Platform: NVIDIA Jetson)

Features

- Supported platforms: NVIDIA Jetson, and Raspberry Pi
- Interface: MIPI CSI-2 and FPD-Link III
- Sensor: Sony Pregius, Sony STARVIS and onsemi
- Form factor: Board-level (S-mount), housed, and IP67
- Lens: Mini lens (S-mount) and TIS 5MP (C/CS mount)

Optics | **Embedded** | Converters | Accessories | Software
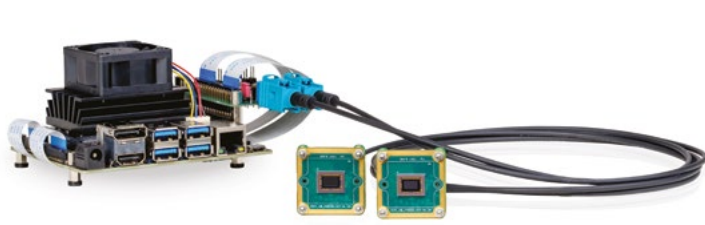
NVIDIA® Jetson Nano™

NVIDIA® Jetson Nano™ FPD-Link® III

NVIDIA Jetson® Nano™ MIPI® CSI-2

NVIDIA® Jetson Xavier™ NX

NVIDIA® Jetson Xavier™ NX FPD-Link III

NVIDIA® Jetson Xavier™ NX MIPI CSI-2

Carrier and Adapter Boards
Compatible with NVIDIA® Jetson™

Powerful embedded components that reduce system footprint and increase system flexibility.

Carrier Boards: The 6-channel carrier board has six FAKRA camera inputs that can be used to connect up to 6* FPD-Link™ III cameras. The FPD-Link III cameras are MIPI CSI-2 cameras whose signal is transmitted via a high-speed serial interface. When compared to the USB 3.0 interface, FPD-Link III allows for cable lengths of more than 20m with a comparable data rate.

The carrier board has all common PC interfaces such as USB and Gigabit Ethernet as well as a CAN bus interface. All The Imaging Source FPD-Link III cameras are supported (36 M Series), covering a wide range of applications.

The carrier boards are delivered with NVIDIA JetPack software, which offers extensive deep learning functionality as well as a host of additional tools and libraries. For general image processing tasks and deep learning applications, the HALCON software library can also be installed and used.

Deserializer Boards: The Imaging Source's 2-channel and 6-channel MIPI deserializers for NVIDIA Jetson connect with our FPD-Link® III board and IP67-certified cameras. A single-channel variant is also available for Raspberry Pi 4.

6-Channel FPD-Link III Carrier Board for NVIDIA® Jetson Nano™ and NVIDIA® Jetson Xavier™ NX

Features

- Run up to six cameras simultaneously.
- Reduce system footprint: SoM design means peripheral hardware and host systems are not necessary.

* NVIDIA Jetson Nano supports up to 4 cameras.

External and Mechanical Interfaces: 6-Channel Carrier Board

External Interface	6x FPD-Link III
External Interface	1x HDMI
External Interface	1x DisplayPort
External Interface	1x USB 3.0
External Interface	1x USB 2.0
External Interface	1x Micro-USB 2.0 OTG
External Interface	1x Gigabit Ethernet
Internal Interface	1x M.2 Key E (for Wi-Fi/Bluetooth modem)
Internal Interface	1x M.2 Key M (for SSD)
External Interface	1x SD card
Internal Interface	1x UART (JST PA connector)
Internal Interface	1x I2C (JST PA connector)
Internal Interface	1x CAN (JST PA connector)
External Interface	2x GP-in (opto-coupled) (JST PA connector + screw terminal)
External Interface	2x GP-out (opto-coupled) (JST PA connector + screw terminal)
External Interface	1x power switch (JST PA connector + screw terminal)
Internal Interface	1x SPI (Molex PicoBlade)
Internal Interface	1x I2S (Molex PicoBlade)
Internal Interface	1x MIPI DSI (30 pin FPC, compatible with RaspberryPi displays)
Internal Interface	1x power connector for DSI display (JST PA connector)
Internal Interface	1x fan (Molex PicoBlade)
Internal Interface	1x multi-pin connector for debugging (UART, reset and recovery)
External Interface	Power supply (hollow round socket + screw terminal), 12V - 36V, min. 60 W and SO-DIMM socket for Jetson SOM

Deserializer Boards for NVIDIA® Jetson™ and for Raspberry Pi 4

2-Channel FPD-Link III Deserializer for Development Kits with NVIDIA® Jetson Nano or NVIDIA Jetson Xavier™ NX

6-Channel FPD-Link III Deserializer for Development Kits with NVIDIA® Jetson AGX Xavier™

1-Channel FPD-Link III Deserializer for Development Kits with Raspberry Pi 4

Video Signal Converters

Maximize image display and capture possibilities with video signal converters.

