THE IMAGINGSOURCE
TECHNOLOGY BASED ON STANDARDS

Industrial Cameras

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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 Taiwan, 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

The Imaging Source Website

Scan here to discover The Imaging Source's latest products, end-of-life announcements, updates, and camera finder.

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 personnel 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

Welcome

Office

USB VISION GiGE VISION GENICAM

Board

Embedded

Zoom

Autofocus

SMT Line

Assembly Line

onsemi Pregius S Pregius STARVIS Polarsens

Embedded Vision

Overview

Affordable processing power, advanced software and reduced system footprint have unlocked new possibilities for embedded vision, expanding its application potential. Discover how The Imaging Source's robust cameras and scalable carrier board solution support lean hardware design, delivering maximum flexibility and efficiency for your embedded vision projects.

Flexible, Application-Ready Embedded Vision for Logistics, Manufacturing and IoT

MIPI CSI-2:

High-speed data transmission with minimal latency - ideal for video streams and image sequences.

Triggers and I/Os:

Hardware and software trigger and I/Os for demanding machine vision applications

FPD-Link III:

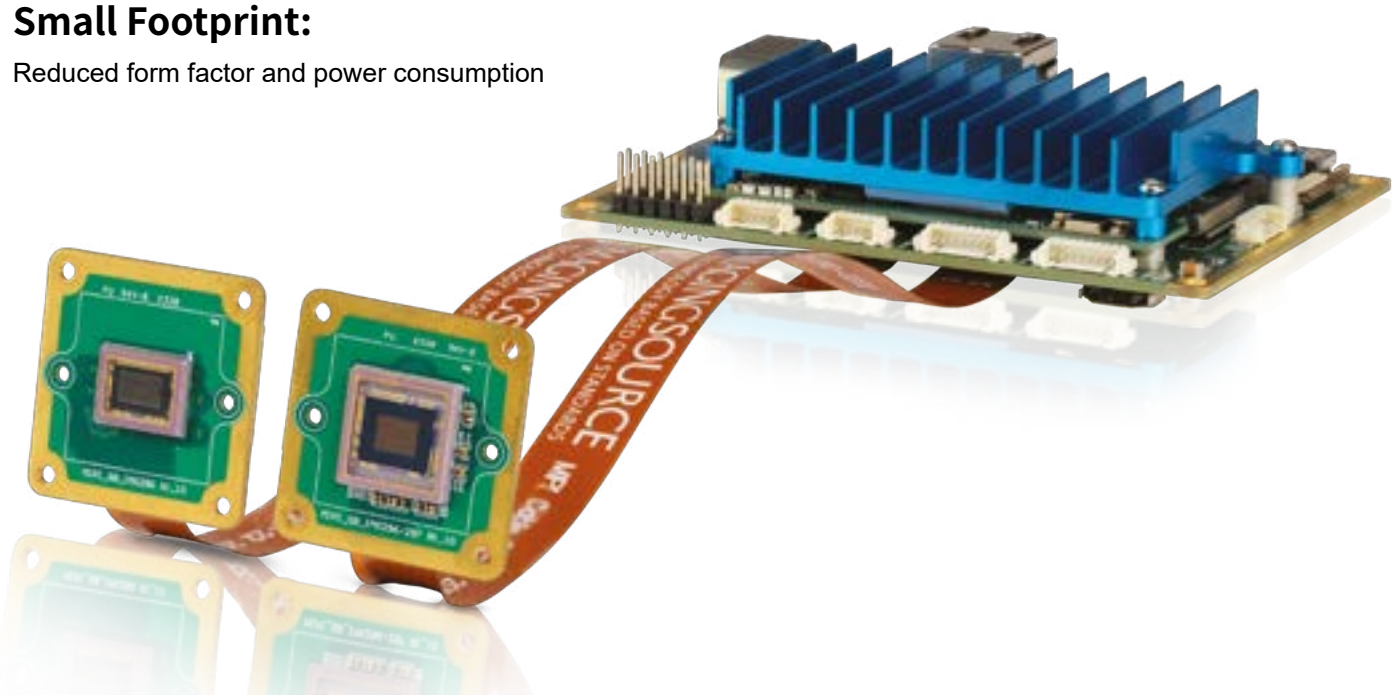
SerDes technology for high-speed data transmission up to 15 m without compromising signal integrity.

Warranty:

3-year warranty with continuous support

Small Footprint:

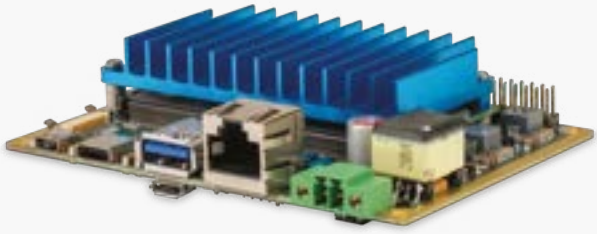
Reduced form factor and power consumption



Camera Interfaces

With 35 years in machine vision, The Imaging Source offers an extensive range of embedded cameras designed to meet the demands of diverse modern applications and industries. Offering both MIPI CSI-2 and FPD-Link III interfaces with the latest Sony and onsemi sensors, our embedded vision cameras deliver unparalleled image quality and reliability, ensuring robust imaging for your application. Whether you're in manufacturing, logistics, or healthcare, our cameras are engineered to perform in the most demanding environments, providing you with reliable and high-quality imaging solutions.

MIPI CSI-2 , FPD-Link III



Toradex (NXP) SoM Scalable Design

Carrier Board

The Imaging Source's carrier board and SoM solution for embedded vision delivers powerful image processing via a scalable board design integrated with a Toradex SoM (System on Module). Powered by NXP's ruggedized processors, the Toradex SoM brings industrial-grade connectivity, reliability, and product longevity to your embedded vision applications. This combination offers an adaptable and scalable image processing platform, ensuring lean and efficient hardware that enables OEMs to realize their first-to-market strategies.

