THE IMAGINGSOURCE
TECHNOLOGY BASED ON STANDARDS

DFK Z12GX236 Color Zoom Camera
The Imaging Source "12x 5MP" Series GigE Zoom Camera

Only 50 x 50 x 103 mm

The Imaging Source DFK Z12GX236 color camera has a GigE interface and is the perfect solution for many industrial automation, quality assurance, security, surveillance and medical applications. The color camera ships with the very sensitive $1/2.8$ " Sony Exmor IMX236LQ sensor. With up to 36 images per second, the DFK Z12GX236 is a low cost, yet highly versatile imaging solution. The camera integrates an autofocus lens (auto/man).

The Imaging Source authors and supports drivers, SDKs, extensions and end-user software for Microsoft Windows, which can be freely downloaded from our web site. Extensions for Microsoft Windows enable the DFK Z12GX236 to be integrated in to common machine vision software libraries, such as LabView and OpenCV. Furthermore, we author and support open source Linux drivers and software (Apache License 2.0) to integrate the camera into popular distributions. Download the Linux source code at GitHub.

Features

- GigE interface.
- Power over Ethernet.
- Motor zoom f=4.8 to 57.6 mm.
- $1/2.8$ " Sony Exmor IMX236LQ.
- Rolling shutter.
- 1,920 x 1,200 (2.3 MP).
- Up to 36 images per second.
- Trigger input and I/Os.
- Only 50 x 50 x 103 mm.

Accessories

- Standard GigE cable in various lengths.
- Trigger cable.
- External power supply with cable.

Device Drivers for Microsoft Windows
Device Driver for The Imaging Source GigE Cameras.

Software Development Kits (SDKs) for Microsoft Windows
IC Imaging Control .NET Component for C#, VB.NET, C++ Class Library for C++ projects, IC Imaging Control C Library, IC Imaging Control ActiveX, IC Imaging Control ActiveX Runtime Setup.

Extensions for Microsoft Windows
TWAIN Source for IC Imaging Control, Cognex VisionPro AIK Plugin for IC Imaging Control, ActivVisionTools Driver for IC Imaging Control, HALCON Extension for IC Imaging Control, LabVIEW Extension for IC Imaging Control, IC Matlab Plugin for Matlab 10.0 R2010, IC Matlab Plugin for Matlab R2013b and R2014, IC NeuroCheck Driver for NeuroCheck 6.0.

End User Software for Microsoft Windows
IC Capture, Image Acquisition, IC Measure, manual on-screen image measurement and image acquisition, IC Fullscreen Presenter, IC Line Profiler, Footswitch software for IC Capture, Scan2Docx, Scan2Docx OCR.

Software Tools for Microsoft Windows
Processor Idle State Manager, Hot Pixel Correction.

DFK Z12GX236 Specification

GENERAL BEHAVIOR	
Video formats @ frame rate	1,920 x 1,200 (2.3 MP), Y800 @ 36, 20, 15, 7.5, 3.75 FPS
	1,920 x 1,200 (2.3 MP), Y16 @ 18, 15, 7.5, 3.75 FPS
	1,920 x 1,200 (2.3 MP), RGB32 @ 36, 20, 15, 7.5, 3.75 FPS
Sensitivity	0.05 lx
Dynamic range	8 bit

INTERFACE (OPTICAL)	
IR cut filter	yes
Sensor specification	Sony IMX236LQ
Shutter	Rolling
Format	$^1/_{2.8}$ "
Resolution	H: 1,920 pixel, V: 1,200 pixel
Pixel size	H: 2.8 µm, V: 2.8 µm
Focal length	4.8 mm (wide) to 57.6 mm (tele)
F-Stop	2.2 (wide) to 2.3 (tele)
MOD	3 cm (wide) to 70 cm (tele)
Focus	auto/man
Iris	auto/man

INTERFACE (ELECTRICAL)	
Interface	GigE
Supply voltage	11 VDC to 13 VDC or PoE: 48 VDC to 56 VDC
Current consumption	approx 600 mA at 12 VDC

INTERFACE (MECHANICAL)	
Dimensions	H: 50 mm, W: 50 mm, L: 103 mm
Mass	330 g

ADJUSTMENTS (MANUAL)	
Shutter	$^1/_{100,000}$ s to 30 s
Gain	0 dB to 36 dB
White balance	-2 dB to 6 dB

