

DFK 27AUJ003 Specification

GENERAL BEHAVIOR

Video formats @ frame rate	3,856 x 2,764 (10.7 MP), Y800 @ 7, 5 FPS 3,856 x 2,764 (10.7 MP), Y16 @ 4, 2 FPS 3,856 x 2,764 (10.7 MP), RGB32 @ 7, 5 FPS
Dynamic range	8 / 12 bit

INTERFACE (OPTICAL)

IR cut filter	no
Sensor specification	Aptina MT9J003
Shutter	Rolling
Format	1/2.3 "
Resolution	H: 3,856 pixel, V: 2,764 pixel
Pixel size	H: 1.67 µm, V: 1.67 µm
Lens mount	C/CS

INTERFACE (ELECTRICAL)

Interface	USB 3.0
Supply voltage	4.5 VDC 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	1/20,000 s to 1/4 s
Gain	0 dB to 12 dB
White balance	-2 dB to 6 dB

ADJUSTMENTS (AUTOMATIC)

Shutter	1/20,000 s to 1/4 s
Gain	0 dB to 12 dB
White balance	-2 dB to 6 dB

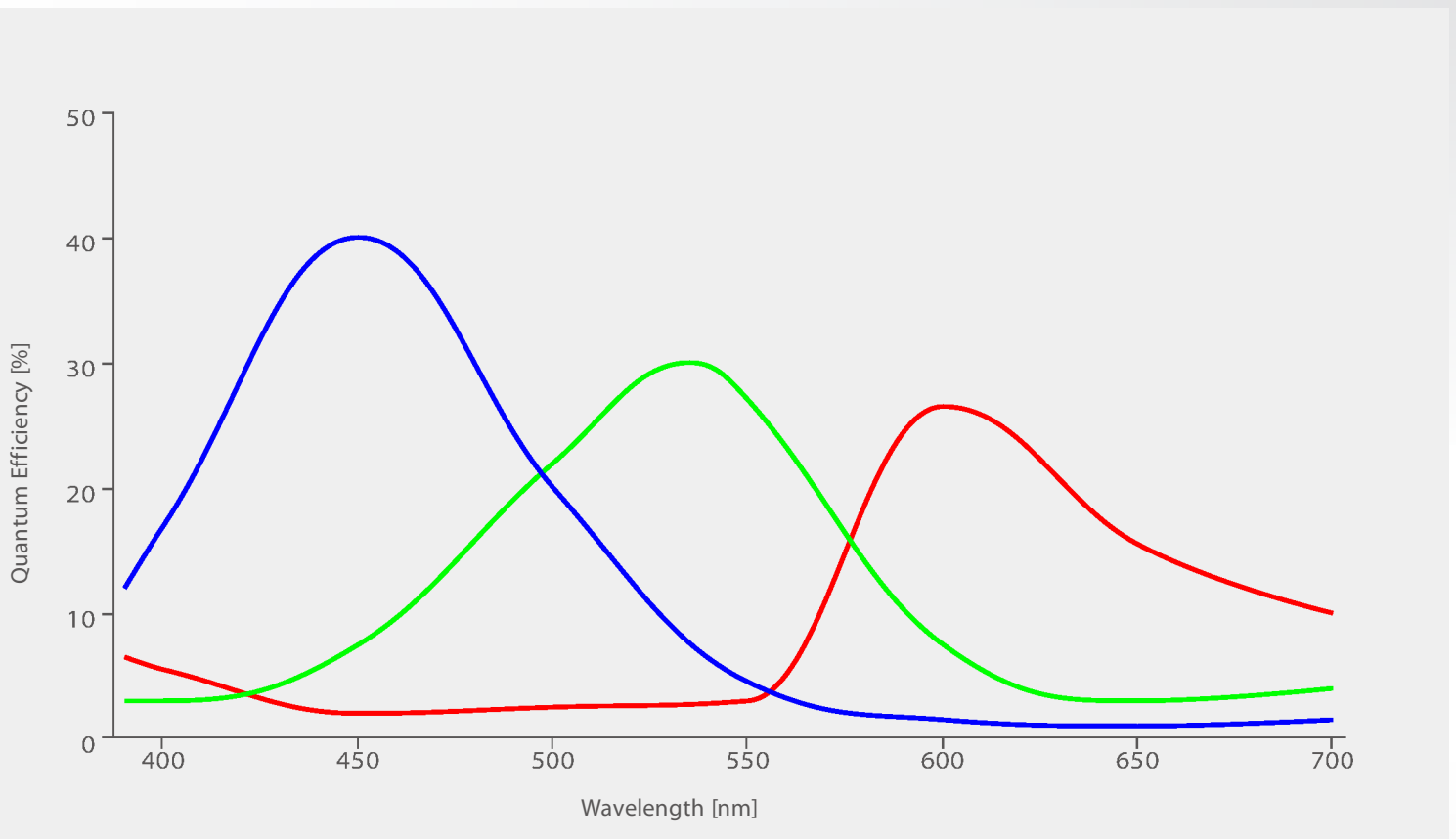
ENVIRONMENTAL

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

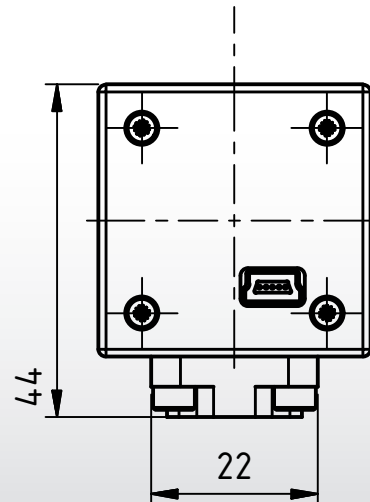
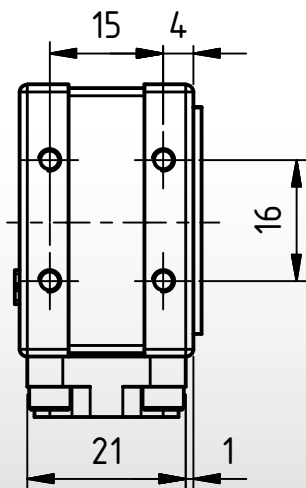
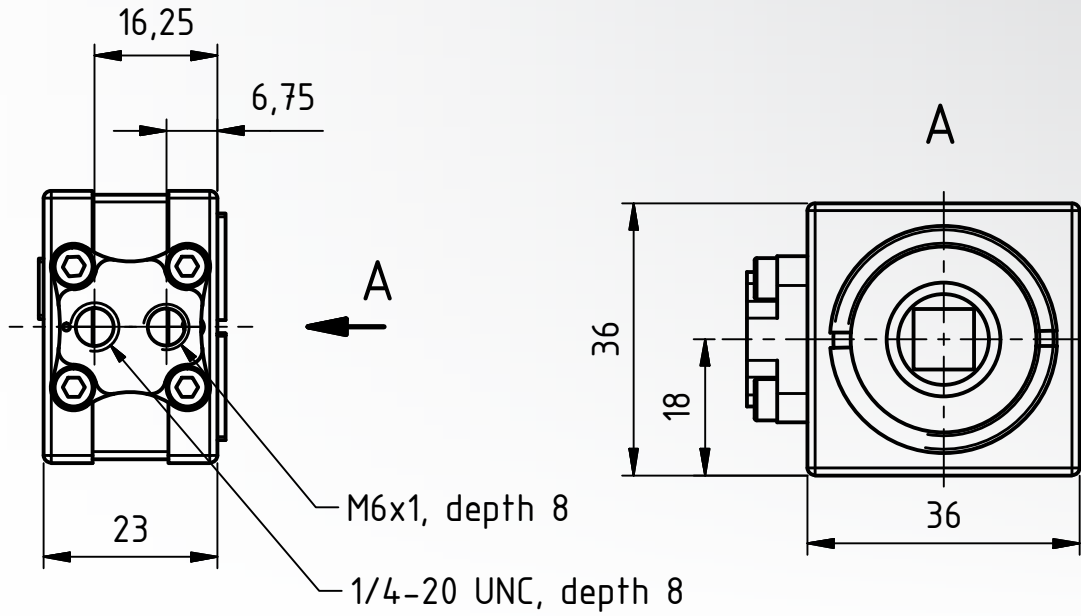
Subject to change