Driver Packages and SDKs

Drivers and SDKs

The Imaging Source authors and supports a range of software products for image acquisition and processing. Included in our embedded vision ecosystem are camera drivers, as well as advanced image capture and processing SDKs. The system is Ready for HALCON and compatible with other third-party software and Torizon. This flexibility allows you to develop and deploy powerful vision applications with ease, ensuring your systems are equipped with the latest in image processing technology.

Contents

Image: Fraunhofer IWU

Cameras

More Products

38 Series

USB 3.1, GigE

This Family of Advanced-Feature Cameras Offers the Latest Sensor Technology for Demanding Machine Vision Applications.

RJ-45 or ix Industrial® Interface Optional

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.

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

38U 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

38G 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)

Please note: All cameras are delivered with a tripod adapter.

37U Series

USB 3.1

Cost-Optimized, Standard-Feature Cameras Provide Flexible Customization Options for Integrators and OEMs.

A Series B Series

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.

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

37AU 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	1440 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 37AUR0234	2.3	1920 x 1200	1/2.6"	3.0 µm	100 fps	AR0234	onsemi	global	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

37BU 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	1440 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 37BUR0234	2.3	1920 x 1200	1/2.6"	3.0 µm	100 fps	AR0234	onsemi	global	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)

Please note: All cameras are delivered with a tripod adapter.

33U 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 available 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

33U 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 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)

Please note: All cameras are delivered with a tripod adapter.

33G 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 available 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

33G 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 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
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)

Please note: All cameras are delivered with a tripod adapter.

27U Series

USB 3.0

Compact, Standard-Feature Cameras for Cost-Sensitive Applications

A Series B Series

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.

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

27AU 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

27BU 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

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

Please note: All cameras are delivered with a tripod adapter.

32U Series

USB 2.0

Robust Industrial Cameras Optimized for Lean Applications

A Series | B Series

The Imaging Source's next generation of USB 2.0 industrial cameras, the 32U Series, builds on the foundation of our popular One4All cameras. The cameras' compact, industrial-grade housing is designed for demanding industrial environments. The cameras offer modern camera architecture while preserving the simplicity and affordability of the legacy One4All series and so are ideal replacements for our popular One4All USB 2.0 camera models.

Equipped with onsemi CMOS sensors, 32U Series industrial cameras are designed for cost-sensitive OEM and streamlined image processing tasks. The cameras offer advanced imaging features such as binning, ROI selection, and in-camera AE/AWB, ensuring precise control and adaptability for diverse industrial imaging applications. Specific model variants are available with opto-isolated trigger inputs, and I/O capabilities. For applications with space constraints or specific integration needs, board-level variants with standard and angled connector options are also available (please see page 26).

Features

- Feature-enhanced replacements for popular One4All (2U) series
- Variety of onsemi CMOS sensor: 0.4 to 5 MP
- Trigger and I/O
- Modern camera architecture with USB 2.0 interface
- Free software tools and SDKs for Windows and Linux

32AU 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 32AUVR024	0.4	744 x 480	1/3"	6.0 µm*	89 fps	AR0234	onsemi	global	Color | Mono
DxK 32AUR0234	2.3	1920 x 1200	1/2.6"	3.0 µm	13 fps	AR0234	onsemi	global	Color | Mono
DxK 32AUR0521	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	AR0521	onsemi	rolling	Color | Mono

* permanently binned from raw 3.0 µm

32BU 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 32BUVR024	0.4	744 x 480	1/3"	6.0 µm*	89 fps	AR0234	onsemi	global	Color | Mono
DxK 32BUR0234	2.3	1920 x 1200	1/2.6"	3.0 µm	13 fps	AR0234	onsemi	global	Color | Mono
DxK 32BUR0521	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	AR0521	onsemi	rolling	Color | Mono

* permanently binned from raw 3.0 µm

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

Please note: All cameras are delivered with a tripod adapter.

37U Series

USB 3.1

These Single-Board Cameras Provide Superb Imaging and Maximum Flexibility for Space-Limited Applications.

Angled Connector [2]

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.

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

37U 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	1440 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 37UR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	100 fps	AR0234	onsemi	global	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.

27U 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.

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

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

27U 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

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

32U Series

USB 2.0

Single-Board Cameras Optimized for Lean Applications and OEM Integration

Angled Connector [2]

Introducing the next generation of USB 2.0 cameras: The 32U Series. These compact, single-board cameras are ideal replacements for our popular One4All USB 2.0 board camera models, offering modern camera architecture while preserving the simplicity and affordability of the legacy One4All series.

Equipped with onsemi CMOS sensors, the 32U Series is designed for cost-sensitive OEM and streamlined image processing tasks. Available with angled connectors, 32U Series board cameras provide maximum flexibility in a wide range of space-constrained applications.

Camera features such as opto-isolated trigger inputs, comprehensive I/O capabilities, and enhanced imaging functions such as binning, ROI selection, and in-camera AE/AWB ensure precise control and high flexibility, making the cameras suitable for a variety of industrial imaging applications. The camera series is also available in a housed form factor (please see page 20).

