

### DMK 23G274 Monochrome Camera

The Imaging Source "23" Series GigE Camera



#### Only 29 x 29 x 57 mm

Lens not included

The Imaging Source DMK 23G274 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 1/1.8 " Sony CCD ICX274AL sensor. With up to 20 images per second, the DMK 23G274 is a low cost, yet highly versatile imaging solution. The camera includes a C to CS mount adapter, making it compatible to C and CS mount lenses. Using the optional CS to M12 board lens adapter, the camera is also compatible to M12 board lenses.

Drivers, SDKs, programming samples, extensions and end-user software for Microsoft Windows can be freely downloaded from our web site (see below). Community-driven, Open Source projects allow the camera to be used on Linux. Extensions for Microsoft Windows enable the camera to be integrated in to common machine vision software libraries, such as LabView. In addition, the camera is compatible to the Open Source computer vision library, OpenCV.

#### Features

- GigE interface.
- Power over Ethernet.
- 1/1.8 " Sony CCD ICX274AL.
- Global shutter.
- 1,600 x 1,200 (1.9 MP).
- Up to 20 images per second.
- Trigger input and I/Os.
- Compatible to C and CS mount lenses.
- Only 29 x 29 x 57 mm.
- Casing compatible to Sony footprint.

#### Accessories

- CS to C mount adapter (shipped as standard).
- CS to M12 board lens adapters.
- C and CS mount lenses.
- M12 board lenses.
- Standard GigE cable in various lengths.
- Trigger cable.
- I/O cable.
- External power supply with cable.

#### **Device Drivers**

Device Driver for The Imaging Source GigE Cameras.

#### Software Development Kits (SDKs)

IC Imaging Control .NET Component, C++ Class Library, IC Imaging Control C Library, IC Imaging Control for VC++ 6.0, IC Imaging Control ActiveX and IC Imaging Control ActiveX Runtime Setup.

#### **Programming Samples**

Barcode Scanner C# Sample for IC Imaging Control.

#### Extensions

TWAIN Source for IC Imaging Control, Cognex VisionPro AlK Plugin for IC Imaging Control, ActivVisionTools Driver for IC Imaging Control, HALCON Extension for IC Imaging Control, LabVIEW Extension for IC Imaging Control and IC Matlab Plugin for Matlab 10.0.

#### End User Software

IC Capture, Image Acquisition.

#### Software Tools

Processor Idle State Manager.



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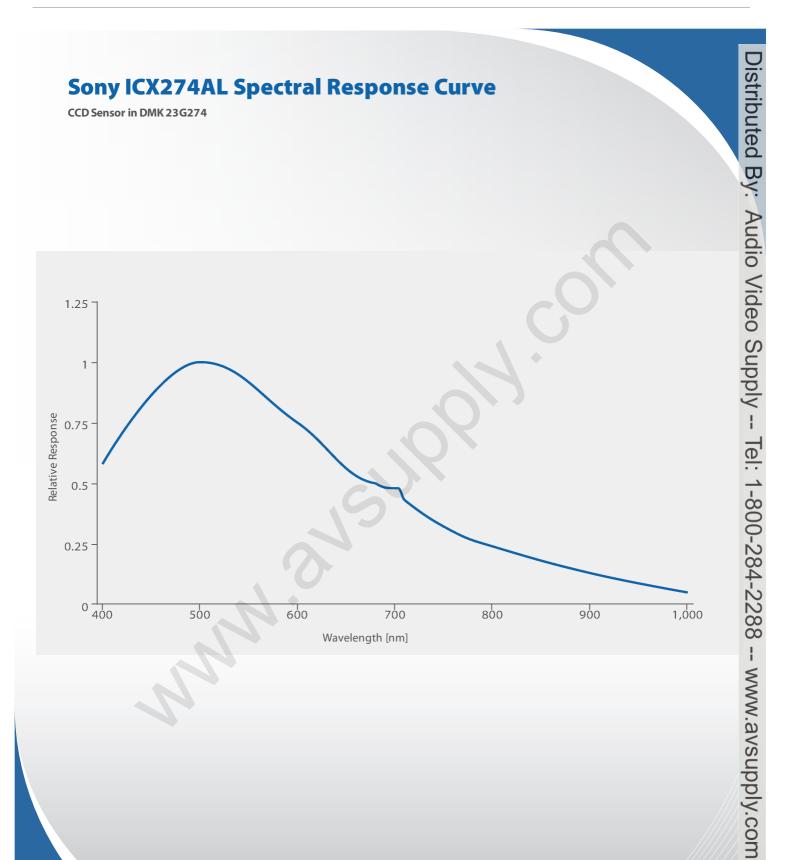
For design help, accessories or pricing, please contact: sales@avsupply or call: 1-858-565-1101