The Imaging Source offers various video signal converters for a wide range of input signals and applications: Convert analog (PAL, NTSC, CCIR, EIA) or SDI video signals to digital image data streams; capture video signals from an HDMI source via USB 3.0 interface; reduce system footprint by directly connecting an HDMI display with any of The Imaging Source's USB industrial cameras using the USB-to-HDMI Converter.

The Imaging Source's free end-user software, IC Capture, IC Measure, and IC Imaging Control SDK, allows users to capture and process image data. The Windows drivers of the video signal converters are DirectShow compatible.

Features

- Video-to-USB 2.0: Convert analog video sources into data streams
- SDI-to-USB 3.0: Connect modern security cameras to PCs
- USB-to-HDMI: Direct camera to monitor imaging
- HDMI-to-USB: Capture HD / 4K HDMI signals via USB 3.0

Video-to-USB 2.0 Converters

DFG/USB2aud   DFG/USB2pro   DFG/USB2propcb

SDI-to-USB 3.0 Converter

DFG/HDSDI

USB-to-HDMI Converter

DFG/USBtoHDMI

HDMI-to-USB Converter

DFG/HDMI

Cables
USB, GigE, FFC/FPC, Coax

Robust, industrial-grade cables for your machine vision application.

There are several considerations that must be taken into account when choosing cables for image processing: Transmission distance, connector, cable type and length—just to name a few.

The Imaging Source offers a selection of standard USB and GigE cables, as well as IP67 and flat band cables for embedded vision solutions.

Features

- USB 3.1: Type-C with locking screws (3 m)
- USB 3.0: Type-A with locking screws (3 m and 10 m)
- USB 2.0: Type-A with locking screws (5 m)
- GigE: RJ-45; iX Industrial; trigger and power
- Embedded: MIPI (FFC/FPC); IP67 FAKRA (up to 15 m)

USB 3.1 and USB 3.0 Cables

USB 3.1

USB 3.0

USB 2.0 and GigE (RJ45, ix Industrial®) Cables

USB 2.0

GigE (RJ45, ix Industrial®)

FFC/FPC and COAX (FAKRA) Cables
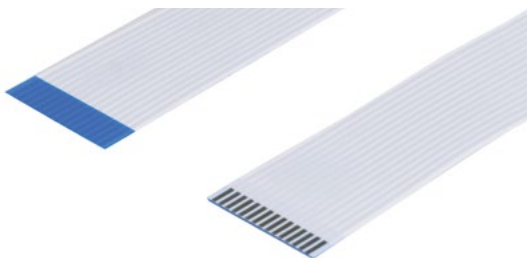
FFC/FPC

IP67 FAKRA cable

Industrial   Board   Embedded   Zoom & Autofocus   Customized & Unique   Microscopy

IC Imaging Control
Image Acquisition SDK for Windows

SDK for image acquisition from The Imaging Source's industrial cameras, frame grabbers, and video converters.

IC Imaging Control is an SDK for acquiring images from a video source, such as The Imaging Source's industrial cameras, frame grabbers and video converters. The SDK automatically recognizes video sources and enables switching between them via program code. Single images, sequences of single images, and live video streams can be captured from the connected video source.

IC Imaging Control allows for real-time preview of video streams even at the maximum-possible frame rates of the video device. IC Imaging Control SDK can also be used to preview multiple video streams at once, making it suitable for surveillance applications.

Features

- Programmable access to video capture sources
- Set and adjust device parameters
- Save images and image sequences
- .NET component, ActiveX component and C++ class library
- Supports all TIS industrial cameras and video converters
- IC Imaging Control: Free software available for download

- IC Imaging Control SDK provides built-in scrolling and zooming. Images can be easily adjusted to suit inspection detail requirements or to fill the entire window.

- Single image frames can be captured from a live video stream. Once acquired to the image buffer, the images may be saved as a BMP, TIFF or JPEG file.

