

## COGNEX INDUSTRIAL CAMERAS

- Trusted Cognex® brand
- Designed for Cognex Designer™ and VisionPro® software
- GigE Vision® and Camera Link® standard

The Cognex family of digital industrial cameras are designed for easy integration with our industry-leading Cognex Designer™ and VisionPro software. These small, lightweight cameras can address a wide variety of applications.

Cognex stands behind its reputation as being the leader in the machine vision market and now you can too.

Show your true colors—Cognex's signature black and yellow that is—and show your customers that you have the leading machine vision technology integrated into your system.

Integration with Cognex Designer™ and VisionPro software provides access to a comprehensive library of tools for meeting all of your machine vision needs.



### GigE Vision and Camera Link options

Need a value solution? Require high-performance to meet the most demanding machine vision needs? Cognex offers industrial cameras to address the widest variety of applications.

#### GigE Vision

GigE Vision is a global camera interface standard developed using the Gigabit Ethernet communication protocol. GigE Vision allows for fast image transfer using low cost standard cables over very long lengths. Cognex GigE Vision cameras offer robust performance at an affordable price in a compact form factor.

- Area Scan
- VGA to 29 MP resolution
- Global and rolling shutters
- Small footprint
- Precise sensor alignment
- I/O flexibility with minimum delay and jitter for applications requiring exact timing
- 3-year warranty



#### Camera Link

Cognex Camera Link industrial cameras are ideally suited for high-resolution and high-speed machine vision applications that require very fast processing of large amounts of image data, such as fine defect inspection, precision alignment and measurement, and continuous process inspection. Camera Link is the most broadly accepted high-bandwidth solution in factory automation. Cognex uses the next generation CMOS technology in our Camera Link offerings. The slim industrial housing is ideally suited for multi-camera systems.

- Line scan
- 4k resolution
- Next generation CMOS sensors
- F-mount
- Power over Camera Link (PoCL)
- Digital I/O camera control signals (max. 4)
- 3-year warranty



Cognex Designer makes it faster to build complete vision applications and allows developers to more easily take full advantage of the powerful VisionPro® tool library. Learn more at [www.cognex.com/products/machine-vision/cognex-designer-vision-software](http://www.cognex.com/products/machine-vision/cognex-designer-vision-software)

VisionPro® software makes it faster than ever to create and deploy solutions for the most challenging machine vision applications. Learn more at [www.cognex.com/visionpro](http://www.cognex.com/visionpro)

## Model Comparison: GigE Vision and Camera Link Cameras

Model Number	Body Type	Interface	Resolution	Frame Rate	Type	Sensor Type	Sensor Technology	Sensor	Sensor Size	Power Consumption (PoE/Aux)	Lens Mount	Color/Mono
CIC-300	A	GigE	0.3 MP	120 fps	Area Scan	CCD	Global Shutter	Sony ICX618	1/4"	2.3 W/2.0 W	C	M
CIC-1300	A	GigE	1.3 MP	60 fps	Area Scan	CMOS	Global Shutter	e2v EV76C560	1/1.8"	2.4 W/2.0 W	C	C,M
CIC-2000	A	GigE	2.0 MP	60 fps	Area Scan	CMOS	Global Shutter	EV6C570	1/1.8"	2.1 W/2.5 W	C	M
CIC-4000	A	GigE	4.0 MP	25 fps	Area Scan	CMOS	Global Shutter	CMOSIS CMV4000	1"	3.4 W/2.9 W	C	C,M
CIC-5MR/5000R	A	GigE	5.0 MP	14 fps	Area Scan	CMOS	Rolling Shutter	Aptina MT9P031	1/2.5"	2.5 W/2.2 W	C	C,M
CIC-5000	P	GigE	5.0 MP	17 fps	Area Scan	CCD	Global Shutter	Sony iCX625	2/3"	5.9 W	C	M
CIC-10MR	A	GigE	10.0 MP	10 fps	Area Scan	CMOS	Rolling Shutter	Aptina MT9J003	1/2.3"	3.3W / 3.5W	C	C,M
CIC-2900	G	GigE	29.0 MP	4 fps	Area Scan	CCD	Gobal Shutter	Trusense KAI-29050	35 mm	6.6W @ 12VDC	F	M
CIC-4KL-24	R	GigE	4.0kHz	26 kHz	Line Scan	CMOS	Linear	Awaiba DR-4K-7		4 W	F	M
CIC-4KL-80	R	Camera Link	4.0kHz	80 kHz	Line Scan	CMOS	Linear	Awaiba DR-4K-7		4 W	F	M

