

- > 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 10 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	Color/Mono
CIC-300	A	GigE Vision	0.3 MP	120 fps	Area Scan	CCD	Global Shutter	Sony ICX618	M
CIC-1300	A	GigE Vision	1.3 MP	60 fps	Area Scan	CMOS	Global Shutter	e2v EV76C560	C,M
CIC-2000-20	A	GigE Vision	2.0 MP	20 fps	Area Scan	CCD	Global Shutter	Sony ICX274	M
CIC-2000-60	A	GigE Vision	2.0 MP	60 fps	Area Scan	CMOS	Global Shutter	EV76C570	M
CIC-4000	A	GigE Vision	4.0 MP	25 fps	Area Scan	CMOS	Global Shutter	CMOSIS CMV4000	C,M
CIC-5MR/5000R	A	GigE Vision	5.0 MP	14 fps	Area Scan	CMOS	Rolling Shutter	Aptina MT9P031	C,M
CIC-5000	P	GigE Vision	5.0 MP	17 fps	Area Scan	CCD	Global Shutter	Sony ICX625	M
CIC-10MR	A	GigE Vision	10.0 MP	10 fps	Area Scan	CMOS	Rolling Shutter	Aptina MT9J003	C
CIC-4KL-24	R	GigE Vision	4.0k	26 kHz	Line Scan	CMOS	Linear	Awaiba DR-4K-7	M
CIC-4KL-80	R	Camera Link	4.0k	80 kHz	Line Scan	CMOS	Linear	Awaiba DR-4K-7	M

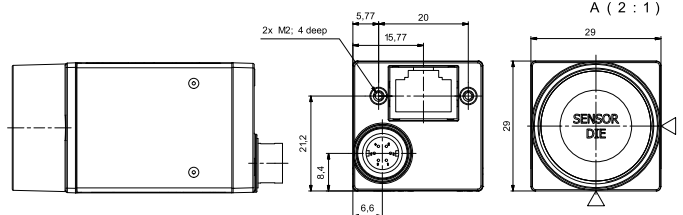
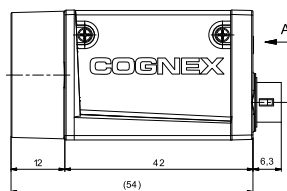
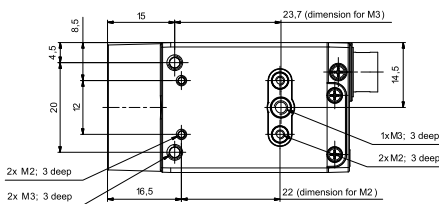
## CIC-300, CIC-1300, CIC-2000-60, CIC-4000, CIC-5MR/5000, CIC-10MR

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



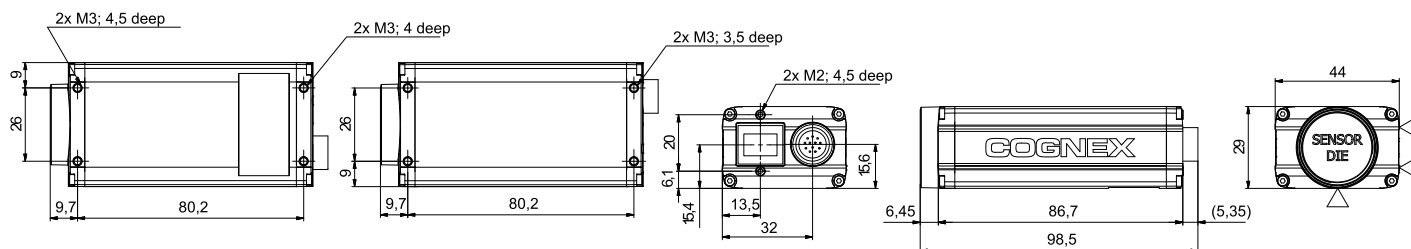
## > CIC-5000

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

The high performance CIC-5000 camera provides exceptionally good image quality. The CIC-5000 camera can often substitute for more costly Camera Link cameras and frame grabbers.

The advantages include:

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



## > CIC-4KL

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

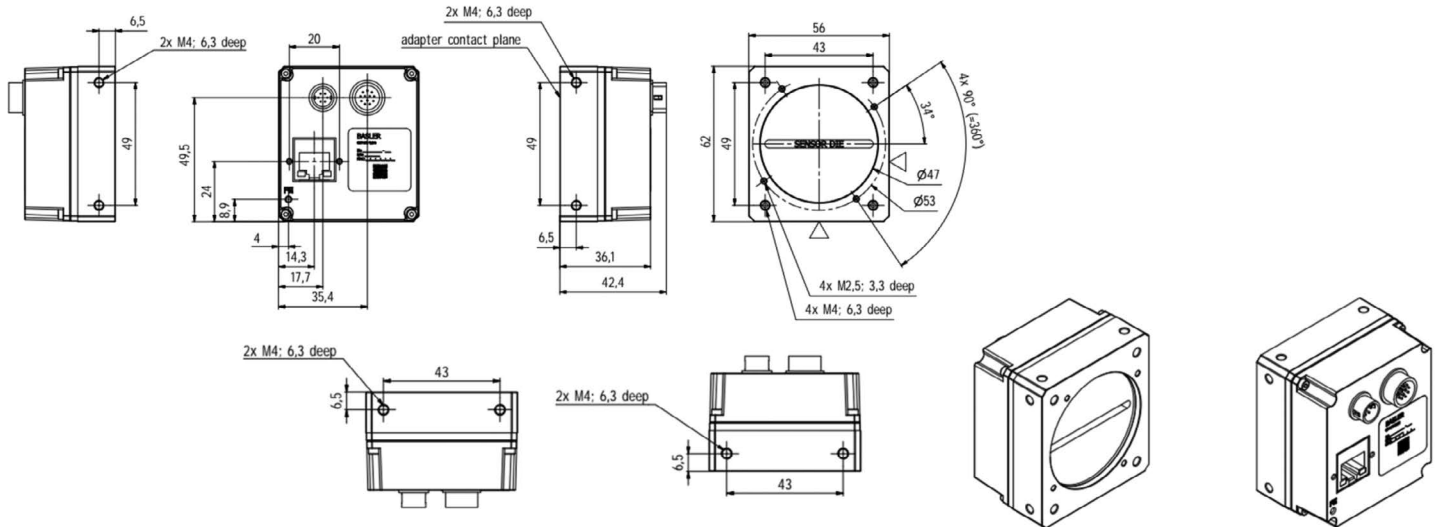
Available in two models, GigE Vision and Camera Link, the CIC-4KL provides high performance thanks to the newest CMOS technology. It's compact, slim industrial housing is ideally suited for multi-camera systems with many line scan cameras installed next to each other. Based on their standard width of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