- A number of frames can be acquired to image buffers which are organized as an array or ring buffer. IC Imaging Control triggers an event each time it writes to the image buffer with the advantage that the end-user application does not have to check the most recent complete image.

- IC Imaging Control provides a dialog box that allows the end-user to open a device and to configure the video norm, video format, input channel, frame rate and orientation (horizontal / vertical flip or 90°, 180° or 270° rotation). Video capture devices can be queried from program code for their settings in order to build customized dialog boxes.

- IC Imaging Control supports the following image settings: Brightness, contrast, hue, saturation, gain and exposure. All changes in settings are immediately visible on the live video stream.

- IC Imaging Control provides a dialog that allows you to manipulate all properties of a video capture device.

- If supported by the video capture device, its serial number can be retrieved with IC Imaging Control and can be used as a dongle.

- In addition to processing the full video stream, IC Imaging Control allows for the definition of a region of interest (ROI), upon which, all of IC Imaging Control's functions can be applied.

tiscamera
Image Acquisition SDK for Linux

This software package offers a user-friendly SDK, drivers, and tools for use with any of The Imaging Source 's industrial cameras.

For years, The Imaging Source has continuously maintained and developed its Linux library including the tiscamera SDK for Linux, an open-source project published under the Apache 2.0 license on github.

Built on top of the GStreamer framework, tiscamera provides a collection of GStreamer elements which allow easy access to The Imaging Source's cameras and integration with a wide variety of third-party image processing software.

Since GStreamer can be accessed from various programming languages, developers can choose among programming languages when creating their applications. With just a few lines of code, developers can rapidly configure their camera, as well as display, capture and save images.
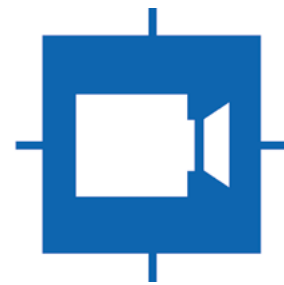
Features

- Open-source camera SDK
- GStreamer integration
- Optimized image processing routines for many platforms (including arm64, Amd64, NVIDIA CUDA)
- Supports all The Imaging Source industrial camera interfaces, including MIPI CSI-2

- tiscamera installation packages are available for multiple platforms, e.g. x64, ARM64 including NVIDIA Jetson platforms and Raspberry Pi.

- Similar to IC Capture, the pre-built tcam-capture application allows the user to explore the camera and SDK features via convenient user interface.

- The tiscamera SDK is independent of the camera's hardware interface (USB, GigE, MIPI CSI-2) which allows applications created with tiscamera to use cameras with different interface standards.

- In addition to basic camera access and configuration, image preprocessing routines for common tasks such as debayering and image enhancement are available.

- The tcamdutils element contains highly-optimized algorithms for common hardware platforms, such as x64, ARM64 and NVIDIA CUDA.

IC Capture

Image Acquisition Software for Windows

Capture and display single images, image sequences and streams from all
The Imaging Source industrial cameras.

IC Capture is an end-user application for the acquisition of images from any video device, manufactured by The Imaging Source, including industrial cameras, frame grabbers and video converters.

All the properties of video devices, such as video formats, exposure times and many more can be set in the program. All video devices connected to the computer are recognized automatically and multiple video sources can be opened in IC Capture simultaneously.

Features

- Image capture from any The Imaging Source industrial camera
- Save single images or image sequences manually or via timer
- Apply cameras settings and regions of interest (ROI)
- Multi-camera synchronization
- IC Capture: Free software available for download
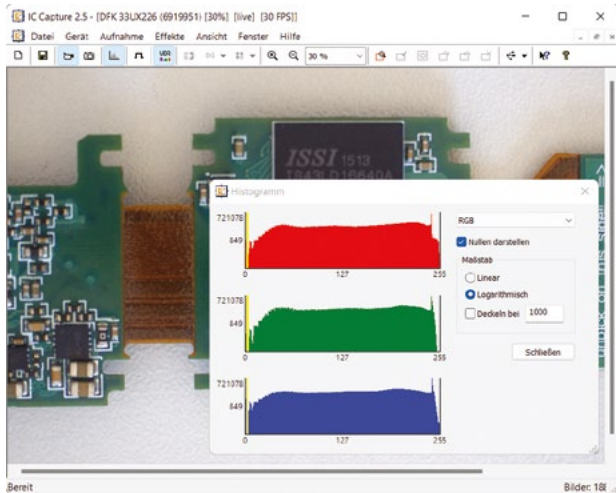
- Single image frames can be captured from a live video stream and can be saved to a BMP, TIFF or JPEG file. A number of frames can be acquired and saved to a sequence of image files. The number of images saved can be limited by either a specific number or by a time limit.

