M3-CYL

CMOS | SONY IMX421 | GLOBAL SHUTTER | HDR MODEL

Ideal for use in any laboratory or industrial setting, Pixelink cameras let you capture high-quality images with your existing microscope equipment. We will work with you to choose and integrate the optimal USB 3.0 camera for your microscopy project. Our microscope cameras and associated software are designed to offer consistent, superior quality image acquisition and performance.

KEY FEATURES

2.8 MP CMOS

141 fps

4.5 µm

11mm

2/3”

12-BIT

COLOR

MONO

USB 3

USB3 VISION

TYPICAL APPLICATIONS

- Live Cell Imaging
- Microbiology
- Cell Analysis
- Vision Correction
- Packaging
- Measurements
- Inspection
- Paint Analysis
- Dirt Analysis

Pixelink AMETEK

1.833.247.1211 (North America)
+1.613.247.1211 (International)

www.pixelink.com

Technical Specifications M3-CYL

SENSOR

Sensor	Sony IMX421
Type	CMOS Global Shutter
Resolution	2.8 MP (1936 x 1464)
Pixel Pitch	4.5 µm x 4.5 µm
Active Area	11 mm diagonal

PERFORMANCE SPECIFICATIONS

FPN	<0.03% of signal
PRNU	<0.4% of signal
Dynamic Range	72 dB
Bit Depth	8-bit and 12-bit
Color Data Formats	Bayer 8, Bayer 12 Packed, Bayer 16 and YUV422
Mono Data Formats	Mono 8, Mono 12 Packed & Mono 16

FRAME RATES

Resolution	Free Running
1936 x 1464	141.1 fps
1280 x 1024	203 fps
640 x 480	403.8 fps

* Frame rates will vary based on host system and configuration.
** Above calculations are based on fixed frame rate mode & 8-bit pixel depth.

INTERFACES

Interface | Data Rate	USB 3.0 | Micro-B | 5Gbps
Trigger	Software

MECHANICALS

Dimensions (mm)	80.88 x Ø54.01 (without lens mount)
Weight (g)	218.5 (without optics)
Mounting	C-Mount

ENVIRONMENTAL & REGULATORY

Compliance	FCC, CE & RoHS
Operating Temperature	0°C to 50°C
Storage Temperature	-45°C to 85°C

SOFTWARE

Pixelink Capture	Control & operate multi-camera
Pixelink SDK	Software Development Kit
Pixlink µScope	Acquisition, analysis & reporting
3rd Party U3V Vision Applications	

COMPUTER & OPERATING SYSTEM (minimum requirements)

