



Lens not included

IC Capture - image acquisition, IC Measure - manual on-screen image measurement and image acquisition, IC 3D - User friendly stereo calibration, depth estimation and 3D visualization, IC Fullscreen Presenter, IC Line Profiler, Footswitch software for IC Capture, Scan2Docx, Scan2Docx OCR, Scan2Voice

DFK 42BUC03 Specification

GENERAL BEHAVIOR

Dynamic range	8 bit
Video formats @ frame rate (maximum)	1,280×960 (1.2 MP) Y800 @ 25 fps 1,280×960 (1.2 MP) RGB24 @ 25 fps 1,280×960 (1.2 MP) RGB32 @ 25 fps

INTERFACE (OPTICAL)

IR cut filter	✓
Sensor type	CMOS
Sensor specification	Micron MT9M021
Shutter	global
Format	1/3 inch
Pixel size	H: 3.75 µm, V: 3.75 µm
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: 36 mm, W: 36 mm, L: 25 mm
Mass	70 g

ADJUSTMENTS

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

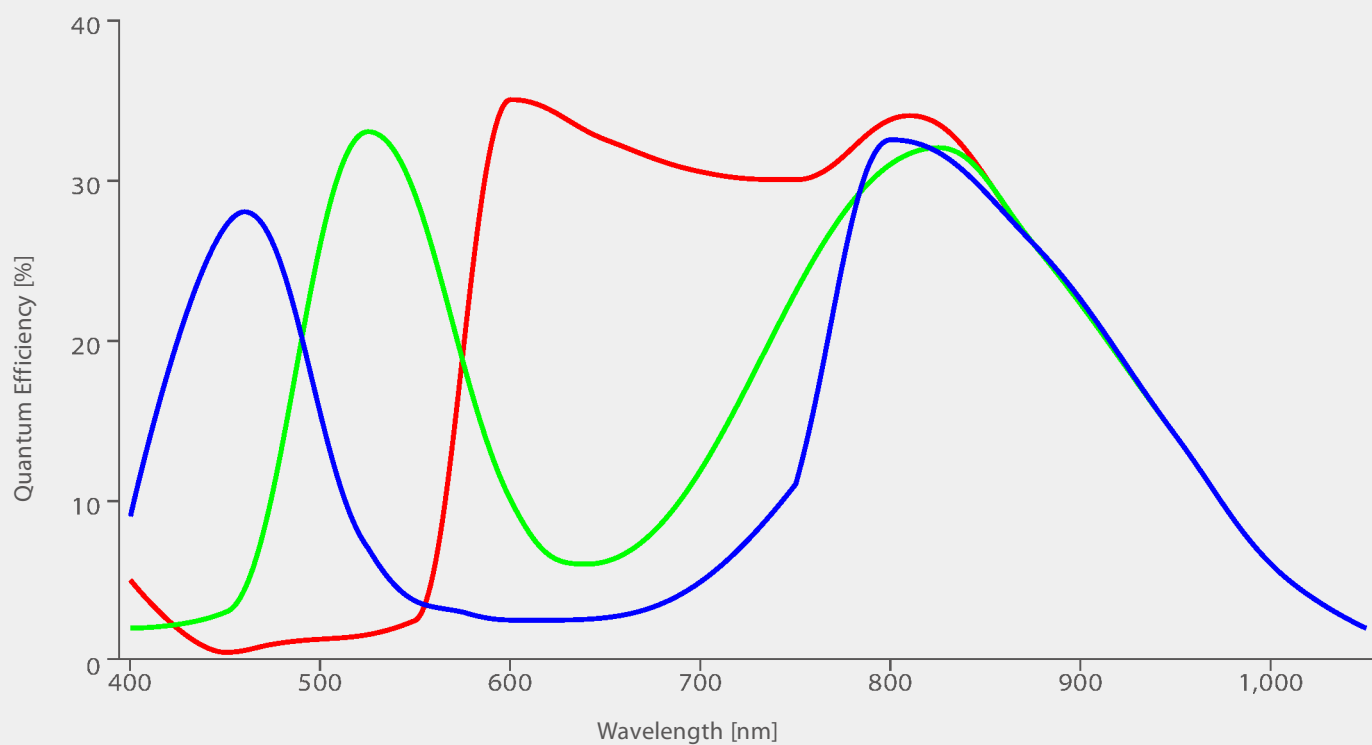
ENVIRONMENTAL

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

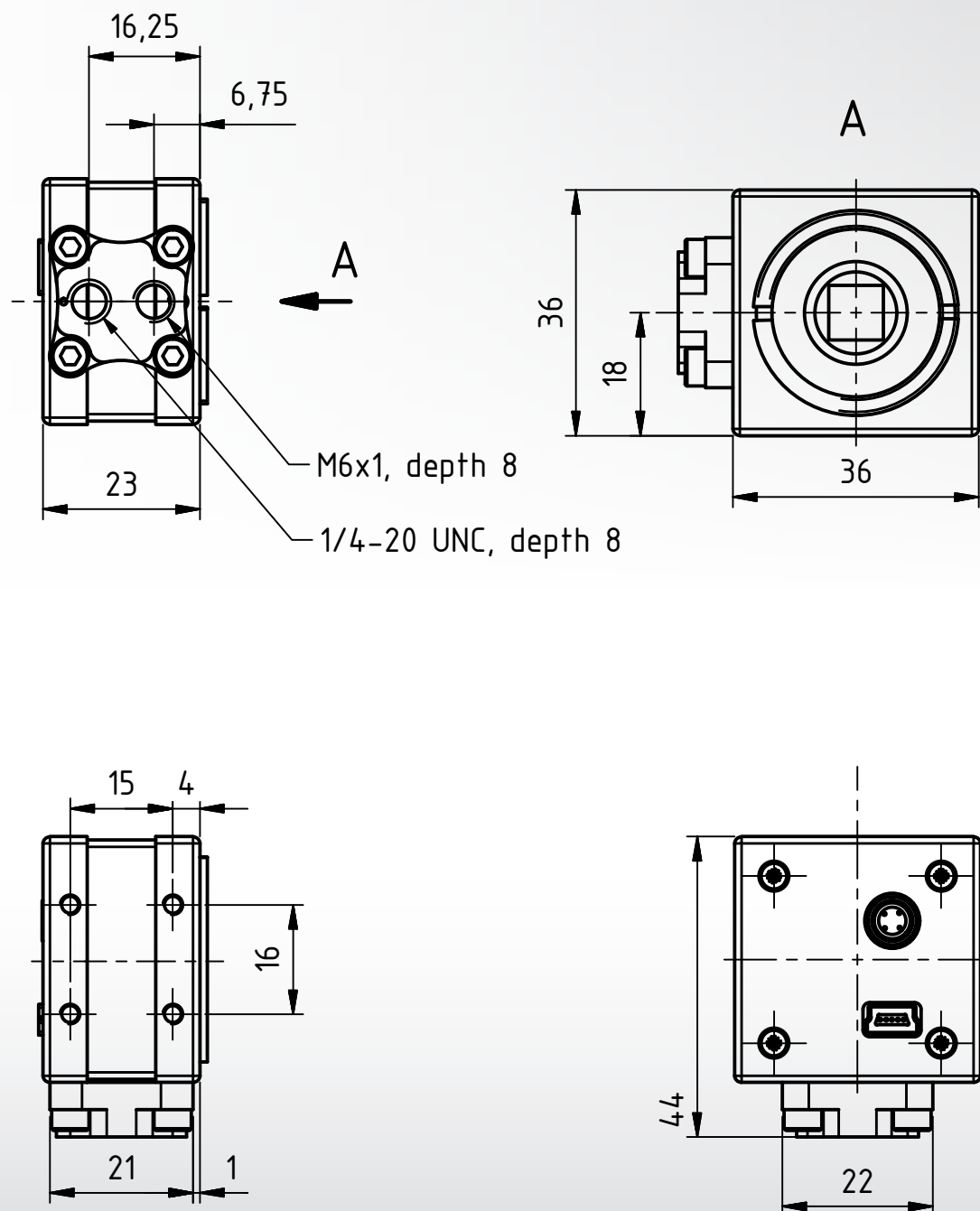
Subject to change

Micron MT9M021 Spectral Response Curve

CMOS Sensor in DFK 42BUC03



DFK 42BUC03 Dimensional Diagram



Dimensions: mm
Tolerances: DIN ISO 2768m



Machine vision, designed in Germany



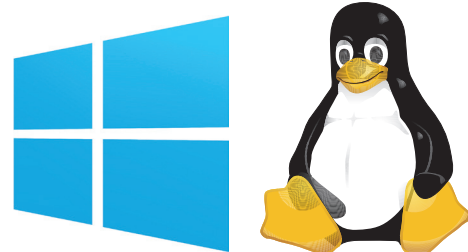
Ever since The Imaging Source was founded in 1990, it has been one of the leading manufacturers of industrial cameras, frame grabbers and video converters for automation, quality assurance, logistics, medicine, science and security.