- When set to trigger mode, the camera waits for an external event to deliver a single image which is then saved by IC Capture. An external trigger signal can also be used to synchronize several cameras.

- IC Capture saves image streams directly to AVI files either as uncompressed files or via software codecs for image compression. AVI capture also works with triggered cameras. All installed image compression codecs can be selected in IC Capture, and then used to compress the video stream.

- Settings applied in IC Capture can be stored and used for future sessions. Additionally, all available camera properties can be adjusted in IC Capture. The software can flip the live video stream horizontally and vertically as well as rotate the live video stream 90°, 180° and 270°.

- IC Capture supports the definition of a region of interest.

- Several cameras, manufactured by The Imaging Source, support long exposure times of up to one hour, or short exposure times of 1/100,000 second to capture fast-moving objects.

- IC Capture supports the gray world and color temperature models to adjust white balance.

IC Measure

Aquisition and Measurement Application

Powerful tools for image acquisition and direct, on-screen measurement of lengths, angles and surfaces.

Specifically developed for microscopy applications, IC Measure is a powerful end-user application for measurement and image acquisition using any video device, manufactured by The Imaging Source.

IC Measure provides multiple tools for manual measurement; via the intuitive interface, lengths, angles, areas and perimeters can be directly measured in the live preview. The measured data can then be exported to any spreadsheet application via the CSV export function.
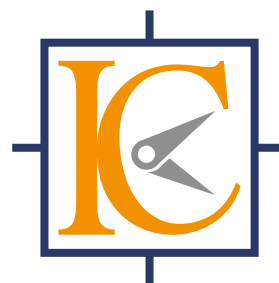
IC Measure available for Windows and Linux platforms.

Features

- On-screen measurement of lengths, angles, areas and perimeters
- Export measured data to any spreadsheet application
- Mark and annotate image features with annotation tools
- Easy software calibration
- IC Measure: Free software available for download

- Mark and annotate image features with IC Measure's annotation tools. Annotations are fully customizable in font, size and color.

- IC Measure features advanced image processing filters to correct for optical distortions (e.g. Barrel and Pincushion distortion) as well as image enhancement tools such as histogram equalization, sharpness, brightness and contrast.

- IC Measure's on-screen calibration tools, allow for efficient software calibration using a stage micrometer, graph paper or virtually any object of known size and can be used for measuring tasks outside of microscopy applications as well.

- All measured objects saved in IC Measure can be stored and used for future projects.

- All camera properties, such as video formats, and exposure times can be applied and set for future sessions.

- Single image frames can be captured from the live video stream and saved as a BMP, TIFF or JPEG file.

- A number of frames can be acquired and saved to a sequence of image files. The number of image frames, which are saved can be limited by either a specific number of by a time limit.

IC Barcode
Barcode Detection Library

SDK for 1D and 2D barcode recognition in
IC Imaging Control.

IC Barcode is a highly accurate and powerful developer library, which recognizes 1D and 2D barcodes from digital images.

The SDK enables the integration of barcode recognition functionality into document processing systems and Windows applications.

IC Barcode's unique and efficient barcode recognition algorithm searches for barcodes in any position and orientation within an image.

IC Barcode available for Windows and Linux platforms.

Features

- Read multiple 1D and 2D barcodes at any orientation
- Report comprehensive information with 100% confidence for all detected barcodes.
- High-speed barcode recognition: Barcodes are located and reported back in a fraction of a second
- Speed up barcode detection / decoding process: Use custom configurations for barcode orientation, type or region of interest
- IC Barcode: Free software available for download

