

## DMK Z12GX236 Monochrome Zoom Camera

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



The Imaging Source DMK Z12GX236 monochrome camera has a GigE interface and is the perfect solution for many industrial automation, quality assurance, security, surveillance and medical applications. The monochrome camera ships with the very sensitive <sup>1</sup>/<sub>2.8</sub> " Sony Exmor IMX236LL sensor. With up to 36 images per second, the DMK 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 DMK 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 IMX236LL.
- 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, IC NeuroCheck Driver for NeuroCheck 6.1.

### 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, Scan2Voice.



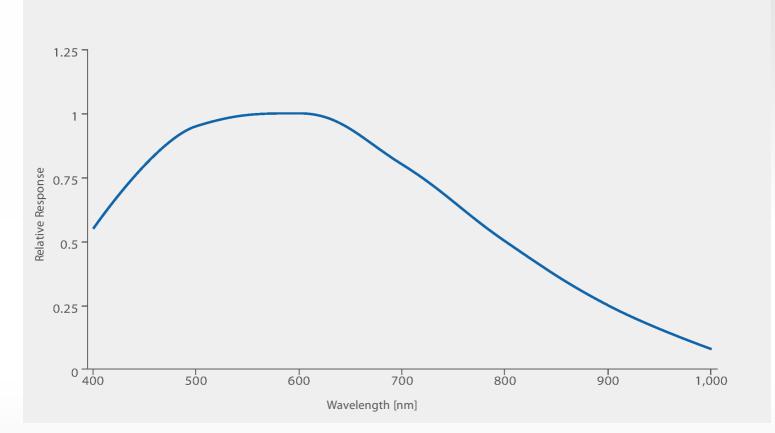
# DMK Z12GX236 Specification

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
Sensitivity	0.015 lx
Dynamic range	8 / 12 bit
INTERFACE (OPTICAL)	
IR cut filter	no
Sensor specification	Sony IMX236LL
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	<sup>1</sup> / <sub>100,000</sub> s to 30 s
Gain	0 dB to 36 dB
ADJUSTMENTS (AUTOMATIC)	
Shutter	<sup>1</sup> / <sub>100,000</sub> s to 30 s
Gain	0 dB to 36 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



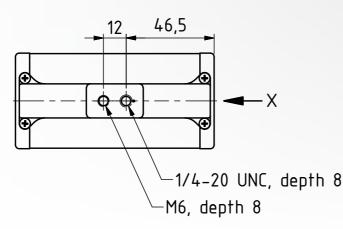
# Sony IMX236LL Spectral Response Curve

Exmor Sensor in DMK Z12GX236

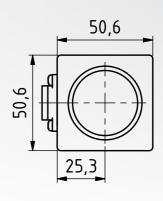


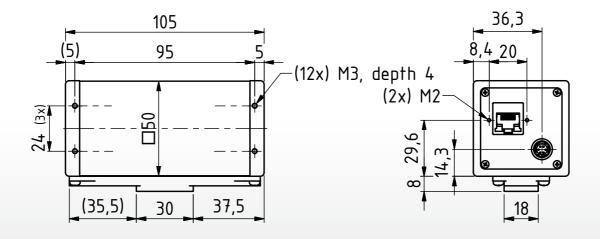


# DMK Z12GX236 Dimensional Diagram













# **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

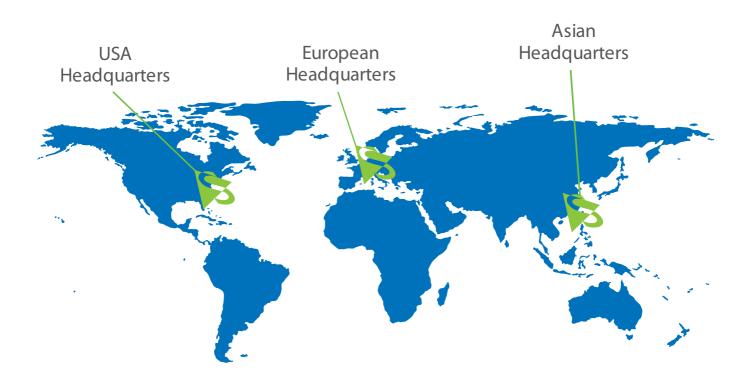
Additionally, The Imaging Source authors and supports open source drivers and end-user software for Linux. The Linux source code, which is released under the Apache License 2.0, enables you to integrate all machine vision cameras into popular Linux distributions. The Open Source code is available to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





## PRESENT ALL OVER THE WORLD.

#### THE IMAGING SOURCE, THE IMAGING SOURCE THE IMAGING SOURCE **EUROPE GMBH** ASIA CO., LTD. LLC 6926 Shannon Willow Rd, Sommerstrasse 36, 2F., No.8, Xinhu 1st Road, Suite 400, 28215 Bremen, Neihu District, Charlotte, NC 28226, Germany. Taipei City 114, United States. Taiwan. Tel: +1 704-370-0110 Tel: +49 (0)421 335 91 0 Tel: +886 2-2792-3153 Fax: +1 704-542-0936 Fax: +49 (0)421 335 91 80 Fax: +886 2-2792-6583

All product and company names in this document may be trademarks and tradenames of their respective owners and are hereby acknowledged. The Imaging Source, LLC cannot and does not take any responsibility or liability for any information contained in this document. The source code in this document may be used exclusively used for educational purposes. The Imaging Source, LLC does not assume any kind of warranty expressed or implied, resulting from the use of the content of this document or the source code. The Imaging Source, LLC reserves the right to make changes in specifications, function or design at any time and without prior notice.

All weights and dimensions are approximate. Unless otherwise specified the lenses shown in the context of cameras are not shipped with these cameras.

Reprint, also in parts, only allowed with permission of The Imaging Source, LLC.

Last update: April 19, 2016 at 2:36 PM. © 2016 The Imaging Source, LLC. All rights reserved.