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

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
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
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

**CIC-4KL**

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

**GigE Vision CIC-4KL-24**

**Camera Link CIC-4KL-80**
### Model Comparison: Gige Vision and Camera Link Cameras

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Body Type</th>
<th>Interface</th>
<th>Resolution</th>
<th>Frame Rate</th>
<th>Type</th>
<th>Sensor Type</th>
<th>Sensor Tech.</th>
<th>Sensor</th>
<th>Sensor Size</th>
<th>Power Consumption</th>
<th>Lens Mount</th>
<th>Color / Mono</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM-CIC-300</td>
<td>A</td>
<td>GigE</td>
<td>0.3 MP</td>
<td>120 fps</td>
<td>Area Scan</td>
<td>CCD</td>
<td>Global Shutter</td>
<td>Sony ICX618</td>
<td>1/4&quot;</td>
<td>2.3 W / 2.0 W</td>
<td>C</td>
<td>M</td>
</tr>
<tr>
<td>CAM-CIC-1300</td>
<td>A</td>
<td>GigE</td>
<td>1.3 MP</td>
<td>60 fps</td>
<td>Area Scan</td>
<td>CMOS</td>
<td>Global Shutter</td>
<td>e2v EV76C560</td>
<td>1/1.8&quot;</td>
<td>2.4 W / 2.0 W</td>
<td>C</td>
<td>C, M</td>
</tr>
<tr>
<td>CAM-CIC-2000-60</td>
<td>A</td>
<td>GigE</td>
<td>2 MP</td>
<td>60 fps</td>
<td>Area Scan</td>
<td>CMOS</td>
<td>Global Shutter</td>
<td>e2v EV76C570</td>
<td>1/1.8&quot;</td>
<td>2.1 W / 2.5 W</td>
<td>C</td>
<td>M</td>
</tr>
<tr>
<td>CAM-CIC-4000</td>
<td>A</td>
<td>GigE</td>
<td>4 MP</td>
<td>25 fps</td>
<td>Area Scan</td>
<td>CMOS</td>
<td>Global Shutter</td>
<td>CMOSIS CMV4000</td>
<td>1&quot;</td>
<td>3.4 W / 2.9 W</td>
<td>C</td>
<td>C, M</td>
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<tr>
<td>CAM-CIC-5MR/5000R</td>
<td>A</td>
<td>GigE</td>
<td>5 MP</td>
<td>14 fps</td>
<td>Area Scan</td>
<td>CMOS</td>
<td>Rolling Shutter</td>
<td>Aptina MT9P031</td>
<td>1/2.5&quot;</td>
<td>2.5 W / 2.2 W</td>
<td>C</td>
<td>C, M</td>
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<tr>
<td>CAM-CIC-5000-20</td>
<td>A</td>
<td>GigE</td>
<td>5 MP</td>
<td>23 fps</td>
<td>Area Scan</td>
<td>CMOS</td>
<td>Global Shutter</td>
<td>Sony IMX264</td>
<td>2/3&quot;</td>
<td>3.3 W / 2.7 W</td>
<td>C</td>
<td>M</td>
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<tr>
<td>CAM-CIC-10MR</td>
<td>A</td>
<td>GigE</td>
<td>10 MP</td>
<td>10 fps</td>
<td>Area Scan</td>
<td>CMOS</td>
<td>Rolling Shutter</td>
<td>Aptina MT9J003</td>
<td>1/2.3&quot;</td>
<td>3.3 W / 3.5 W</td>
<td>C</td>
<td>C, M</td>
</tr>
<tr>
<td>CAM-CIC-2900-4</td>
<td>G</td>
<td>GigE</td>
<td>29 MP</td>
<td>4 fps</td>
<td>Area Scan</td>
<td>CCD</td>
<td>Global Shutter</td>
<td>Truesense KAI-29050</td>
<td>35 mm</td>
<td>6.6 W @ 12 VDC</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>CAM-CIC-4KL-24</td>
<td>R</td>
<td>GigE</td>
<td>4K</td>
<td>24 kHz</td>
<td>Line Scan</td>
<td>CMOS</td>
<td>Linear</td>
<td>Awaiba DR-4K-7</td>
<td>4 W</td>
<td>F</td>
<td>M</td>
<td></td>
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<tr>
<td>CAM-CIC-4KL-80</td>
<td>R</td>
<td>Camera Link</td>
<td>4K</td>
<td>80 kHz</td>
<td>Line Scan</td>
<td>CMOS</td>
<td>Linear</td>
<td>Awaiba DR-4K-7</td>
<td>4 W</td>
<td>F</td>
<td>M</td>
<td></td>
</tr>
</tbody>
</table>

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