

Imaging Modules 3.3 and 5.0

Digital Imaging for Industry, Medicine and Security



Imaging Module with C-mount



Imaging Module without C-mount

Imaging Quality for Pros by Pros

Jenoptik Imaging Modules for digital image acquisition provide reliable tools at an excellent price-performance ratio. They combine many years of experience in the development, design and production of high-quality image acquisition systems for various branches of industry or science.

Easy to Integrate

An Imaging Module consists of two boards which are connected via a flat-ribbon cable. Both the sensor and the interface board can have their own separate location for greater flexibility where modules have to be built into a special system solution with little integration space. A powerful industrial IEEE1394a Firewire standard interface is included for communication with a computer. For optical adaptation, a C-mount is provided. It integrates an IR-cut-off filter (optionally clear glass) to protect the sensor from dust.

Mechanical attachment via C-mount warrants simple and precise installation. Imaging Modules can also be supplied without a C-mount on special request.

Easy to use

Imaging Modules can easily be operated using our proven CapturePro image acquisition software with a graphical user interface – also via TWAIN driver. For integration with user software, an ActiveX Control and a Software Development Kit (SDK) with C-interface are available. The SDK includes a sample program in source code. Both tools facilitate fast and full access to image data and camera at any time.

Applications

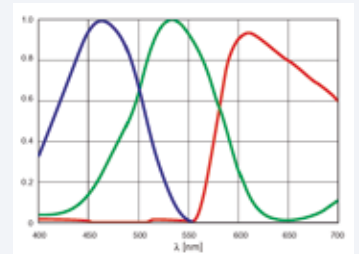
- Industrial quality control
- Image documentation and archiving
- Science and medicine
- Forensics and securing of evidence
- Security and biometry

Imaging Modules 3.3 and 5.0

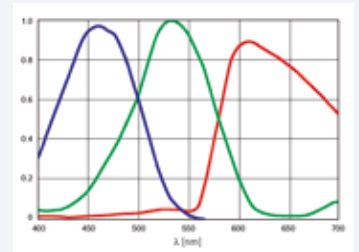
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Specifications

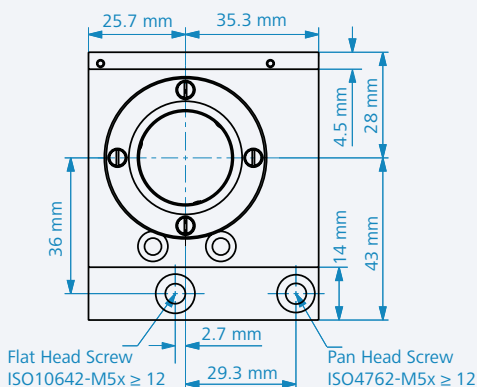
	Imaging Module 3.3	Imaging Module 5.0
Image sensor	SONY ICX252AQ	SONY ICX282AQ
Sensor size	3.3 MPix Interline RGB Color CCD	3.3 MPix Interline RGB Color CCD
Active pixels (spacing)	8,10 mm × 6,64 mm (1/1.8")	9.74 mm × 7.96 mm (2/3")
Digitization	2080 × 1542 (3.45 µm)	2580 × 1944 (3.40 µm)
Analog gain	12 bit	
Pixel clock	up to 8x	
Frame rate	12 MHz	12 MHz / 18 MHz
Binning	2,5 fps (full frame) ... 17 fps (HFRM)	2,8 fps (full frame) ... 23 fps (HFRM)
ROI	1x1 to 5x5	
Exposure times	Arbitrary position and size	
Dynamic range (typical)	0.2 ms ... 180 s	
Noise (typical)	approx. 60 dB	
Data interface	3 LSB (RMS)	4 LSB (RMS)
Optical interface	IEEE1394a Firewire	
IR-cut-off filter	Standard: C-Mount. Optional: modules without C-Mount	
Power supply	Standard: IR-cut-off filter integrated in C-mount. Optional: clear glass	
Power consumption	Imaging modules without C-mount are shipped without any filter	
Dimensions sensor board with C-mount	8 VDC bis 33 VDC (via IEEE1394a)	
Dimensions sensor board without C-mount	4 W	
Dimensions interface board	61 mm × 71 mm	
Cable length sensor-interface board	40 mm × 50 mm	
Ambient operating temperature	70 mm × 75 mm	
Control software	Standard: 25 mm Optional: 12,7 mm	
PC Requirements	+5 °C ... +35 °C	
	ProgRes® CapturePro, TWAIN, ActiveX-Control, Software Development Kit (SDK)	
	Pentium IV, 1,6 GHz, 512 MB RAM, IEEE1394a	
	Microsoft Windows 2000 / XP / Vista	



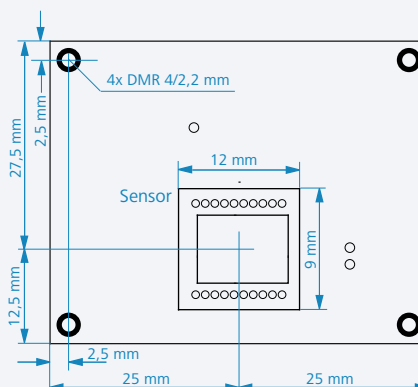
SONY ICX252AQ:
Relative spectral sensitivity
(CCD, without optics and IR cut-off-filter)



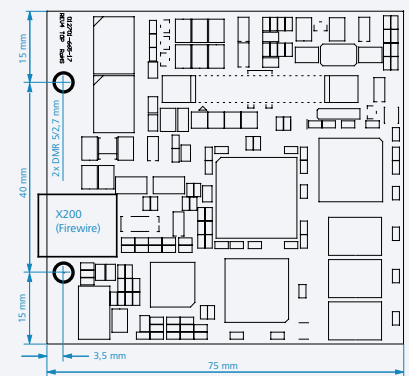
SONY ICX282AQ:
Relative spectral sensitivity
(CCD, without optics and IR cut-off-filter)



Dimensions sensor board
mounted on C-mount



Dimensions sensor board
without C-mount



Dimensions interface board

It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.