Features

- Feature-enhanced replacements for One4All (2U) Series
- Variety of onsemi CMOS sensors: 0.4 to 5 MP
- Trigger and I/O
- Modern camera architecture with USB 2.0 interface
- Free software tools and SDKs for Windows and Linux

32U Series Board-Level Cameras

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 32UVR024-ML	0.4	744 x 480	1/3"	6.0 µm*	89 fps	AR0234	onsemi	global	Color | Mono
DxM 32UR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	13 fps	AR0234	onsemi	global	Color | Mono
DxM 32UR0521-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	AR0521	onsemi	rolling	Color | Mono

* permanently binned from raw 3.0 µm

32U Series Board-Level Cameras (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 32UVR024-MLA	0.4	744 x 480	1/3"	6.0 µm*	89 fps	AR0234	onsemi	global	Color | Mono
DxM 32UR0234-MLA	2.3	1920 x 1200	1/2.6"	3.0 µm	13 fps	AR0234	onsemi	global	Color | Mono
DxM 32UR0521-MLA	5.0	2592 x 1944	1/2.5"	2.2 µm	6 fps	AR0521	onsemi	rolling	Color | Mono

* permanently binned from raw 3.0 µm

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

[2] Available upon request, please contact our sales team.

47G Series

GigE Board Cameras

Ultra-Compact, GigE Board-Level Cameras for Cost-Sensitive and OEM Applications

The Imaging Source's new GigE board-level cameras feature a single-board design with an angled RJ45 connector, delivering an especially compact form factor, measuring just 36 x 36 x 18 mm. These GigE Vision cameras are easily integrated into a wide variety of industrial automation, quality assurance and surveillance applications.

With robust data transmission and support for cable lengths up to 100 meters, the GigE board-level cameras ensure stable connectivity and flexible positioning in diverse environments. Equipped with the latest onsemi and Sony* CMOS sensors, these cameras also feature performance enhancements such as in-camera image preprocessing, trigger and GPIO.

*Sony sensor models: Series production planned for Q1 2025

Features

- Cost-optimized imaging solution
- Variety of Sony and onsemi CMOS sensors available
- Trigger and I/O
- Compact form factor: Single-board design with angled RJ45 connector
- Free software tools and SDKs for Windows and Linux

47G Series for Mini-Lens Holder

Dimensions: 36 x 36 x 18 mm Mass: 12 g w/o PoE, 20 g w/ PoE

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	PoE	Color | Mono
DxM 47GX900-ML*	3.1	2048 x 1536	1/3.1"	2.25 µm	35 fps	IMX900	Sony Pregius S	global	-	Color | Mono
DxM 47GX900-MLP*	3.1	2048 x 1536	1/3.1"	2.25 µm	35 fps	IMX900	Sony Pregius S	global	X	Color | Mono
DxM 47GR0521-ML	5.0	2592 x 1944	1/2.5"	2.2 µm	22 fps	AR0521	onsemi	rolling	-	Color | Mono
DxM 47GR0521-MLP	5.0	2592 x 1944	1/2.5"	2.2 µm	22 fps	AR0521	onsemi	rolling	X	Color | Mono

* samples available; mass production expected in Q1 2025

47G Series with C-Mount Front Plate

Dimensions: 39 x 39 x 33 mm Mass: 38 g w/o PoE, 46 g w/ PoE

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	PoE	Color | Mono
DxM 47GX900*	3.1	2048 x 1536	1/3.1"	2.25 µm	35 fps	IMX900	Sony Pregius S	global	-	Color | Mono
DxM 47GX900-P*	3.1	2048 x 1536	1/3.1"	2.25 µm	35 fps	IMX900	Sony Pregius S	global	X	Color | Mono
DxM 47GR0521	5.0	2592 x 1944	1/2.5"	2.2 µm	22 fps	AR0521	onsemi	rolling	-	Color | Mono
DxM 47GR0521-P	5.0	2592 x 1944	1/2.5"	2.2 µm	22 fps	AR0521	onsemi	rolling	X	Color | Mono

* samples available; mass production expected in Q1 2025

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

36S Series

MIPI® CSI-2 Single-Board Modules

Direct Camera-to-Processor Connection for Exceptionally Efficient and Compact Embedded Vision Solutions

This compact camera module for embedded vision offers reliable and efficient sensor-to-ISP connection supporting up to four image data lanes with a total throughput of up to 10 Gb/sec and is compatible with Raspberry Pi.

The Imaging Source offers rolling and global shutter sensors from Sony and onsemi for the MIPI CSI-2 standard with resolutions from 0.4 MP- 2.3 MP. HDR imaging, triggering and form-factor options provide maximum flexibility for embedded vision projects.

Contact us to discuss your imaging needs and learn how embedded vision can enhance your image processing application.

22-Pin Single-Board Camera Module

Features

- Resolutions: 0.4 - 2.3 MP; frame rates up to 120 fps
- Sony and onsemi sensors: Global and rolling shutter
- Low latency: Direct sensor-to-processor connection
- 22-pin interface: Compatible with most processor boards
- Low power consumption
- Long-term availability

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

Dimensions: 30 x 30 x 6 mm Mass: 4 g

Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 36SX297-ML	0.4	720 x 540	1/2.9"	6.9 µm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxM 36SX296-ML	1.6	1140 x 1080	1/2.9"	3.45 µm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DxM 36SX462-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	120 fps	IMX462	Sony STARVIS	rolling	Color | Mono
DxM 36SX290-ML	2.1	1920 x 1080	1/2.8"	2.9 µm	120 fps	IMX290	Sony STARVIS	rolling	Color | Mono
DxM 36SR0234-ML	2.3	1920 x 1200	1/2.6"	3.0 µm	120 fps	AR0234CS	onsemi	global	Color | Mono
DxM 36SX568-ML	5.0	2448 x 2048	1/1.8"	2.74 µm	60 fps	IMX568	Sony Pregius S	global	Color | Mono

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

36A Series

MIPI® CSI-2 Modules

MIPI CSI-2 Camera Modules with 15-Pin FPC Connector and Extended GPIO Functionality

15-Pin Interface

With a wide range of high-performance CMOS sensors from Sony and onsemi, The Imaging Source offers MIPI CSI-2 cameras with 15-pin FPC connectors that are compatible with the initial versions of the NVIDIA® Jetson™ and Raspberry Pi developer kits.