Aptina MT9J003 Spectral Response Curve

CMOS Sensor in DFK27AUJ003



DFK 27AUJ003 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:

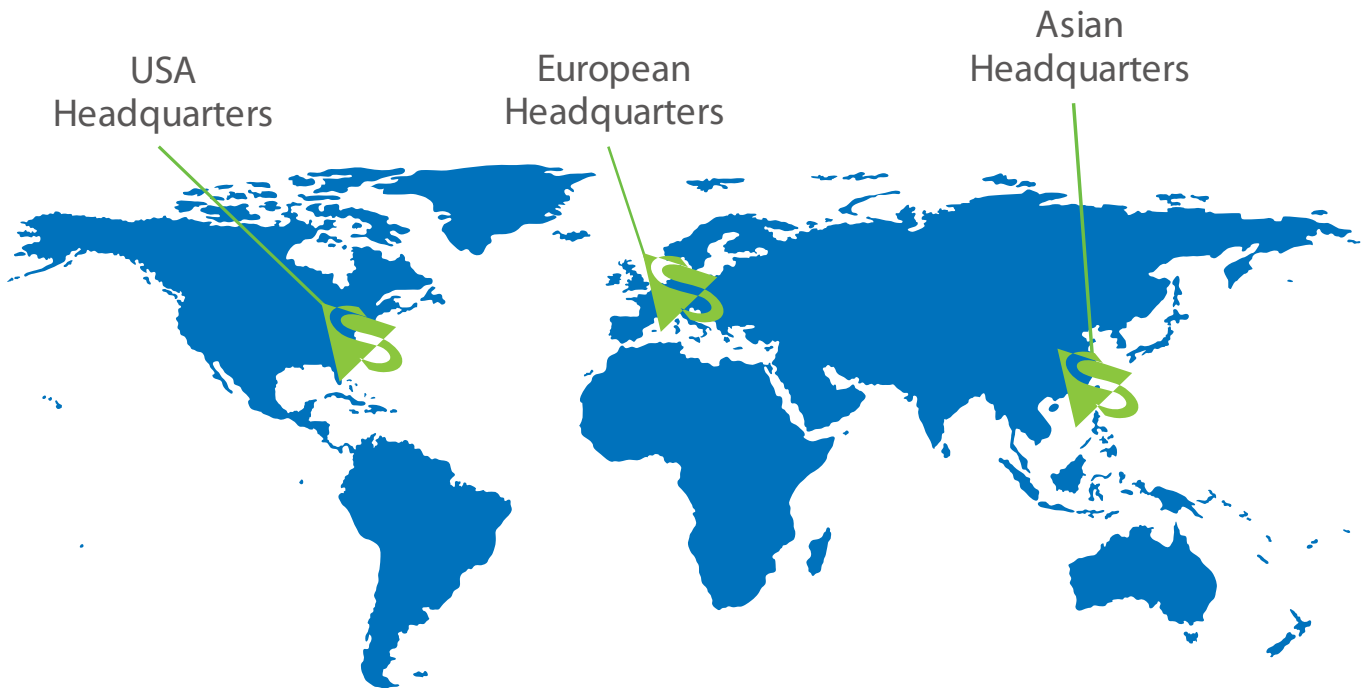
<http://www.theimagingsource.com>

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:

<http://www.github.com>

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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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