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 ease with 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:

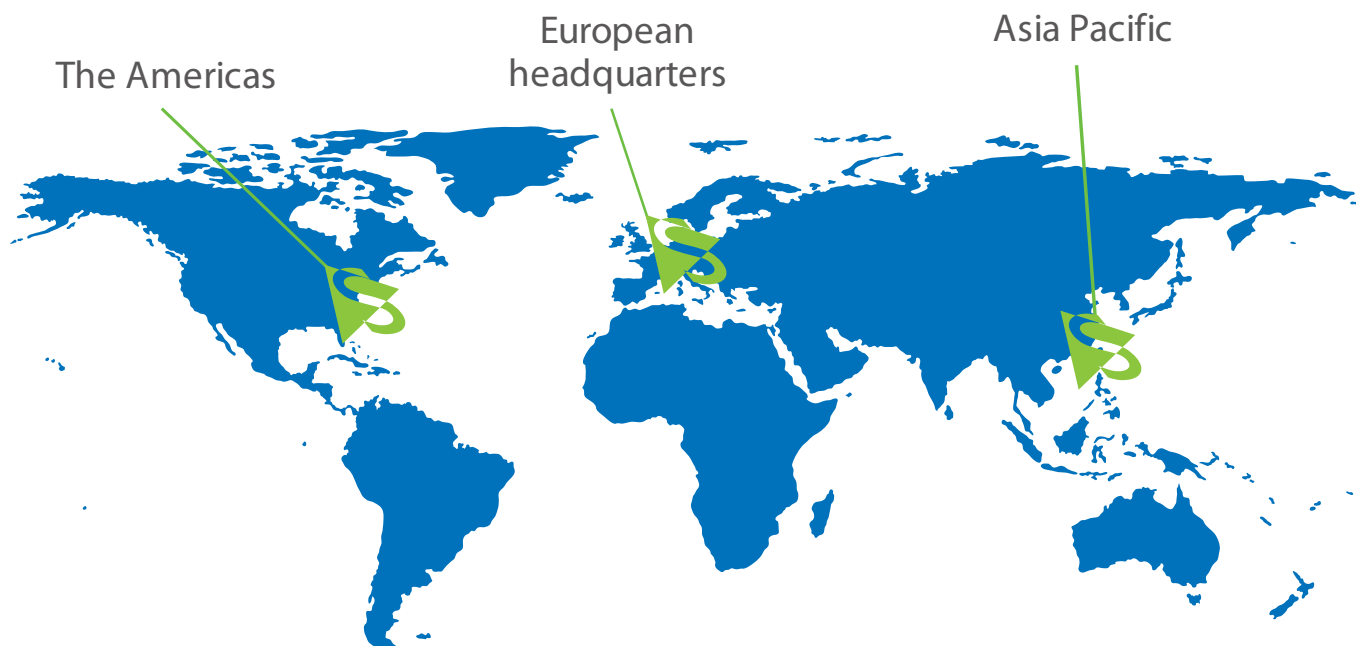
<http://www.theimagingsource.com>

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:

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<http://www.theimagingsource.com>



PRESENT ALL OVER THE WORLD

THE IMAGING SOURCE, LLC

Suite 400
6926 Shannon Willow Rd
Charlotte, NC 28226
United States

Tel: +1 704-370-0110
Fax: +1 704-542-0936

THE IMAGING SOURCE EUROPE GMBH

Überseetor 18
28217 Bremen
Germany

Tel: +49 421 335910
Fax: +49 421 3359180

THE IMAGING SOURCE ASIA CO., LTD.

2F., No.8, Xinhua 1st Road
Taipei City 114, Neihsu
District
Taiwan

Tel: +886 2 2792 3153
Fax: +886 2 2792 6583

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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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