

GimaGO

Gigabit Ethernet Vision Cameras



GiGE™
VISION



Solutions that suit your requirements

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NET
NEW ELECTRONIC TECHNOLOGY

GimaGO – Foresi

Introduction

NET's GimaGO Product Family

The GimaGO series is compliant with the GigE Vision standard and supports the GenICam Standard.

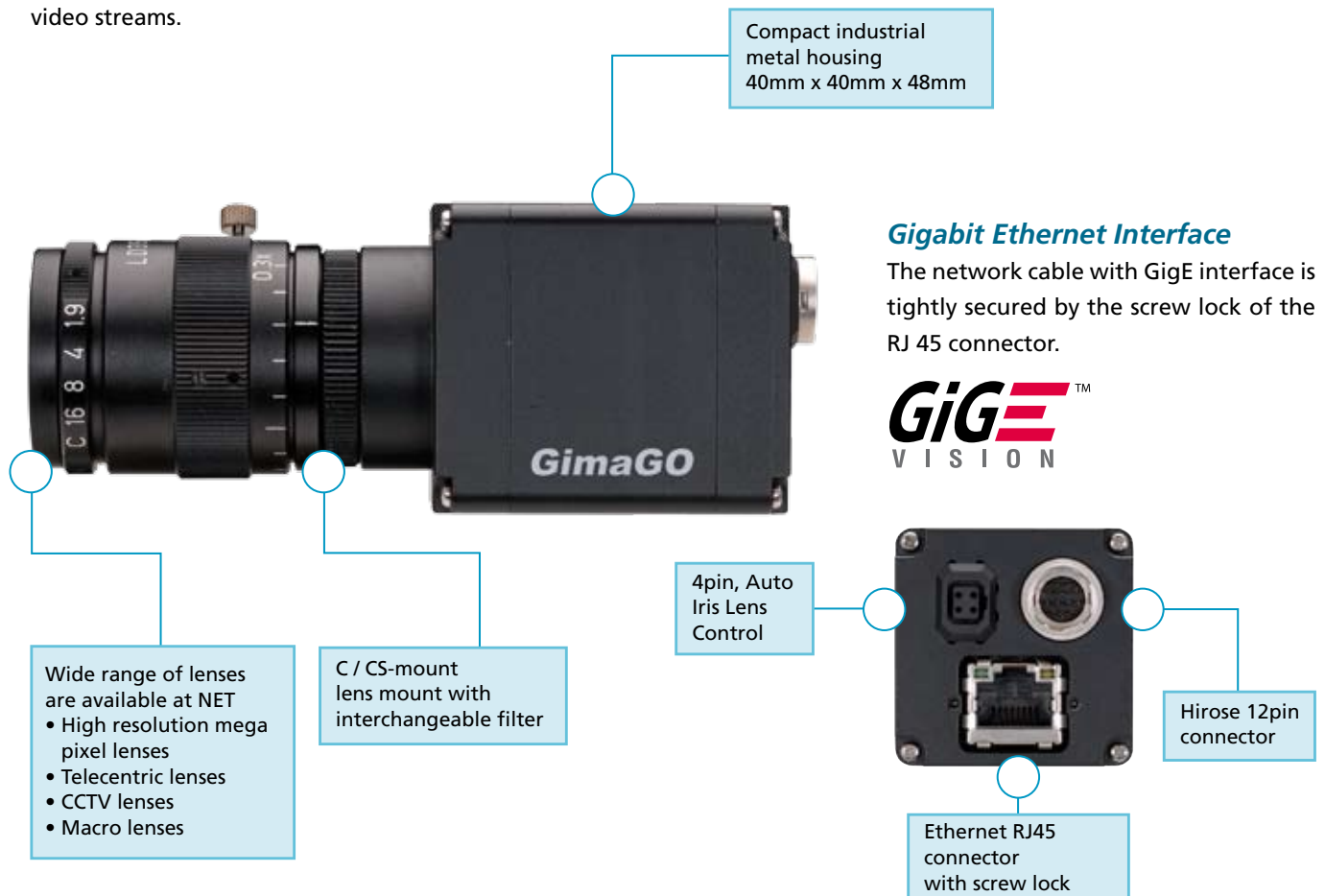
The step into the world of digital image capturing and processing becomes now very easy and effective. The camera supports monochrome and color imaging, allowing a large selection of different resolutions and several frame rates for each and individual applications. GimaGO family offers 14 different models for a variety of vision applications.

GimaGO is the fastest and most cost effective way to get a camera implemented and started for an application to provide single images or complete video streams.