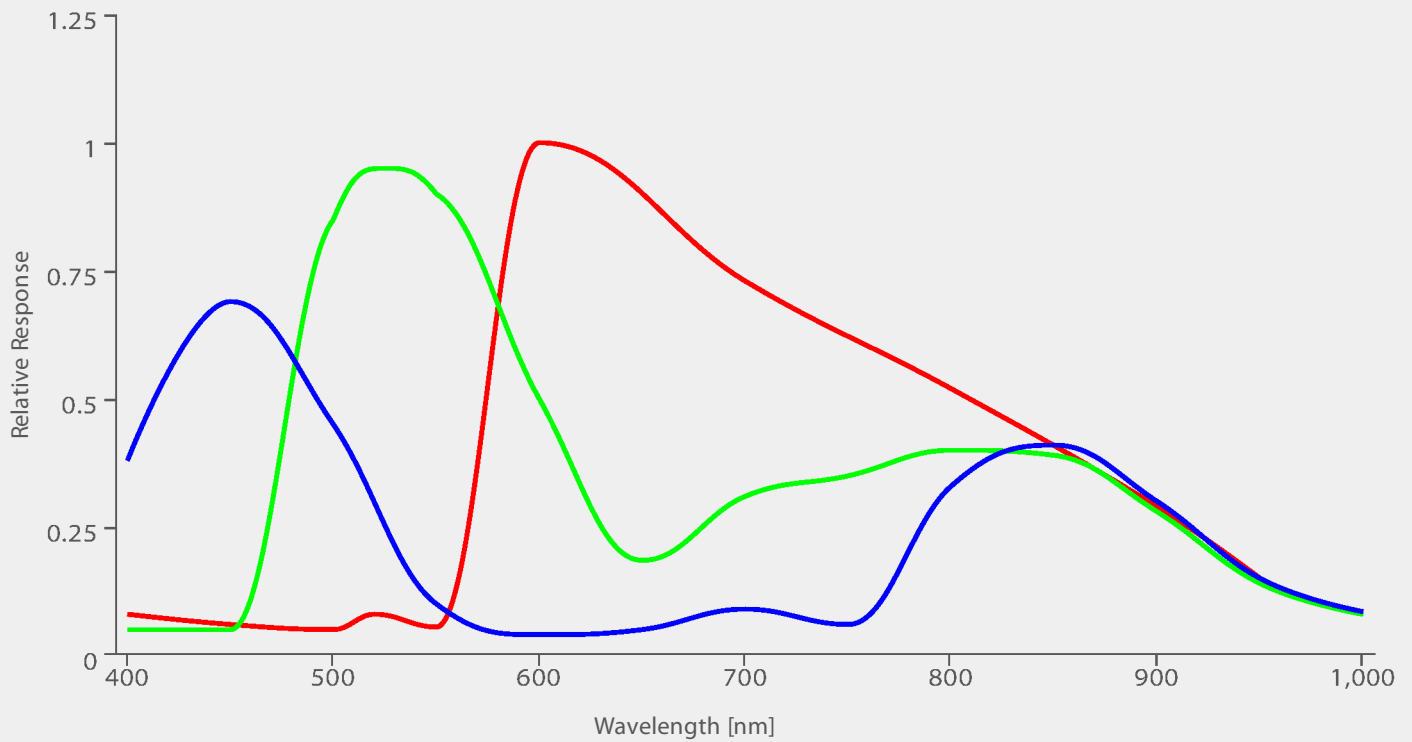| ADJUSTMENTS (AUTOMATIC)	
Shutter	$^1/_{100,000}$ s to 30 s
Gain	0 dB to 36 dB
White balance	-2 dB to 6 dB