Optics   Embedded   Converters   Accessories   **Software**
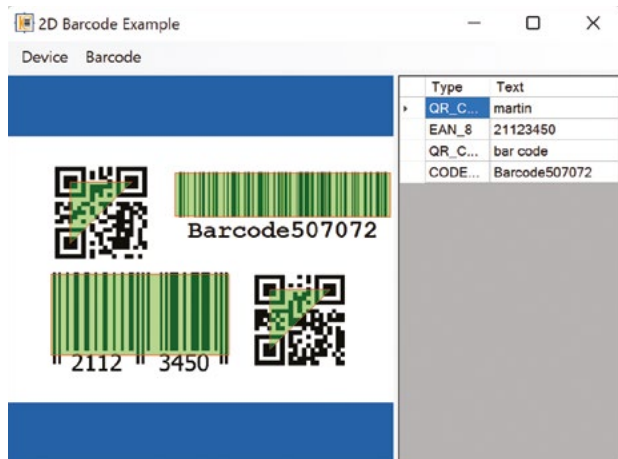
Supported 1D Barcodes

- EAN8

- EAN13

- CODE39

- CODE93

- CODE128

- UPC_A

- APC_E

- INTERLEAVED_2_OF_5

Supported 2D Barcodes

- AZTEC

- DATA_MATRIX

- QR CODE

- MAXICODE

- PDF417

MVTec Products
HALCON and MERLIC

Used in tens of thousands of demanding applications, MVTec software products set the standard for machine vision software.

HALCON and MERLIC deliver a full-range of image processing solutions for industrial and commercial machine vison applications. As an MVTec distributor and Certified Training Partner, The Imaging Source's dedicated in-house specialists provide efficient and expert technical assistance for MVTec's imaging programs and software libraries.

Because of the variety of tasks and the corresponding breadth of potential solutions in machine vision, system developers must evaluate which solution will deliver the best combination of value and efficiency in a particular application. Not only will we help you in the selection of the right hardware, but we will also actively support you throughout the process - starting from the development of simple user interfaces (via sample programs or support in HDevelop Script) all the way up to prototyping.

Services

- The Imaging Source distributes and supports MVTec products.
- Dedicated sales and support staff provides consulting and technical support.
- As an MVTec Certified Training Partner, TIS offers several online training seminars.
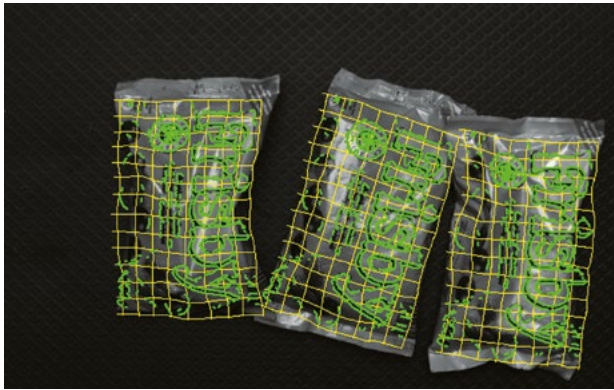
MVTec offers comprehensive software for machine vision including solutions for deep learning and embedded vision applications. Image shows the location of deformable objects in HALCON.
Image courtesy of MVTec Software GmbH

HALCON

HALCON is the comprehensive standard software for machine vision with an integrated development environment (IDE) that is used worldwide. It enables cost savings and improved time to market. HALCON's flexible architecture facilitates rapid development of any kind of machine vision application.

MERLIC

MERLIC is an all-in-one software product for quickly building machine vision applications without programming. Based on MVTec's extensive machine vision expertise, MERLIC combines reliable, fast performance with ease of use.

Embedded Vision

MVTec's machine vision software, HALCON and MERLIC, run perfectly on embedded devices. Available as bundles or standard software products, MVTec enables innovative and high-performing embedded vision products. MVTec software supports all relevant interfaces, such as GigEVision, USB3Vision, Video4Linux, and MIPI CSI for image acquisition.

Deep Learning

With the Deep Learning Tool, developers can easily label data via the intuitive user interface – without any programming expertise. The data can be seamlessly integrated into HALCON and MERLIC to perform deep-learning-based object detection, classification and semantic segmentation.

MVTec Training Partner

As an MVTec Certified Training Partner, The Imaging Source offers online training seminars for MVTec software. With an emphasis on hands-on practical experience with the software, participants can choose from entry-level to advanced courses. Please check our website or contact our sales staff for current courses and dates.

The Imaging Source
Services

30 years of experience makes The Imaging Source an invaluable partner in realizing your machine vision application.

