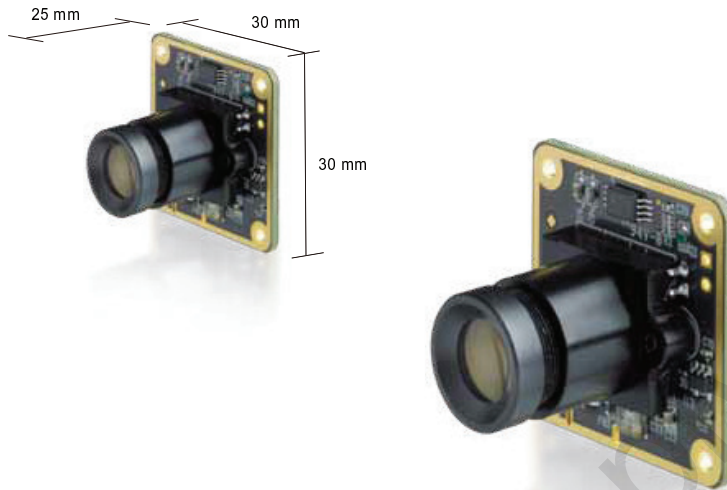


The Imaging Source "One4all" Series USB CMOS Board Cameras

DMK 72BUC02 / DFK 72BUC02



The Imaging Source DMK 72BUC02 (monochrome) and DFK 72BUC02 (color) 5 Megapixel USB CMOS cameras are the perfect solution for many industrial automation, quality assurance, security, surveillance, and medical applications. Utilizing the Aptina MT9P031 CMOS sensors, the board version products are very compact and extremely cost sensitive. Binning, windowing, and high-speed readout are but a few of performance enhancements that are coupled with the DigitalClarity technology that dramatically reduces image noise levels.

The Imaging Source 72 "One4all" series CMOS cameras are characterized by small PCB dimensions and very competitive prices.

Included :

- Camera, CS to C mount adapter and tripod mount
- Drivers compatible to WDM, DirectShow, DirectX®, TWAIN, ActivVisionTools, HALCON, Vfw and LabVIEW® for Windows 7/8, Windows Vista, and Windows XP
- IC Capture camera control and acquisition software for Windows 7/8, Windows Vista, and Windows XP (32 and 64 bit versions)
- IC Imaging Control Software Development Kit (SDK) including a .NET component, an ActiveX component, and a C++ class library for Windows

Features :

- Digital I/O strobe
- Binning and ROI

Accessories :

- M12 adapters
- M12 lenses
- USB 2.0 cable (1.8m, 3m, 4.5m)
- JST trigger connector cable included

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

Specification: DMK 72BUC02 (Monochrome)

GENERAL BEHAVIOR

Example Configurations

Resolution	Format	FPS	Sensitivity
2592x1944	1/2.5 "	6	1.4 V/lux-sec
2048x1536	1/3 "	9	1.4 V/lux-sec
1600x1200	1/4 "	13	1.4 V/lux-sec
1280x960	1/4.5 "	19	1.4 V/lux-sec
1280x960	1/2.5 "	15	5.6 V/lux-sec
1024x768	1/5.5 "	27	1.4 V/lux-sec
640x480	1/9 "	52	1.4 V/lux-sec
640x480	1/2.5 "	23	22.4 V/lux-sec

Color format	Y800
Dynamic range	8 bit

INTERFACE (OPTICAL)

IR cut filter	no
Sensor specification	MT9P031
Shutter	Rolling
Format	1/2.5 "
Resolution	H: 2592, V: 1944
Pixel size	H: 2.2 μ m, V: 2.2 μ m
Lens mount	C/CS

INTERFACE (ELECTRICAL)

Supply voltage	4.5 to 5.5 VDC
Current consumption	approx. 250 mA at 5 VDC

INTERFACE (MECHANICAL)

Dimensions	H: 36 mm, W: 36 mm, L: 25 mm
Mass	70 g

ADJUSTMENTS (MANUAL)

Shutter	1/10,000 to 30 s
Gain	0 to 18 dB

ADJUSTMENTS (AUTOMATIC)

Shutter	1/10,000 to 30 s
Gain	0 to 18 dB

ENVIRONMENTAL

Max. temperature (operation)	-5 °C to 45 °C
Max. temperature (storage)	-20 °C to 60 °C
Max. humidity (operation)	20 % to 80 % non-condensing
Max. humidity (storage)	20 % to 95 % non-condensing

Specification: DFK 72BUC02 (Color)