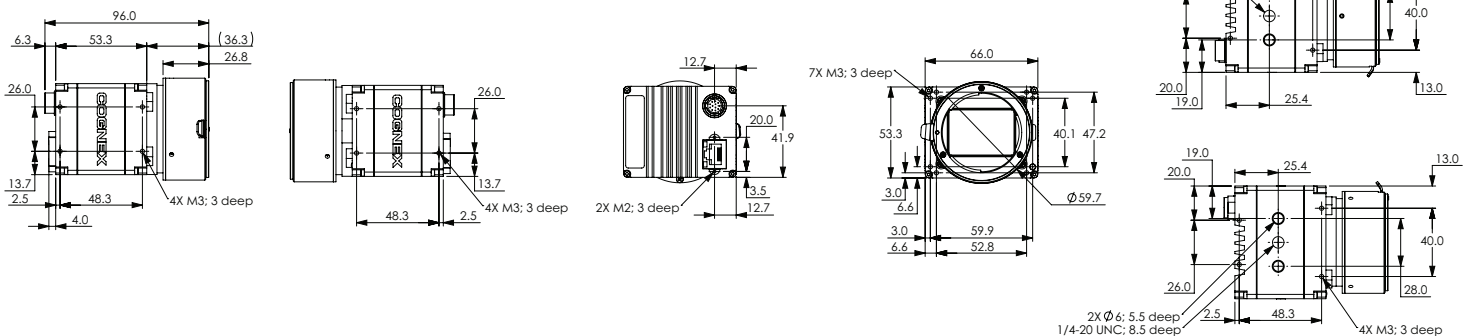
## CIC-2900

<b>Video Output Format</b>	Mono8, Mono12, Mono12Packed, Mono14
<b>Synchronization</b>	Trigger ready, input, exposing, readout, imaging, strobe, GPO
<b>Exposure Control</b>	Auto exposure (manual exposure control: 30 $\mu$ s to 33.5 s)
<b>Form Factor (L x W x H)</b>	Body Type G: 96 x 66 x 53.3 (including connectors, w/o tripod and lens)
<b>Housing Temperature</b>	-20°C ... +50°C
<b>Weight</b>	372 g
<b>Lens Mount</b>	F-Mount (lens sold separately)
<b>Digital I/O</b>	Opto-isolated I/Os: 1 input, 2 outputs
<b>Power Requirements</b>	PoE, or 7–25 VDC
<b>Compliance</b>	CE, FCC Class A, RoHS

The CIC-2900 incorporates an OnSemi KAI-29050 CCD sensor providing excellent image quality. It is a rugged camera designed to operate in extreme environments.

The advantages include:

- Outstanding image quality
- Gigabit Ethernet with PoE
- Versatile temperature range for extreme environments



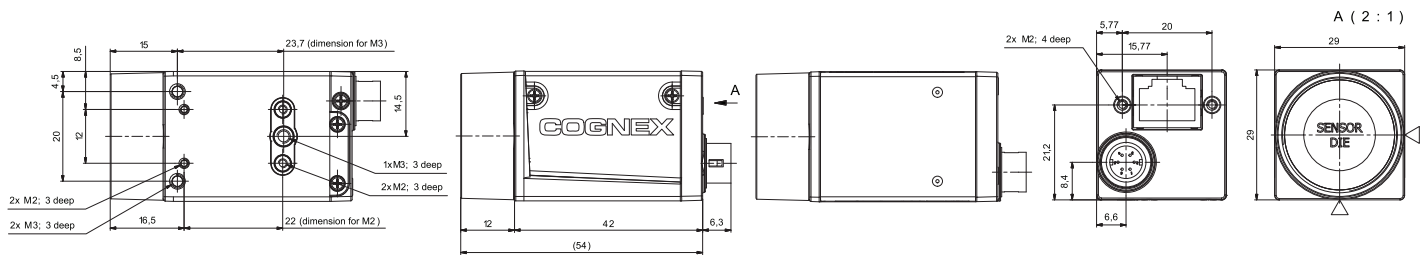
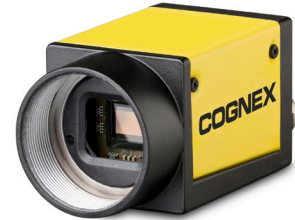
## ➤ CIC-300, CIC-1300, CIC-2000-60, CIC-4000, CIC-5MR/5000, CIC-10MR

<b>Video Output Format</b>	Mono 8, Mono 12, Mono 12 Packed, color for some
<b>Synchronization</b>	External trigger, via the Ethernet connection or free running
<b>Exposure Control</b>	Hardware trigger or programmable
<b>Form Factor (L x W x H)</b>	Body Type A: 42 mm x 29 mm x 29 mm
<b>Housing Temperature</b>	Up to 50°C
<b>Weight</b>	90 g
<b>Lens Mount</b>	C-mount (lens sold separately)
<b>Digital I/O</b>	1 opto-isolated input / 1 opto-isolated output
<b>Power Requirements</b>	+ 12 VDC ( $\pm 10\%$ ) the camera's 6-pin Hirose connector Power over Ethernet (802.3 af)
<b>Compliance</b>	CE, FCC, IP30, RoHS, PoE (IEEE 802.3 af), UL, GigE Vision Compliant

The most popular and standard proven data interfaces in the vision market means you benefit from GigE Vision market leadership, easy multi-camera setups and 100-meter cable length.