More Functions Higher Performance

The GimaGO series combines several standard modes according to the GigE Standard, like Trigger & Strobe, Shutter, Gain, White Balance, Brightness, Gamma and additional smart features like Auto Iris Lens Control and 32MB on board memory to a high performance GigE camera, plus an unbeatable price-performance relation.

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 GOControl viewer software.



Flight and Success

Technical Data - CCD Camera Line

Product Overview

The GimaGO series is equipped with seven high performance Sony CCD image sensors in mono-chrome 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 UXGA 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 4-pin 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
	G0124C	G0134C	G0323C	G0423C	G0433C	G0443C	G0531C
Image Sensor	1/3" IT CCD ICX424AL/AQ	1/2" IT CCD ICX414AL/AQ	1/3" IT CCD ICX204AL/AK	1/3" IT CCD ICX445ALA/AKA	1/2" IT CCD ICX267AL/AK	2/3" IT CCD ICX285AL/AQ	1/1.8" IT CCD ICX274AL/AQ
Effective pixel	330,000 Pixel, VGA 659(H) x 494(V)	330,000 Pixel, VGA 659(H) x 494(V)	800,000 Pixel, XGA 1034 (H) x 779(V)	1.250,000 Pixel, SXGA 1296(H) x 966(V)	1.450,000 Pixel, SXGA 1329(H) x 1040(V)	1.450,000 Pixel, SXGA 1329(H) x 1040(V)	2.000,000 Pixel, UXGA 1628(H) x 1236(V)
Pixel Size	7.40 (H) x 7.40 (V) μm	9.9 (H) x 9.9 (V) μm	4.65 (H) x 4.65 (V) μm	3.75 (H) x 3.75 (V) μm	4.65 (H) x 4.65 (V) μm	6.45 (H) x 6.45 (V) μm	4.40 (H) x 4.40 (V) μm
Frame Rate	86 fps	86 fps	34 fps	30 fps	30 fps	30 fps	16 fps
Data Path	For B/W model: 8bit or 12bit B/W For Color model: 8bit or 12bit Raw RGB + YUV422/YUV411						
Lens Mount	C- / CS- mount						
Scanning System	Progressive Scan						
Binning	For B/W model: 2 x 2 and G0531C (color)						
Partial Scan	ROI (Unit: 4x4)						
Trigger	Edge	Rising Edge or Falling Edge					
	Mode	0, 1, 2, 4, 5, 12, 13, 15					
	Source	External Trigger or Software Trigger					
Strobe	Support Normal Mode or Trigger Mode						
Feature Save/Load	9 Channels (0:factory, 1~4: feature, 5~8:mode / feature)						
SIO (RS-232)	Path through or NET Command						
Control Function	For B/W: Brightness, Sharpness, Gamma, Auto-Exposure, Auto-Gain, Auto-Shutter For Color: Brightness, Sharpness, Gamma, Auto-Exposure, Shutter, U/B, V/R, Hue/G (digital gain), Auto White Balance, LUT						
Shutter Speed	1 μsec ~ 3600 sec						
S/N Ratio	56 dB or better						
Interface/Transfer Rate	Gigabit Ethernet Interface acc. to GigE Vision Standard / 1 Gbps						
Gain	0 ~ 18dB, (manual or Auto)						
Power Consumption	+ 8 V DC to + 30 V DC						
Operating Temperature	- 5°C to + 45°C						
Regulations	FCC, CE, RoHS						
External Dimension	40 x 40 x 48 mm, (H) x (W) x (D)						
Advanced Features	Auto IRIS Lens Control						

Solutions that suit your requirements

GimaGO – Foresight and Success

Software

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, positioning- alignment control, completeness-, surface- and printing inspection, identification, edge and contour analysis, bar code and data matrix, traffic- security surveillance, license plate/container recognition OCR/APNR, access control, traffic management, monitoring and many more.

Highlights

- The extremely small and robust aluminum housing (40 x 40 x 48mm) can withstand an exceptionally high level of continuous load to meet the highest requirements
- Broadband data transfer of up to 100m cable lengths by Gigabit Ethernet provides highest flexibility
- Auto-Iris function for changing light ambience, optimal adjustment of any changes in the surroundings by regulating the lens aperture automatically
- Compliant to GenICam and GigE Vision standards

Software Development Kit (SDK)

NET's flexible SDK software package 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 2005 are available. Additional samples for other compilers on request.

Third 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 MVTec, National Instruments, Matrox and Cognex.

Viewer Software

The GOControl 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 defined settings according to the GigE standard, and also to a various choice of customized settings which can be individual 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 GOControl viewer software is part of the Software Development Kit (SDK) and is included in the software package.

