

### **DFK 61AUC02 Color Camera**

The Imaging Source "61" Series USB 2.0 Camera



Only 50.6×50.6×29 mm

Lens not included

The Imaging Source DFK 61AUC02 color camera has a USB 2.0 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 inch Micron CMOS MT9T031 sensor. With up to 10 images per second, the DFK 61AUC02 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.

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 61AUC02 to be integrated in to common machine vision software libraries, such as LabView and OpenCV.

#### **Features**

- USB 2.0 interface (forwards compatible)
- 1/2 inch Micron CMOS sensor (MT9T031)
- 2,048×1,536 (3.1 MP)
- Up to 10 images per second
- Rolling shutter
- Only 50.6×50.6×29 mm
- Compatible to C and CS mount lenses
- Manufactured by The Imaging Source
- Ships with Windows software

#### Accessories

- CS to C mount adapter (shipped as standard)
- C and CS mount lenses
- CS to M12 board lens adapters
- M12 board lenses
- Standard USB 2.0 cable in various lengths
- 5 m USB 2.0 cable with fixing screws

#### **Device Drivers for Microsoft Windows**

Device Driver for USB 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, LabVIEW Extension for IC Imaging Control, IC Matlab Plugin for Matlab 10.0 R2010, IC Matlab Plugin for Matlab R2013b and higher versions, 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



### **DFK 61AUC02 Specification**

#### **GENERAL BEHAVIOR**

Dynamic range 8 bit

Video formats @ frame rate 2,048×1,536 (3.1 MP) BY8 @ 10 fps (maximum) 2,048×1,536 (3.1 MP) Y800 @ 10 fps

2,048×1,536 (3.1 MP) RGB32 @ 10 fps

#### **INTERFACE (OPTICAL)**

IR cut filter

Sensor type CMOS

Sensor specification Micron MT9T031

Shutter rolling

Format <sup>1</sup>/<sub>2</sub> inch

Resolution (maximum) H: 2,048 px, V: 1,536 px

Frame rate (maximum) 10 fps

Pixel size H: 3.2  $\mu$ m, V: 3.2  $\mu$ m

Lens mount C/CS

#### INTERFACE (ELECTRICAL)

Interface USB 2.0 (forwards compatible)

Supply voltage 4.5 VDC to 5.5 VDC

Current consumption approx 250 mA @ 5 VDC

Auto iris control

Trigger \*

I/Os ×

#### **INTERFACE (MECHANICAL)**

Dimensions H: 50.6 mm, W: 50.6 mm, L: 29 mm

Mass 140 g

#### **ADJUSTMENTS**

Shutter 1/<sub>10,000</sub> s to 4 s

Gain 0 dB to 18 dB

White balance -6 dB to 6 dB

#### **ENVIRONMENTAL**

Temperature (operating)  $-5 \,^{\circ}\text{C}$  to  $45 \,^{\circ}\text{C}$ Temperature (storage)  $-20 \,^{\circ}\text{C}$  to  $60 \,^{\circ}\text{C}$ 

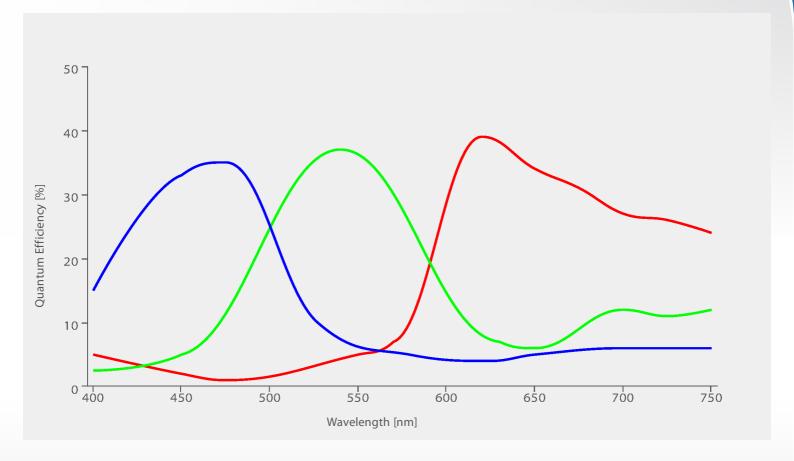
Humidity (operating) 20 % to 80 % (non-condensing) Humidity (storage) 20 % to 95 % (non-condensing)

Subject to change



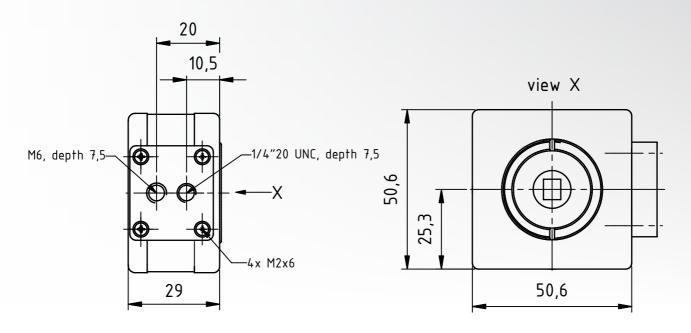
# **Micron MT9T031 Spectral Response Curve**

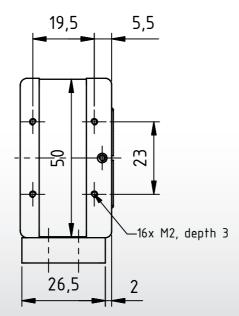
CMOS Sensor in DFK 61AUC02

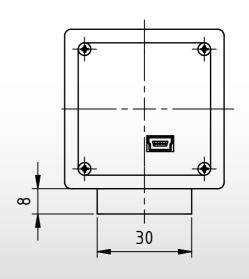




## **DFK 61AUC02 Dimensional Diagram**







Dimensions: mm

Tolerances: DIN ISO 2768m