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

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

The modules feature connectors for external trigger, strobe and GPO functionality. For embedded designs, not requiring a dedicated I/O connector, we recommend our single-board MIPI CSI-2 cameras.

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
- Complete driver packages for NVIDIA JetPack and tiscamera Linux SDK

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

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

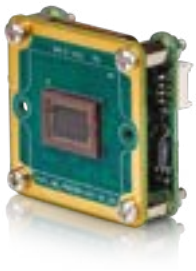
Product Code [1]	MP	Resolution	Format	Pixel Size	Frame Rate	Sensor	Type	Shutter	Color | Mono
DxM 36AX297-ML	0.4	720 x 540	1/2.9"	6.9 µm	120 fps	IMX297	Sony Pregius	global	Color | Mono
DxM 36AX296-ML	1.6	1140 x 1080	1/2.9"	3.45 µm	60 fps	IMX296	Sony Pregius	global	Color | Mono
DFM 36AX462-ML	2.1	1920 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
DxM 36AX568-ML	5.0	2448 x 2048	1/1.8"	2.74 µm	30 fps	IMX568	Sony Pregius S	global	Color | Mono

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

36C 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.



Board Module

IP67 Camera

C/CS Mount Camera [2]

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).

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

36C 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
DxM 36CX568-ML	5.0	2448 x 2048	1/1.8"	2.74 µm	48 fps	IMX568	Sony Pregius S	global	Color | Mono

36C 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
DxK 36CX568-ML	5.0	2448 x 2048	1/1.8"	2.74 µm	48 fps	IMX568	Sony Pregius S	global	Color | Mono

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

[2] Available upon request, please contact our sales team.

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 Z12

The Imaging Source's Z Series optical zoom cameras provide a flexible solution ideal for dynamic imaging needs.

Featuring an integrated motorized lens for software-controlled adjustment of focal length (zoom), aperture and focus, the cameras capture consistently sharp images even when object size fluctuates or multiple images at varying magnifications are needed.

The optical zoom cameras are available with a selection of global and rolling shutter sensors, providing a robust imaging solution for machine vision applications in industrial automation, quality assurance, in-line inspection, traffic (ITS), and surveillance.

Features

- 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
- Average time for doubling/halving focal length:
  39G-Z20: 800ms; 39G-Z12: 600ms
  Focus adjustment times may vary based on focus distance and zoom setting.

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 39GR0522-Z12	5.0	2592 x 1944	1/2.5"	2.2 µm	22 fps	AR0522	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

Zoom Camera With Filter Adapter

With Filter Adapter

With Red Filter

With Close-Up Lens

With Polarizing Filter

Close-Up Lenses

- At working distances of less than 2 meters, close-up lenses are recommended for certain zoom levels to ensure focus.
- Contact us to discuss filters, filter holders, and close-up lens options for your specific application.

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

Please note: All cameras are delivered with a tripod adapter.

AFU Series

Autofocus: USB

One-Push Autofocus Produces Sharp Images Despite Fluctuations in Working Distance.

USB 3.0 Integrated Lens

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 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.

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 AFUX178-M12	6.3	3072 x 2048	1/1.8"	2.4 µm	22 fps	IMX178	Sony	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	Sensor	Type	Shutter	Color | Mono
DFK AFU050-L34**	5.0	2592 x 1944	1/4"	1.4 µm	60 fps	3.4 mm	USB 2.0	rolling	Color | -
DFK AFU420-L62	41.4	7716 x 5360	2/3"	1.12 µm	110 fps	6.2 mm	USB 3.0	rolling	Color | -

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

Please note: All cameras are delivered with a tripod adapter.

Custom and OEM Cameras

Tailored Industrial Cameras for Customer-Specific Applications

Leverage The Imaging Source's 35 years of expertise in machine vision to develop a camera solution that precisely meets your specific application requirements. The Imaging Source offers two distinct customization options:

OEM Cameras: Select a camera from our standard product portfolio and make minor modifications, such as branding, housing color, or connector configurations, to better align with your project needs.

Custom Cameras: For more specialized applications, we offer fully custom solutions. These involve significant design changes, including alterations to the camera board, optical system, or other core components.

The Imaging Source's OEM and 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

Lens and Housing Options for Your Application

Board Without Lens

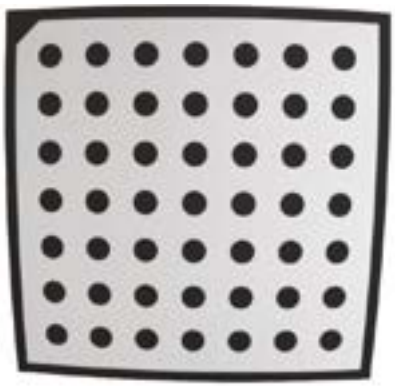
With M12 Mount

With C/CS Mount

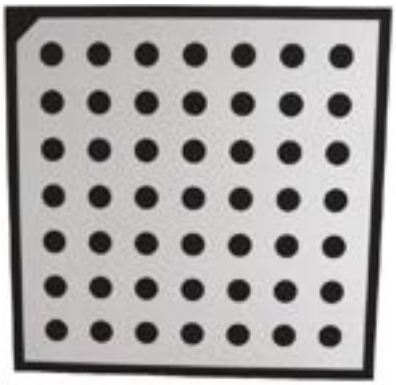
Housed With C/CS Mount

Service: Calibration of Camera Intrinsic Parameters

The Imaging Source offers lens installation, focus adjustment, and camera intrinsic parameter calibration to correct lens distortion, which is common in wide-angle optical systems. These calibrated parameters can be stored on the camera or provided separately, enhancing accuracy in applications like multi-camera stitching, AI, measurement tasks, and robotics.