The advantages include:

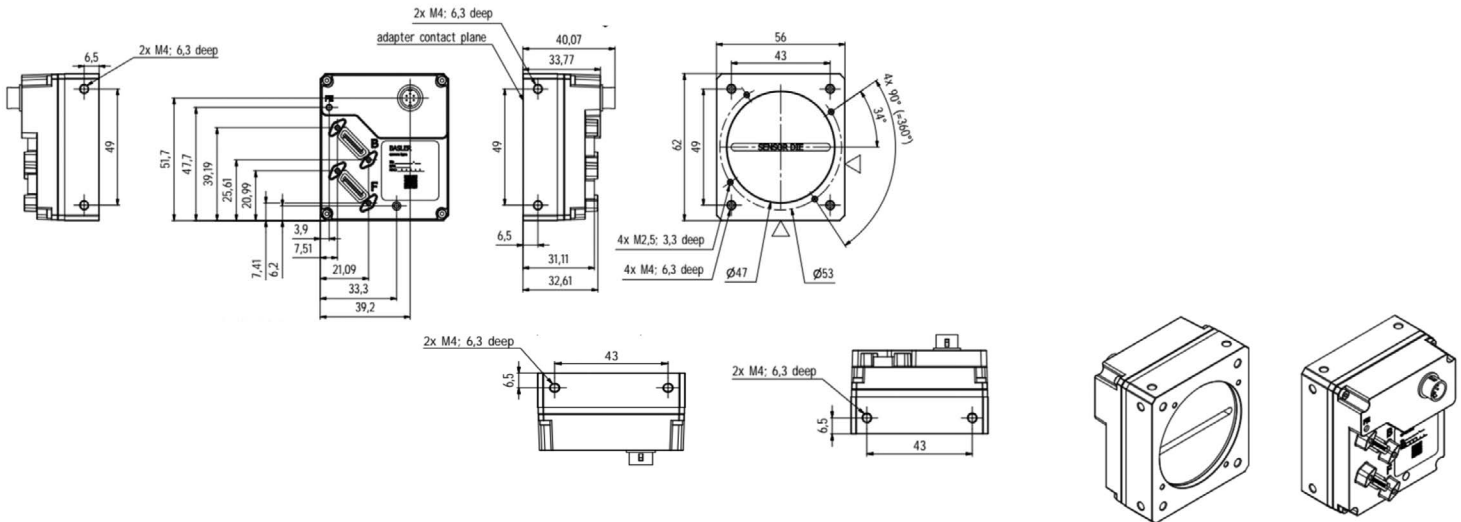
- 4k resolution
- Max. line rates of 26 kHz (GigE Vision) and 80 kHz (Camera Link)
- PoCL functionality (Power over Camera Link)
- Outstanding price/performance ratio
- Fully quality tested and calibrated for consistently high performance and reliability



## 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.

Corporate Headquarters One Vision Drive Natick, MA 01760 USA Tel: +1 508 650 3000 Fax: +1 508 650 3344

### Americas

Americas +1 508 650 3000

### Europe

Austria +49 721 6639 393  
Belgium +31 403 05 00 43  
France +33 1 4777 1551  
Germany +49 721 6639 393  
Hungary +36 1 501 0650  
Ireland +0808 168 3001  
Italy +39 02 6747 1200

Netherlands +31 403 05 00 43  
Poland +48 71 776 07 52  
Spain +34 93 445 67 78  
Sweden +46 21 14 55 88  
Switzerland +49 721 6639 393  
Turkey +90 212 306 3120  
United Kingdom +0808 168 3001

### Asia

China +86 21 5050 9922  
India +9120 4014 7840  
Japan +81 3 5977 5400  
Korea +82 2 539 9047  
Singapore +65 632 55 700  
Taiwan +886 3 578 0060

© Copyright 2014, Cognex Corporation. All information in this document is subject to change without notice. All Rights Reserved. Cognex and VisionPro are registered trademarks and Cognex Designer and the Cognex logo are trademarks of Cognex Corporation. All other trademarks are property of their respective owners. Lit. No. CC24DS-14011

[www.cognex.com](http://www.cognex.com)