In the design and realization of machine vision systems, we will support you in every possible way - whether with in-depth consultation or by creating an integrated overall concept. Even well-versed professionals depend on our team's extensive machine vision know-how.
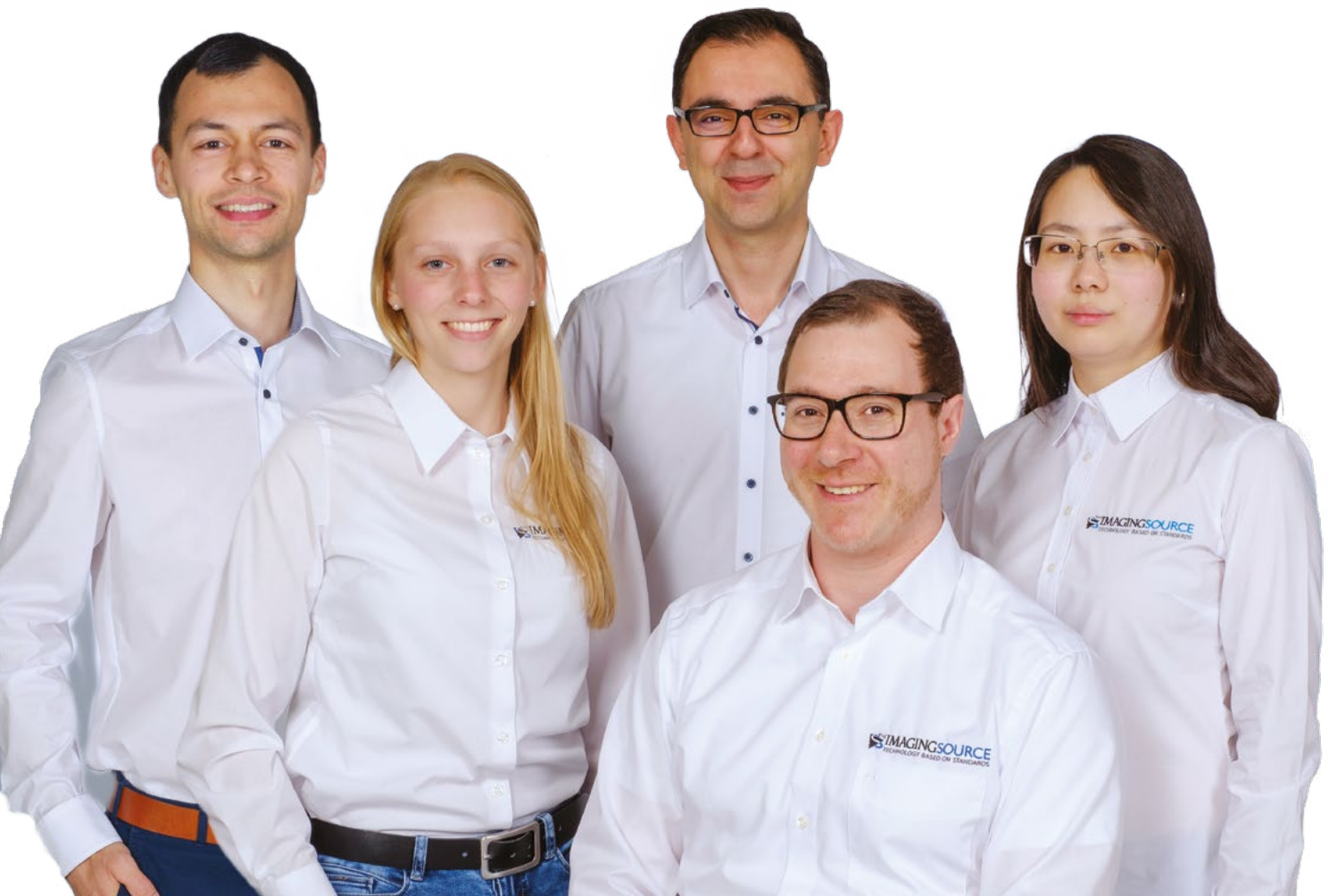
Consulting

Our extensive experience with industrial vision applications allows us to offer our customers a range of consulting services from telephone consultation and initial concept development to feasibility studies and prototype development (hardware and software). In the event our products don't meet your application needs, we will of course use thoroughly-tested products from third-party service providers.

Feasibility Studies

For larger, high-camera-volume projects, a feasibility study is often a sensible first step. Our highly-experienced support team is available to assist you with hardware and software selection, implementation and test equipment. Please contact our sales team for more information.