# DMK 23G274 Specification

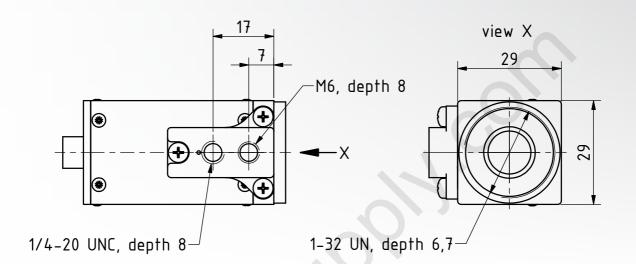
| GENERAL BEHAVIOR           |  |  |
|----------------------------|--|--|
| Video formats @ frame rate | 1,600 x 1,200 (1.9 MP), Y800 @ 20, 15, 7.5, 3.75 FPS |  |
| C 111 11                   | 1,600 x 1,200 (1.9 MP), Y16 @ 20, 15, 7.5, 3.75 FPS  |  |
| Sensitivity                | 0.05 lx  |  |
| Dynamic range              | 8 bit  |  |
| INTERFACE (OPTICAL)        |  |  |
| IR cut filter              | no   |  |
| Sensor specification       | Sony ICX274AL  |  |
| Shutter                    | Global   |  |
| Format                     | 1/1.8 "  |  |
| Resolution                 | H: 1,600 pixel, V: 1,200 pixel                       |  |
| Pixel size                 | H: 4.4 μm, V: 4.4 μm                                 |  |
| Lens mount                 | C/CS   |  |
| INTERFACE (ELECTRICAL)     |  |  |
| Supply voltage             | 11 VDC to 13 VDC or PoE: 48 VDC to 56 VDC            |  |
| Current consumption        | approx 400 mA at 12 VDC                              |  |
| INTERFACE (MECHANICAL)     |  |  |
| Dimensions                 | H: 29 mm, W: 29 mm, L: 57 mm                         |  |
| Mass                       | 65 g   |  |
|                            | 5  |  |
| ADJUSTMENTS (MANUAL)       |  |  |
| Shutter                    | <sup>1</sup> / <sub>100,000</sub> s to 30 s          |  |
| Gain                       | 0 dB to 36 dB  |  |
| ADJUSTMENTS (AUTOMAT       |  |  |
| Shutter                    | <sup>1</sup> /100 000 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                                    |  |
|                            |  |  |

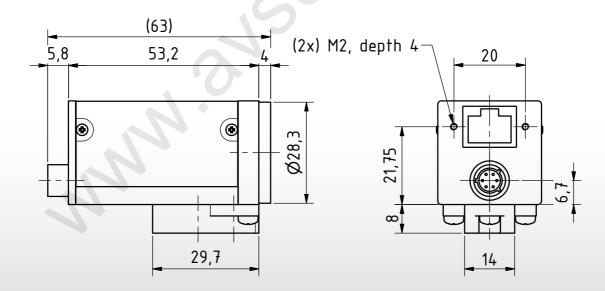






### DMK 23G274 Dimensional Diagram





Dimensions: mm Tolerances: DIN ISO 2768m

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### **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 Support**



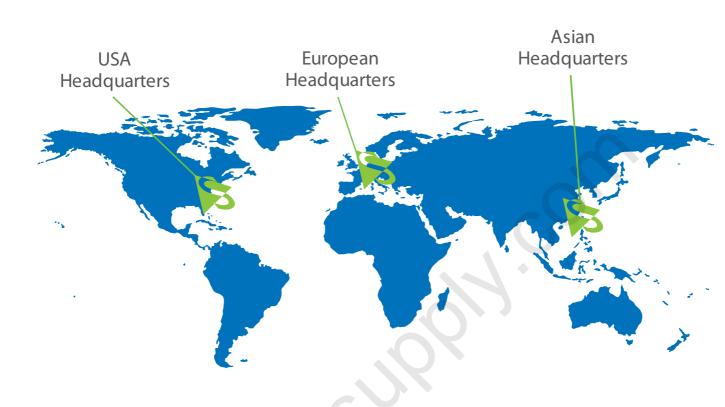
What really separates The Imaging Source from its competitors is the unsurpassed customer service and technical support we provide for our products.

Industrial cameras consist of two basic components: Hardware and software. We guarantee fast and efficient support for both components through our highly skilled support representatives and expert product developers. Not only will we provide support regarding technical issues, but we will also work to provide assistance with software implementation issues.

All cameras, frame grabbers and video converters, manufactured by The Imaging Source, are compatible with IC Imaging Control. Using this SDK, programmers can quickly integrate our machine vision devices into their own applications.

Download IC Imaging Control, drivers, extensions and programming samples from our web site: <u>www.theimagingsource.com</u>





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

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