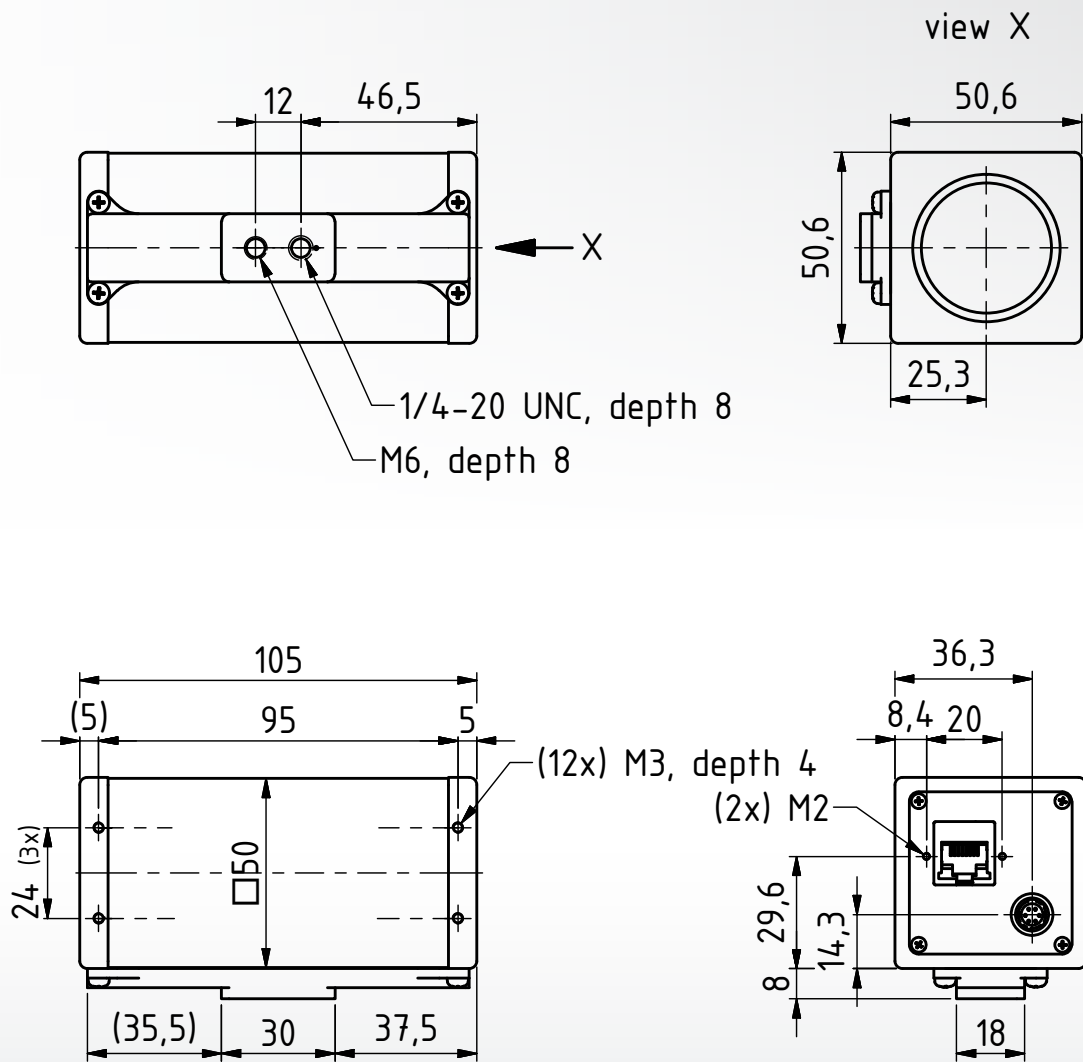| ENVIRONMENTAL	
Temperature (operation)	-5 °C to 45 °C
Temperature (storage)	-20 °C to 60 °C
Humidity (operation)	20 % to 80 % non-condensing
Humidity (storage)	20 % to 95 % non-condensing

Subject to change

Sony IMX236LQ Spectral Response Curve

Exmor Sensor in DFK Z12GX236

DFK Z12GX236 Dimensional Diagram

view X

12   46,5

X

50,6

50,6

25,3

1/4-20 UNC, depth 8

M6, depth 8

105

(5)   95   5

(12x) M3, depth 4
(2x) M2

36,3

8,4 20

□50

24 (3x)

29,6

14,3

8

(35,5)   30   37,5

18

Scale: 1:2
Dimensions: mm
Tolerances: DIN ISO 2768m

Machine Vision - Designed in Germany

Ever since The Imaging Source was founded in 1990, it has been one of the leading manufacturers of industrial cameras, frame grabbers and video converters for automation, quality assurance, logistics, medicine, science and security.

Our extensive range of industrial cameras ships with USB 3.0, USB 2.0, GigE, FireWire 800 and FireWire 400 interfaces. Thanks to their multi-purpose features and extremely high quality standards, the cameras are commonly used in demanding applications.