Unprocessed image: DFK 33GX265 with a 3.5mm lens



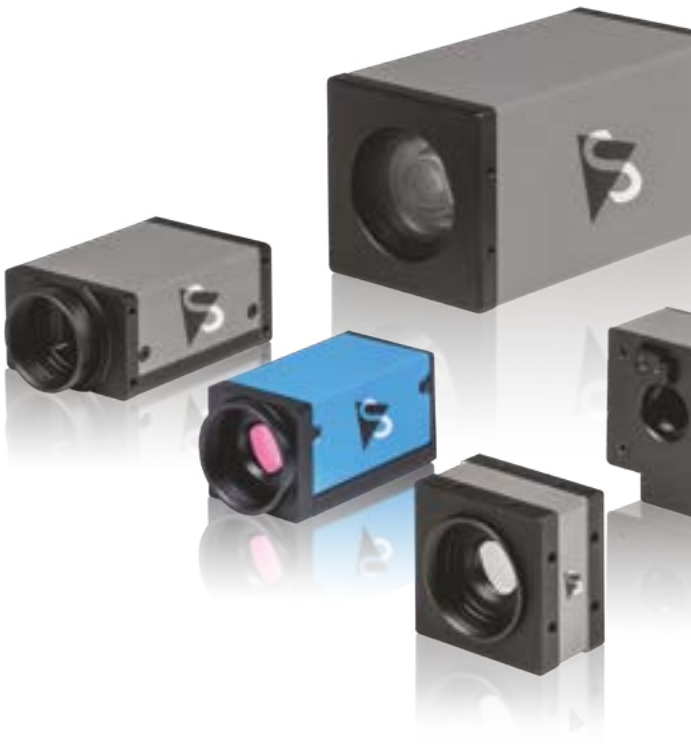
After calibration: Same image after processing with intrinsic parameters.

DBK Variant and C-Mount to M12 Adapter (Example)

Color Camera Without IR-Cut-Filter

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 such cases, The Imaging Source offers specialized cameras as part of our standard product portfolio.

- USB and GigE cameras with Sony's Polarsens™ sensors to detect stress, reduce glare, and improve image contrast.
- 42 MP imaging for high-resolution quality inspection
- The MKU Ocular Camera is ideal for a wide variety of microscope applications. Product scope includes IC Measure, a user-friendly software that enables archiving, measurement, calibration, and comprehensive camera control.

32U Series USB 2.0

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

33G Series GigE Cameras With On-Sensor Polarization

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

33U Series USB 3.0 Cameras With On-Sensor Polarization

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	7 fps	N/A	N/A	rolling	Color | -

MKU Ocular Camera*

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
DFK MKU226-10x22	12.0	4000 x 3000	1/2.7"	1.85 µm	30 fps	IMX226CQJ	Sony STARVIS	rolling	Color | -

* Ocular included in product scope.

[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

TIS 5 MP and TIS Compact Lenses

TIS 5 MP

TIS Compact

TIS Macro 1.1" and High-End Lenses

TIS Macro 1.1"

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 pages 44-45)
- 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

Extension Tubes, Spacer 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

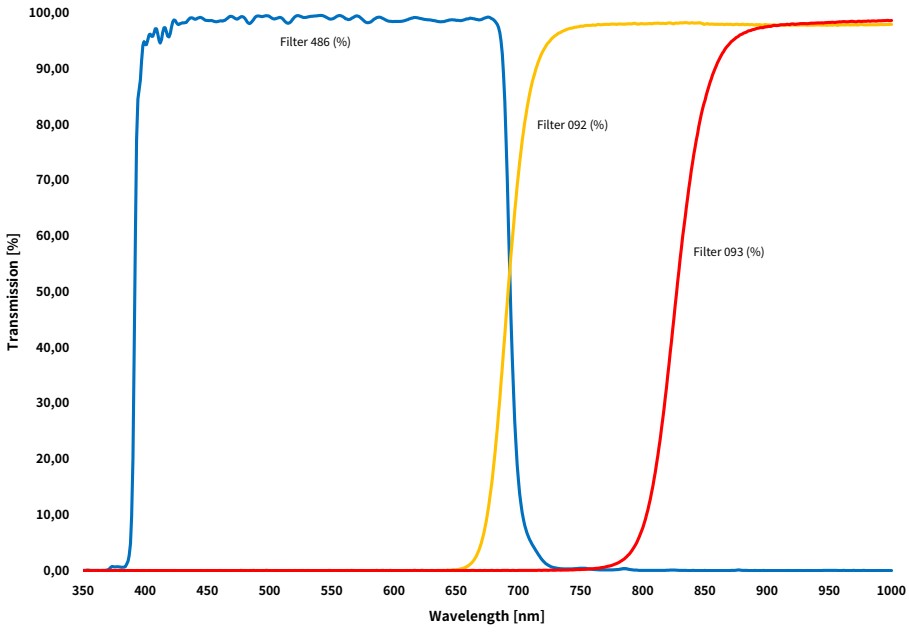
Features

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

Extension Tubes and Spacer Rings

Filters

Transmission



Embedded Vision Carrier Board

Toradex Verdin SoM NXP®

Image Processing Power for Your Embedded Applications

Carrier Board With Toradex Verdin SoM

Designed for versatility, The Imaging Source's embedded vision platform supports single and dual-camera applications via our modular board concept and Toradex SoM.