The advantages include:

- One cable solutions: Gigabit Ethernet with PoE
- Broad sensor portfolio: CMOS and CCD



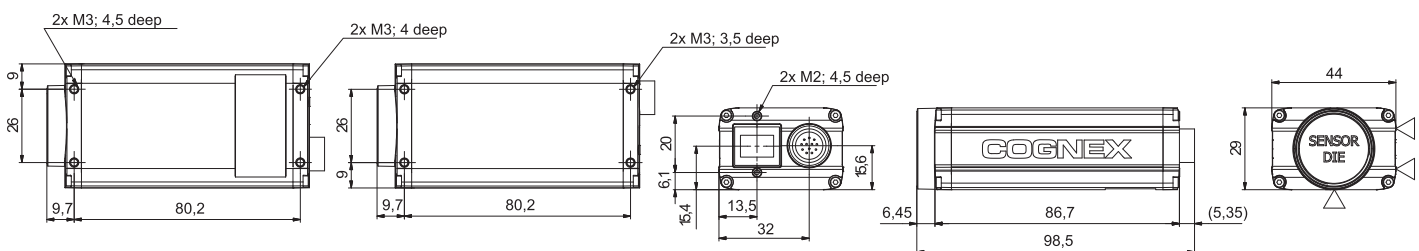
## ➤ CIC-5000

<b>Video Output Format</b>	Mono 8, Mono 16, Mono 12 Packed, YUV 4:2:2 Packed, YUV 4:2:2 (YUYV)
<b>Synchronization</b>	External trigger, software or free running
<b>Exposure Control</b>	Programmable via the camera API
<b>Form Factor (L x W x H)</b>	Body Type P: 87 mm x 44 mm x 29 mm
<b>Housing Temperature</b>	Up to 50°C
<b>Weight</b>	220 g
<b>Lens Mount</b>	C-mount (lens sold separately)
<b>Digital I/O</b>	2 opto-isolated input / 4 opto-isolated output
<b>Power Requirements</b>	12-24 VDC Hirose 12-pin connector (max. 10 meter cable length)
<b>Compliance</b>	CE, FCC, IP30, RoHS, GigE Vision Compliant

The high performance CIC-5000 camera provides exceptionally good image quality.

The advantages include:

- Outstanding image quality
- Small, rugged housing for easy integration



## ➤ CIC-4KL

<b>Specifications</b>	GigE Vision	Camera Link
<b>Video Output Format</b>	Mono 8, Mono 12, Mono 12 packed	Mono 8, Mono 10, Mono 12
<b>Synchronization</b>	External trigger, software or free running	
<b>Exposure Control</b>	Trigger width or timed	
<b>Form Factor (L x W x H)</b>	Body Type R: 36 mm x 56 mm x 62 mm	Body Type R: 34 mm x 56 mm x 62 mm
<b>Housing Temperature</b>	Up to 50°C	
<b>Weight</b>	240 g	210 g
<b>Lens Mount</b>	F-mount (lens sold separately)	
<b>Digital I/O</b>	Camera Control signals (max. 4)	
<b>Power Requirements</b>	12-24 VDC (±5%)	
<b>Compliance</b>	CE, FCC, IP30, RoHS, UL (in process)	