System Architecture

We will work with you to meet any machine vision challenge – regardless of whether it's a 2D or 3D vision solution or simply an application with demanding specifications. Our experienced interdisciplinary team has created thousands of machine vision systems - from pure capture-and-archive applications to the precision measurement (10 μm range) of machine parts.

Training for MVTec Products

Get started with MVTec software products via our online seminars. With an emphasis on hands-on practical experience with the software, participants can choose from entry-level to advanced courses. Please check our website or contact our sales staff for current courses and dates.

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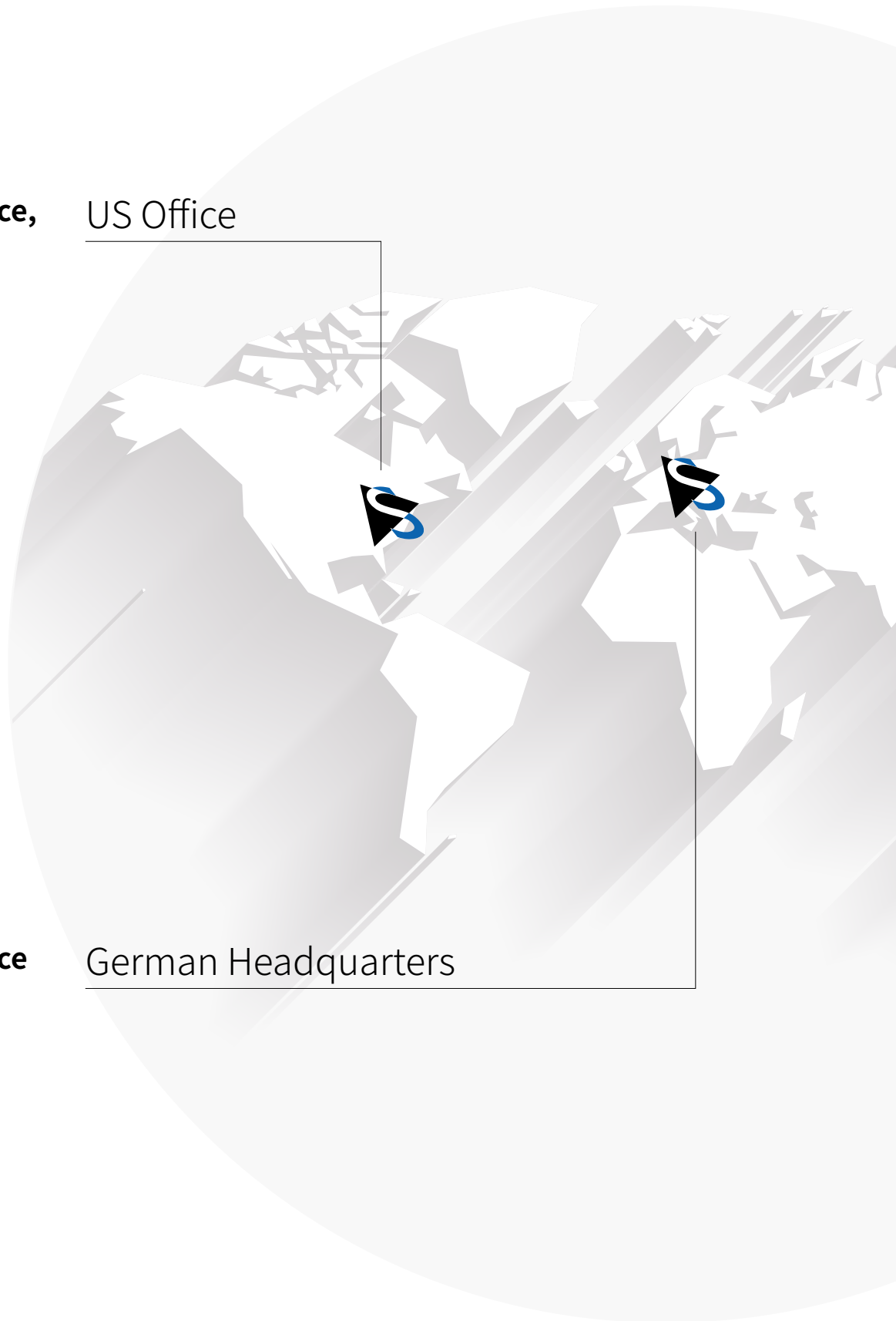   +1 (877) 462-4772
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