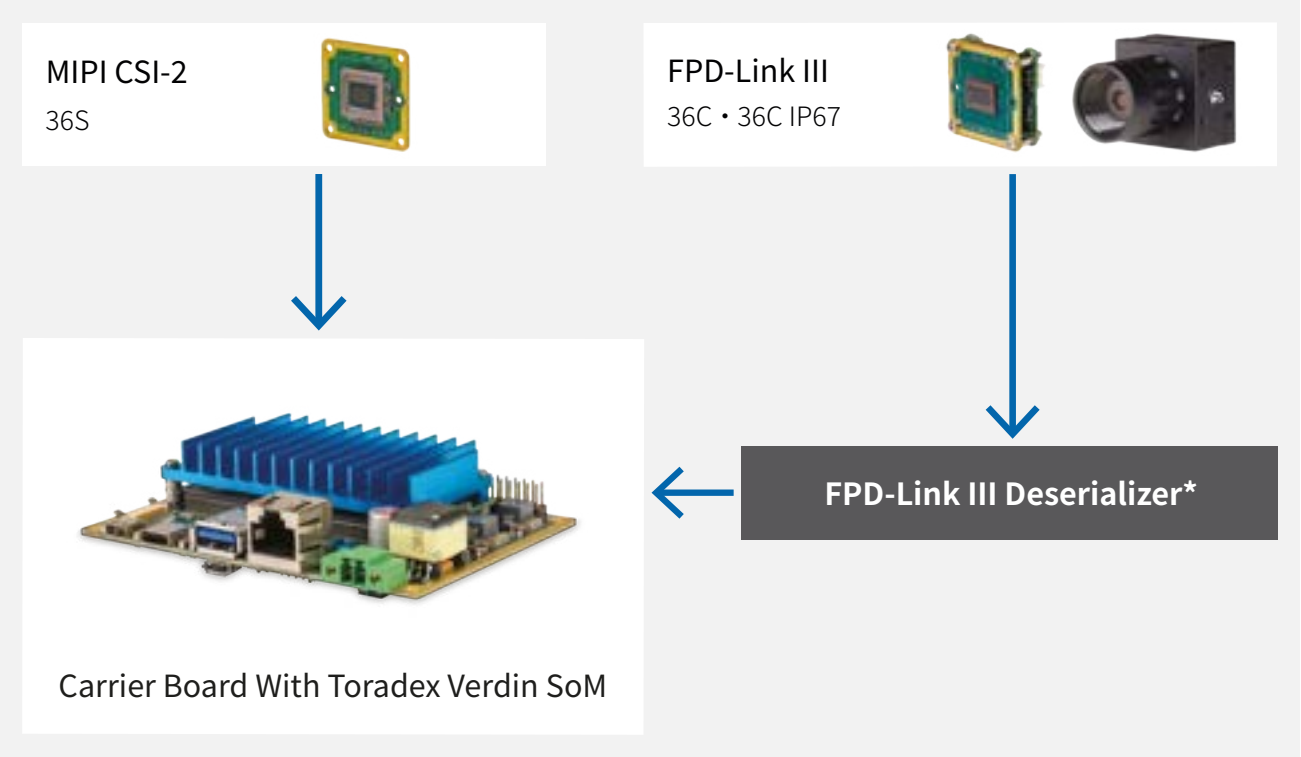
The integration of our MIPI® CSI-2 and FPD-Link® III* camera portfolio with robust industrial-grade computing enables precise development, ensuring efficient turnaround of application-specific design changes, saving development time and related costs.

*Toradex SoM FPD-Link III models: Series production planned for Q1/2025

Features

- Resolutions: 0.4 MP - 8.3 MP
- Interfaces: MIPI CSI-2 and FPD-Link III
- Sensor: Latest Sony and onsemi CMOS sensors
- Image Acquisition SDK: IC Imaging Control
- Seamless Integration With Leading Software Platforms
- Ready for HALCON

Carrier Board With Toradex Verdin Connection Options



* Deserializer Board expected Q1 2025

Evaluation Kit: 2-Channel MIPI

Options for Evaluation Kits:
Platform, Interface, Sensor, Form Factor, Lens

Carrier Board With Toradex Verdin NXP® i.MX 8M Plus SoM

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, 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.

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

NVIDIA Preferred Partner

Features

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

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 and 5

2-Channel FPD-Link III Deserializer
for Development Kits With NVIDIA® Jetson Nano
or NVIDIA Jetson Xavier™ NX (for Raspberry Pi)

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

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) 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 for the video signal converters are compatible with DirectShow.

Features

- Video-to-USB 2.0: Convert analog video sources into data streams
- 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

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 (PoE)
- Embedded: MIPI (FFC/FPC); IP67 FAKRA (up to 15 m)
- I/O cables are available for USB and GigE Cameras.

USB 3.1 and USB 3.0 Cables

USB 3.1

USB 3.0

USB 2.0 and GigE (RJ-45) Cables

USB 2.0

GigE

FFC/FPC and Coax (FAKRA) Cables

FFC/FPC

IP67 FAKRA cable

IC Imaging Control

Image Acquisition SDK

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

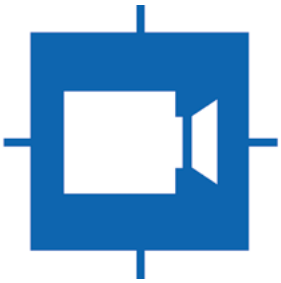
- Native support for multiple programming languages (.NET, Python, C++, C) with unified API
- Fully GenICam-compliant, ensuring comprehensive camera feature utilization and enhanced interoperability with leading third-party software such as MVTec HALCON, MATLAB and NeuroCheck
- Intuitive SDK for precise camera configuration and control with advanced features such as single image capture, sequential image acquisition, and video recording
- Variety of example programs available on GitHub
- Comprehensive support for Windows, Linux and ARM platforms

- **Real-Time Video Preview:** IC Imaging Control allows for real-time preview of video streams even at the maximum-possible frame rates of the video device.
- **Multi-Stream Preview for Surveillance:** IC Imaging Control SDK can also be used to simultaneously preview multiple video streams, making it suitable for surveillance applications.
- **Built-In Scrolling and Zooming:** Images can be easily adjusted via built-in scrolling and zooming as needed to meet specific inspection requirements or to fill the entire screen or window.
- **Capture and Save Single Image Frames:** 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, PNG or JPEG file.
- **Frame Queue Management:** A number of frames can be acquired to image buffers which are organized as a queue. A software callback can be registered to be executed whenever a new buffer is filled.
- **Device Selection Dialog:** IC Imaging Control provides a dialog box that allows the end user to select a video capture device. Video capture devices can be queried from program code for their settings in order to build customized dialog boxes. A complete dialog implementation is available as part of the example library.
- **GenICam Feature Manipulation:** IC Imaging Control provides a dialog that allows you to manipulate all GenICam features of a video capture device.
- **Serial Number Retrieval:** If supported by the video capture device, the device's serial number can be retrieved via IC Imaging Control and used as a dongle.