The software support offered by the cameras fulfill the requirements of demanding end-users and programmers. The cameras can be put into operation within a few minutes, or integrated into new or existing applications with only a few lines of code. All camera drivers are Microsoft certified. The easy of which the cameras can be integrated, the corresponding low integration costs, and the high quality of the software set the industry standard.

All cameras, frame grabbers and video converters, manufactured by The Imaging Source, are the result of decades of experience, uncompromisingly high quality standards, and continual development. Developers and system engineers prefer The Imaging Source cameras due to their ease of system integration.

World-Class Software and Customer Care

What really separates The Imaging Source from its competitors is the comprehensive Windows and Linux software available free of charge with all its products, and the unsurpassed level of customer service.

The Imaging Source authors and supports device drivers, software development kits (SDKs), programming samples, extensions, end-user software and software tools for Microsoft Windows. All Windows software can be download directly from our web site:
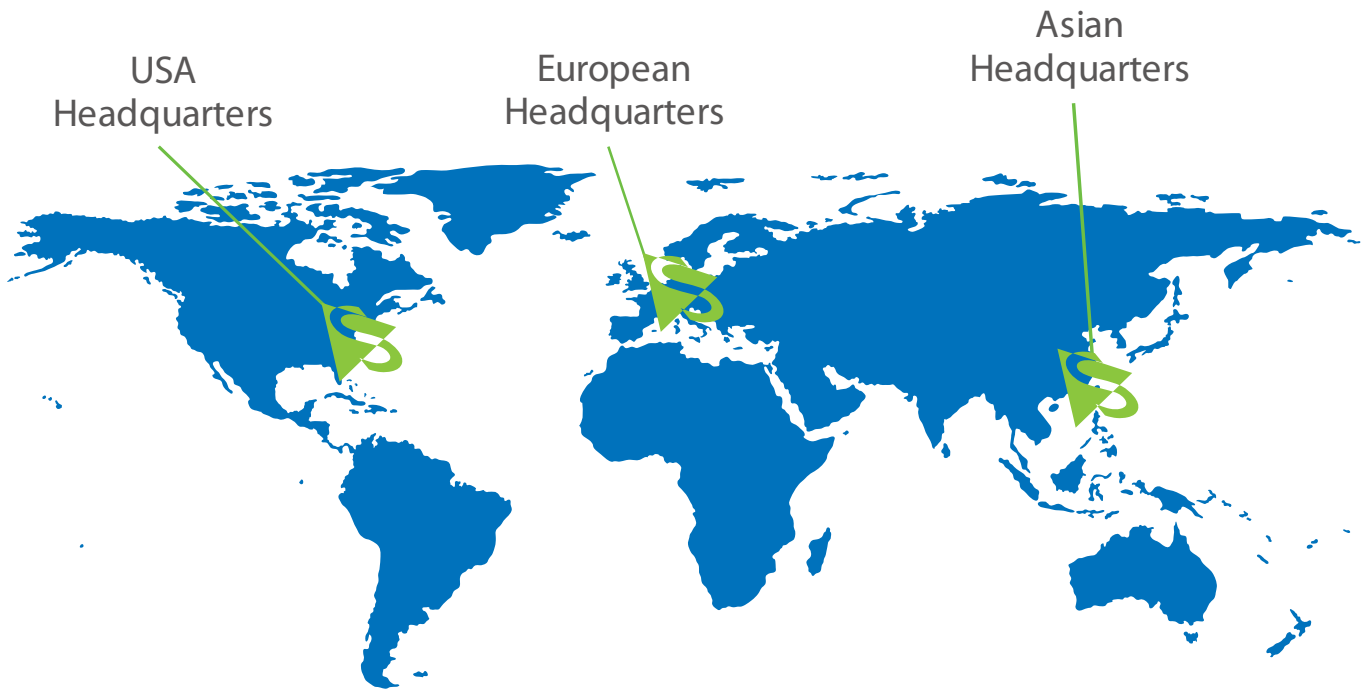
http://www.theimagingsource.com

Additionally, The Imaging Source authors and supports open source drivers and end-user software for Linux. The Linux source code, which is released under the Apache License 2.0, enables you to integrate all machine vision cameras into popular Linux distributions. The Open Source code is available to download from GitHub:

http://www.github.com

The Imaging Source guarantees fast and efficient customer service for all hardware and software issues via our skilled customer service representatives. Not only will we provide support regarding technical issues, but we will also work with you to implement our components into your project. Contact customer service at:

http://www.theimagingsource.com

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