



**GimaGO**

*Visionary and success.*

GIGABIT ETHERNET VISION CAMERAS

**net**   
NEW ELECTRONIC TECHNOLOGY

# GimaGO – VISIONARY AND SUCCESS

NET's GigE vision camera line.

## GimaGO GIGABIT ETHERNET SERIES

The GimaGO product family is compliant with the GigE and GenICam standards. The step into digital image capturing and processing becomes now very easy and effective. The camera supports monochrome and color imaging, allowing a large selection of different resolutions and several frame rates for individual applications.

GimaGO product family exists of different models for every industrial vision applications. The GimaGO series combines several standard modes according to the GigE vision standard, like trigger & strobe, shutter, gain, white balance, brightness, gamma and additional smart features like auto iris lens control and 32 MB on board memory to a high performance GigE camera.

GimaGO series is increasing the efficiency of your application of image capturing and processing in several industries due the very easy implementation and handling by NET's Software Development Kit (SDK) and FGControl viewer software.



**GIG**™  
VISION

# TECHNICAL DATA – CCD CAMERA LINE

## PRODUCT OVERVIEW

The GimaGO series is equipped with Sony CCD image sensors in monochrome and color. These outstanding sensors were selected to provide the best image quality together with the GimaGO electronics.

The integrated sensors range from VGA to QSXGA and output precise image quality in progressive scan mode. The standard housing of the GimaGO camera can adapt C- or CS-mount lenses without any changes required.

The 4pin connector on the back of the camera gives the flexibility to use lenses with the auto iris function during inconsistent light conditions.

	G0124B	G0134B	G0323B	G0423B	G0433B	G0443B	G0531B	G0740B	
	G0124C	G0134C	G0323C	G0423C	G0433C	G0443C	G0531C	G0740C	
Resolution (H x V) [px]	659 x 494 / VGA	659 x 494 / VGA	1034 x 779 / XGA	1296 x 966 / SXGA	1329 x 1040 / SXGA	1329 x 1040 / SXGA	1628 x 1236 / UXGA	2448 x 2048 / QSXGA	
Sensor	CCD	CCD	CCD	CCD	CCD	CCD	CCD	CCD	
Image sensor	ICX424AL/AQ	ICX414AL/AQ	ICX204AL/AK	ICX445ALA/AKA	ICX267AL/AK	ICX285AL/AQ	ICX274AL/AQ	ICX625ALA/AQA	
Sensor size	1/3"	1/2"	1/3"	1/3"	1/2"	2/3"	1/1.8"	2/3"	
Pixel size [µm]	7.40 x 7.40	9.90 x 9.90	4.65 x 4.65	3.75 x 3.75	4.65 x 4.65	6.45 x 6.45	4.40 x 4.40	3.45 x 3.45	
Frame rate [fps]	86	86	36	30	30	30	16	15	
Shutter speed	1 µs - 3600 s							5 µs - 3600 s	
Data path	<b>for b/w model:</b> 8 bit or 12 bit <b>for color model:</b> 8 bit or 12 bit Raw RGB + YUV422/YUV411								
Binning	for b/w model: 2 x 2 and G0531C (color)								
Partial scan	ROI (Unit: 4 x 4)								
Trigger	external / software								
Strobe	normal / trigger								
Gain [dB]	0 - 18								
Lens	C- / CS-mount								
Scanning system	progressive scan								
Control function	<b>for b/w:</b> brightness, sharpness, gamma, auto-exposure, auto-gain, auto-shutter <b>for color:</b> brightness, sharpness, gamma, auto-exposure, shutter, U/B, V/R, Hue/G (digital gain), auto white balance, LUT								
Feature save/load	9 channels								
SIO (RS-232)	path through or NET command								
S/N ratio [dB]	> 56								
Interface	Gigabit ethernet interface according to GigE vision standard / 1 Gbps								
Operating temperature	-5 to +45° C								
Dimension (W x H x D) [mm]	40 x 40 x 48						55 x 55 x 44.5		55 x 55 x 44.5
Regulations	FCC, CE, RoHS								
Power consumption [W]	< 3							5	
Advanced features	auto iris lens control								

# APPLICATION & SOFTWARE

Ask us for matching lenses & illumination!

## APPLICATION OVERVIEW

NET's GimaGO cameras are designed for a variety of vision applications and are suitable for several industries such as quality control i.e. bonder- and wafer inspection, alignment control, surface- and printing inspection, edge and contour analysis, bar code and data matrix, license plate recognition (OCR/APNR), access control and many more.

## HIGHLIGHTS

- Resolution up to 5 mega pixel
- Compliant to GenICam and GigE vision standards
- Auto iris function for adaption to changing lighting conditions
- Robust aluminum housing – vibration (15 g) and shock (50 g) tested
- Broadband data transfer of up to 100 m cable lengths by Gigabit ethernet for highest flexibility

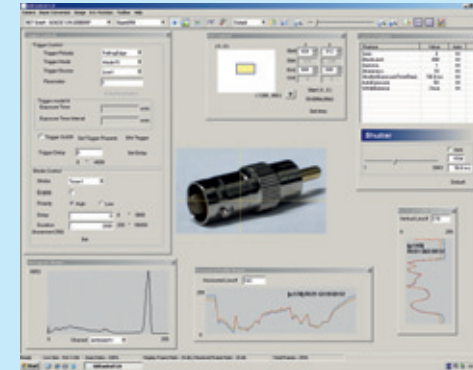
## VIEWER SOFTWARE

The FGControl viewer software provides an easy and quick access to all GimaGO cameras by PC for an individual testing and evaluation of the camera. This driver is compatible with the GigE

vision standard and its technology is based upon the XML description (GenICam standard) to access the GimaGO - feature "XML Tree". The XML Tree-design and the selection of different levels of user access enables the operator flexibility in access to define settings according to the GigE standard, and also to a various choice of customized settings which can be individually adjusted, saved and viewed live as well.

The software also supports to store single (still) images in JPG, TIF, BMP formats and video streams in AVI formats on connected PC's. Any changes of settings to an existing camera application is an easy process, even to change the camera themselves is due to the GigE vision standard a simple plug and play action. The driver supports common hardware and GigE network cards on the computer.

The FGControl viewer software is part of the Software Development Kit (SDK) and is included in the software package.



## SOFTWARE DEVELOPMENT KIT (SDK)

NET's flexible SDK makes the integration into existing and customized image capturing and processing systems simple. The software allows an easy integration into many commercial systems via operating system features. Programming samples on CD for Microsoft Visual C++ 6.0, Visual Basic 6.0 and Visual Studio are available. Additional samples for other compilers on request.

## 3<sup>RD</sup> PARTY SOFTWARE-APPLICATION

The integration of GimaGO cameras is supported through a wide variety of common drivers and allows the easy function of plug-and-play. The GimaGO family is compatible to software libraries like Vision Pro Software, MIL Matrox Imaging Library, NI Machine Vision Software and Halcon.

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