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

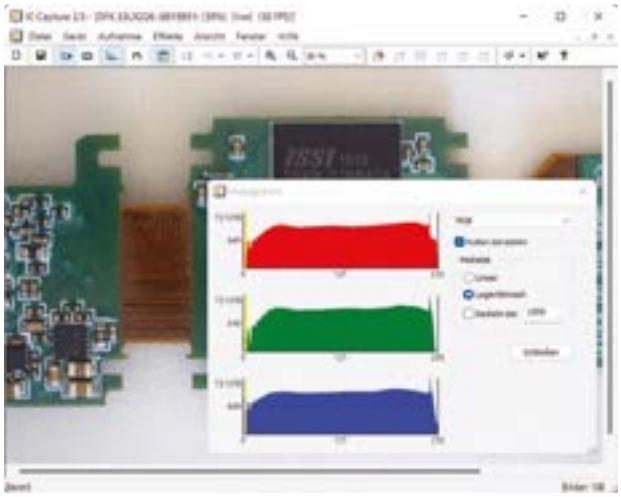
Capture and Display Single Images, Image Sequences and Streams From All The Imaging Source Industrial Cameras.

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



IC CAPTURE
easy image acquisition

- 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

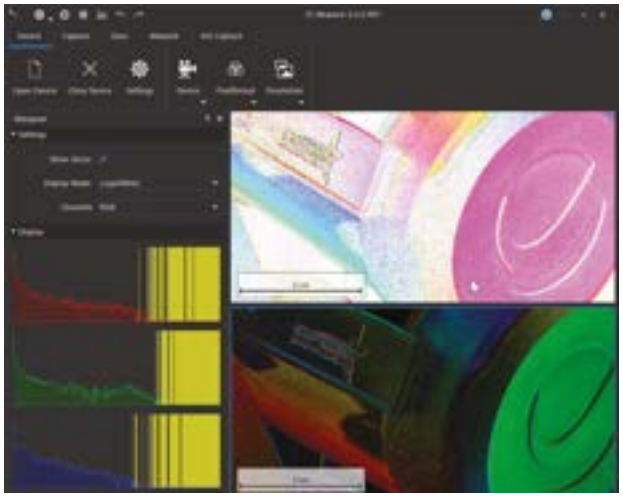
Specifically developed for microscopy applications, IC Measure is a powerful end-user application for measurement and image acquisition using any video device, manufactured by The Imaging Source.

IC Measure offers new features such as multi-camera support, multi-platform compatibility (Windows and Linux) and a redesigned user interface. In addition, new LUA Script API functions have been added to improve IC Measure's customizability and extensibility. These updates make IC Measure a powerful software solution for precise measurement and image processing tasks.

IC Measure supports multi-camera applications (Windows and Linux).

Features

- Multi-camera support
- Multi-platform support
- On-screen measurement of lengths, angles, areas and perimeters
- Mark and annotate image features with annotation tools
- Easy software calibration
- IC Measure: Free software available for download



IC MEASURE
Easy Image Measurement

- **User Interface:** IC Measure's user-friendly and visually appealing interface offers efficient tools for measurements and analysis, making IC Measure an excellent working environment for microscopy experts and general image processing tasks.
- **Live Preview** in IC Measure includes continuous scaling as well as image manipulation options like rotate and flip for precise measurement. The software provides a Histogram feature to aid users in assessing brightness distribution and making adjustments to camera parameters.
- **Device Management:** IC Measure offers robust device management for The Imaging Source's industrial cameras, frame grabbers, and video converters. Users can finely tune camera parameters, manage multiple cameras, and conveniently adjust exposure times.
- **Calibration:** Designed to deliver precise measurements in live or still microscope images, IC Measure simplifies microscope management and calibration. Via the user-friendly interface, the software can perform calibration with an object micrometer, graph paper, or virtually any object of known size.
- **On-Screen Measurement:** Users can capture both single images and image sequences with IC Measure. The software allows precise on-screen measurement and provides a variety of annotation tools which allow the user to add text or other annotation nondestructively via a separate layer.
- **Advanced Image Processing Filters:** Use integrated filters to correct barrel and pincushion distortions and eliminate vignetting effects caused by the lens.
- **Denoising and Sharpening:** IC Measure employs advanced algorithms to denoise and sharpen images, preserving sharpness and details.
- **HDR Image Generation:** With its integrated tone mapping, IC Measure optimizes images with high dynamic range, automatically or with custom configuration for details in low and high brightness ranges.

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

BARCODE
accurate recognition SDK

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

The Imaging Source

Services

35 years of Experience Makes The Imaging Source an Invaluable Partner in Realizing Your Machine Vision Application.

The Imaging Source supports your machine vision projects with precision-engineered components, expert consultation, and tailored solutions. Whether you need integration-ready vision systems, custom branding, pre-configured settings, or specialized advice, our team is here to ensure your success in even the most complex applications.