GENERAL BEHAVIOR

Example Configurations

Resolution	Format	FPS	Sensitivity
2592x1944	1/2.5 "	6	1.4 V/lux-sec
2048x1536	1/3 "	9	1.4 V/lux-sec
1600x1200	1/4 "	13	1.4 V/lux-sec
1280x960	1/4.5 "	19	1.4 V/lux-sec
1280x960	1/2.5 "	15	5.6 V/lux-sec
1024x768	1/5.5 "	27	1.4 V/lux-sec
640x480	1/9 "	52	1.4 V/lux-sec
640x480	1/2.5 "	23	22.4 V/lux-sec

Color format Y800, RGB32

Dynamic range 8 bit

INTERFACE (OPTICAL)

IR cut filter	yes
Sensor specification	MT9P031
Shutter	Rolling
Format	1/2.5 "
Resolution	H: 2592, V: 1944
Pixel size	H: 2.2 μ m, V: 2.2 μ m
Lens mount	C/CS

INTERFACE (ELECTRICAL)

Supply voltage	4.5 to 5.5 VDC
Current consumption	approx. 250 mA at 5 VDC

INTERFACE (MECHANICAL)

Dimensions	H: 36 mm, W: 36 mm, L: 25 mm
Mass	70 g

ADJUSTMENTS (MANUAL)

Shutter	1/10,000 to 30 s
Gain	0 to 18 dB
White balance	-6 dB to +6 dB

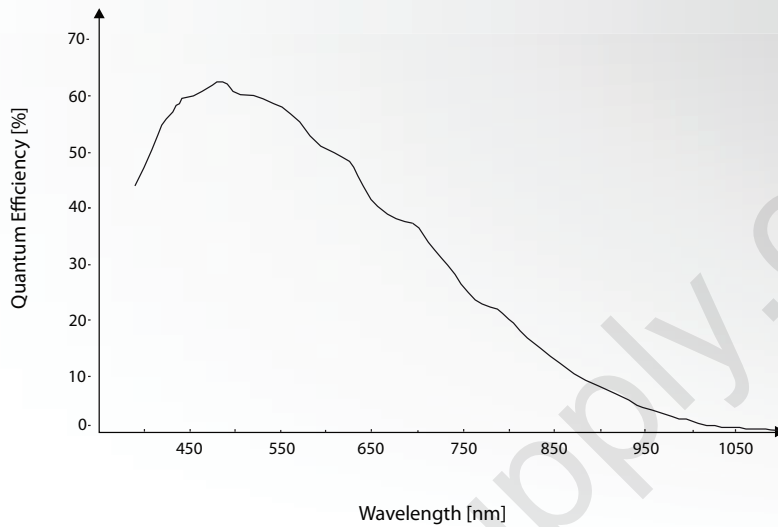
ADJUSTMENTS (AUTOMATIC)

Shutter	1/10,000 to 30 s
Gain	0 to 18 dB
White balance	-6 dB to +6 dB

ENVIRONMENTAL

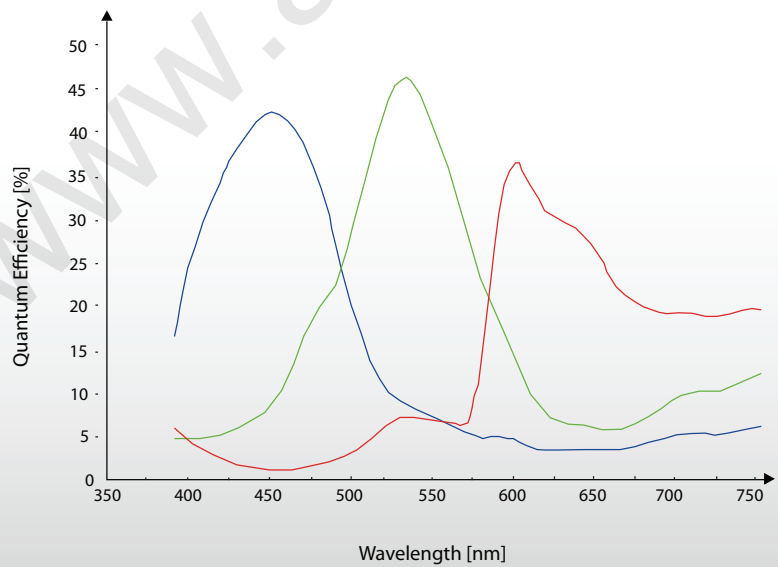
Max. temperature (operation)	-5 °C to 45 °C
Max. temperature (storage)	-20 °C to 60 °C
Max. humidity (operation)	20 % to 80 % non-condensing
Max. humidity (storage)	20 % to 95 % non-condensing

Monochrome Spectral Response Curve



Sensor: Micron MT9P031 M - courtesy of Aptina Deutschland GmbH

Color Spectral Response Curve



Sensor: Micron MT9P031 C - courtesy of Aptina Deutschland GmbH