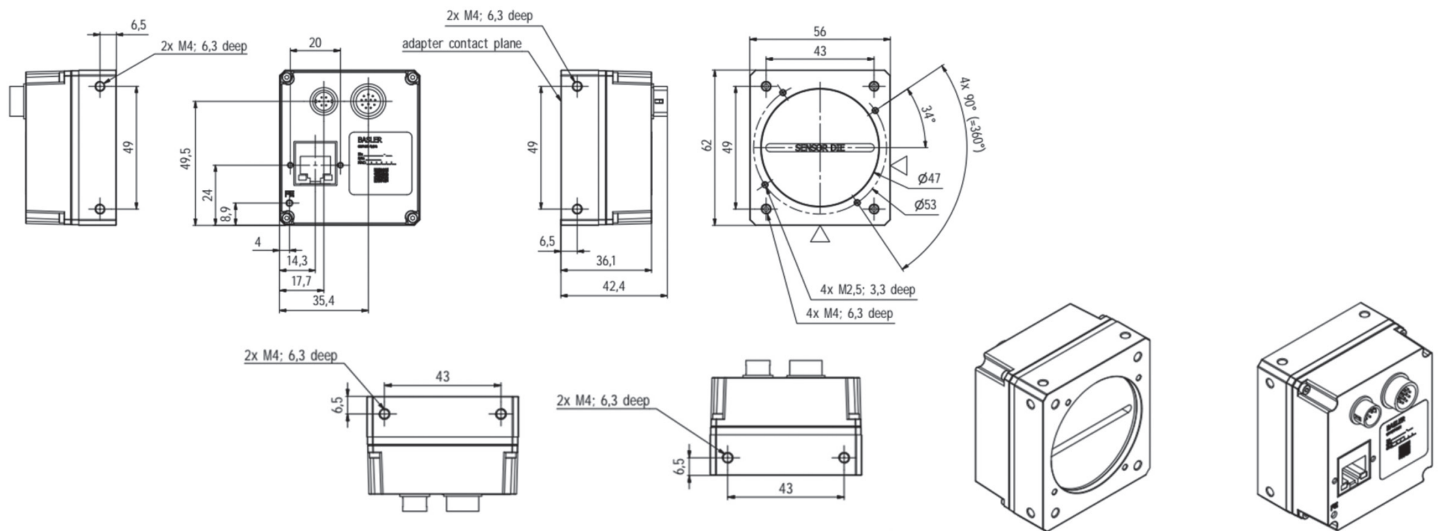
Available in two models, GigE Vision and Camera Link, the CIC-4KL provides high performance thanks to the newest CMOS technology. Its compact, slim industrial housing is ideally suited for multi-camera systems with many line scan cameras installed next to each other. Based on their standard width of 56 mm, they can easily replace older line scan camera models.

The advantages include:

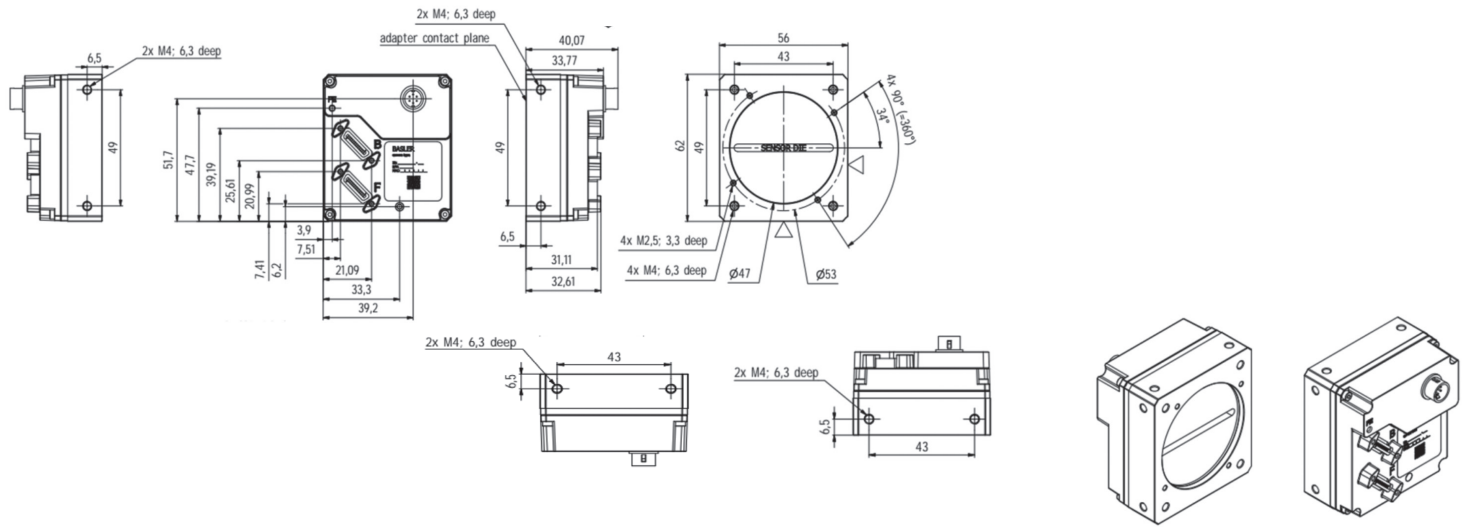
- 4k resolution
- Max. line rates of 26 kHz (GigE Vision) and 80 kHz (Camera Link)
- PoCL functionality (Power over Camera Link)
- Outstanding price/performance ratio
- Fully quality tested and calibrated for consistently high performance and reliability



### GigE Vision CIC-4KL-24



# Camera Link CIC-4KL-80



## COGNEX

Companies around the world rely on Cognex vision and ID to optimize quality, drive down costs and control traceability.

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