Integration-Ready Vision Components

The Imaging Source provides a wide range of integration-ready vision components, from MIPI CSI-2 sensors to fully featured industrial cameras and imaging software. We understand that successful integration requires precise control over numerous hardware and software parameters. To streamline this process for our customers, The Imaging Source offers comprehensive hardware assembly and software customization services. This includes the assembly of complex vision systems, such as embedded vision modules, IP-rated components (e.g. IP68), and specialized lens configurations. We also set and secure critical parameters, including focus, aperture, and zoom, ensuring they remain stable in demanding environments. Additionally, we install customer-specific software and calibrate intrinsic parameters, delivering a solution that is ready to integrate, saving you valuable time and resources.

Custom Branding and Firmware

The Imaging Source offers custom branding and firmware options to align our cameras with your company's identity and operational needs. We can label cameras with your company name and custom model numbers, making it easier to distinguish between multiple cameras in a system, especially when software cannot differentiate by serial numbers alone. Moreover, we allow customers to specify the firmware version installed on each camera, ensuring consistency across all units. This service is particularly beneficial in regulated industries like the medical sector, where maintaining a specific firmware version is crucial for compliance and reliability.

Pre-Configured GigE Camera Settings

To simplify deployment, The Imaging Source offers pre-configuration services for GigE cameras. We can program a fixed IP address, user-defined camera names, and other settings directly into the default user dataset of each camera. This pre-configuration eliminates the need for manual setup, which can be time-consuming, especially when dealing with multiple cameras across several machines. By agreeing on a separate article code, we ensure that every camera arrives with the correct configuration, allowing for quick and efficient integration into your system.

Machine Vision System Consultation

Effective machine vision starts with a well-designed system tailored to your specific application. The Imaging Source's experienced interdisciplinary team offers expert consultation to help you develop a machine vision system that meets your exact requirements, regardless of industry or application. Over 35 years, The Imaging Source has supported thousands of machine vision integrators and automation equipment manufacturers, from basic capture-and-archive setups to high-precision measurement systems. Our guidance ensures that your machine vision system is optimized for performance, reliability, and integration, providing you with the tools to succeed in even the most challenging environments.

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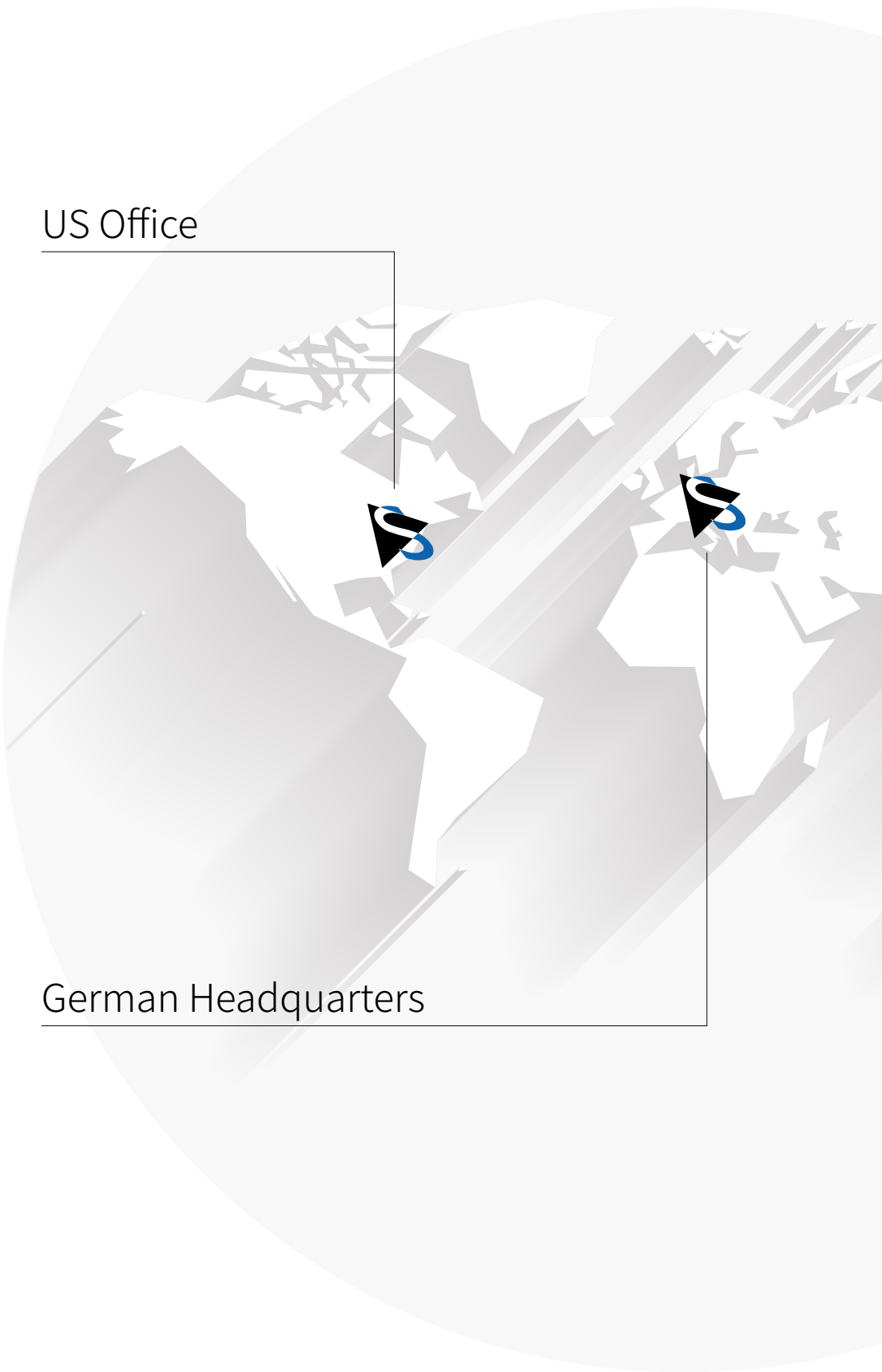

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