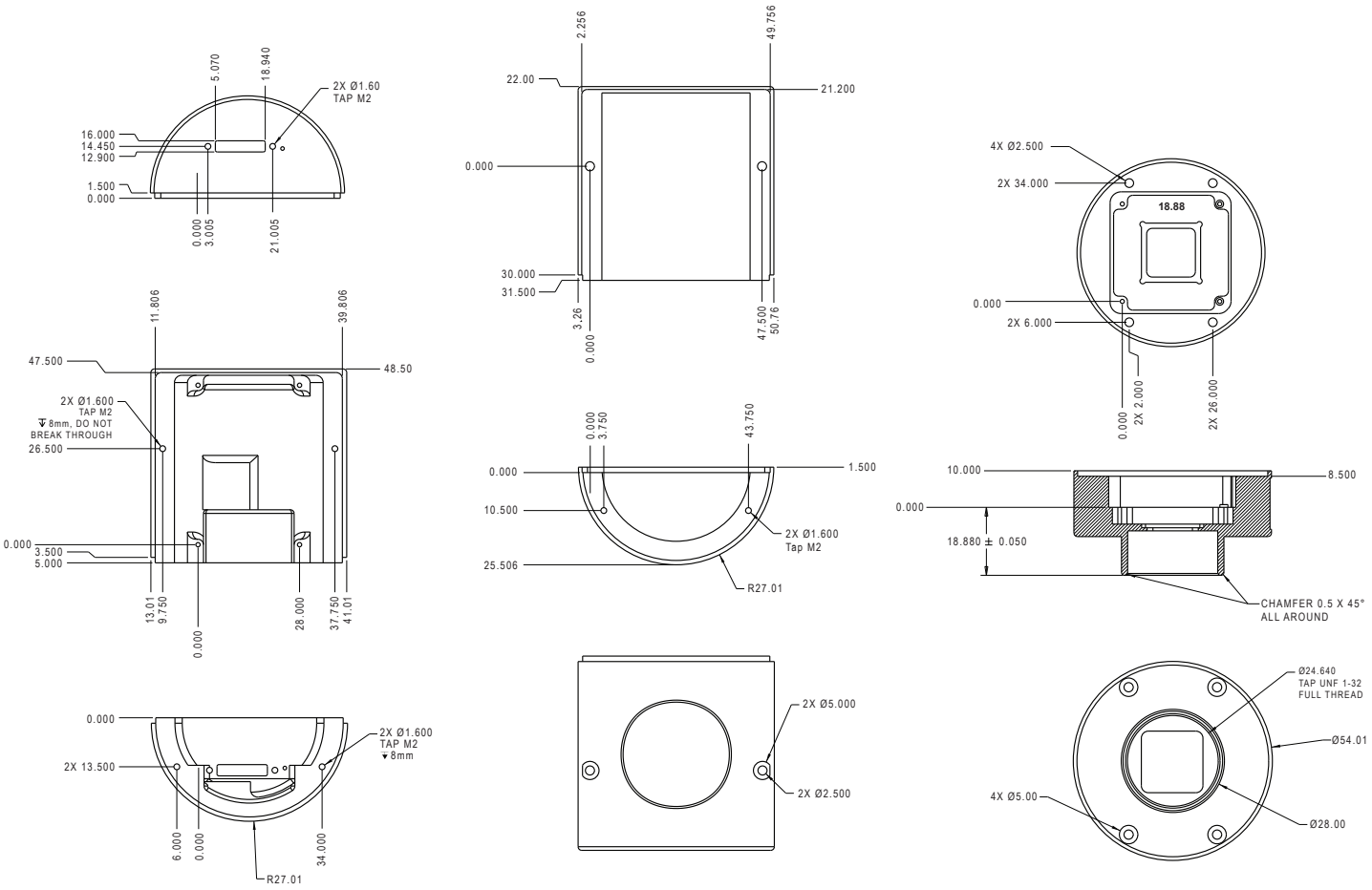
	Windows	Linux x86	Linux ArmV7	Linux ArmV8
Processor	Intel i5	Intel i5	Arm 7 (32 bit)	Arm8 (64 bit)
Memory	4GB recommended	4GB recommended	2GB	2GB
Hard Drive	150 MB	150 MB	50 MB	50 MB
Operating System	Windows 7/8/10	Ubuntu 16.04 18.04 20.04 22.04	Ubuntu 16.04 18.04	Ubuntu 16.04 18.04 20.04 22.04

POWER REQUIREMENTS

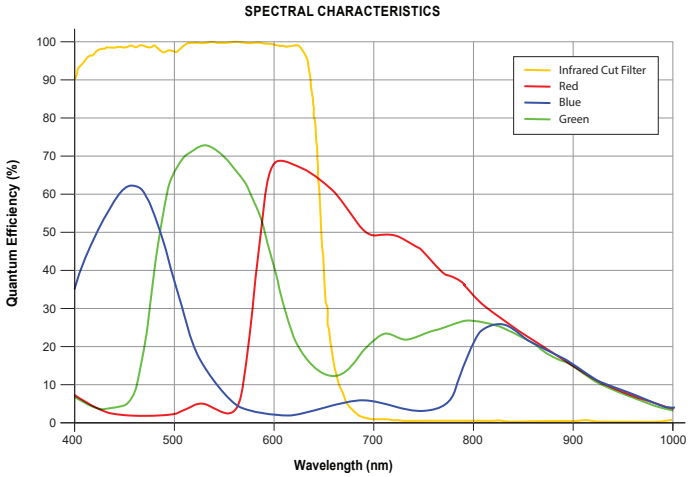
Voltage Required	5V DC (from USB connector)

Mechanicals & Responsivity Curves M3-CYL

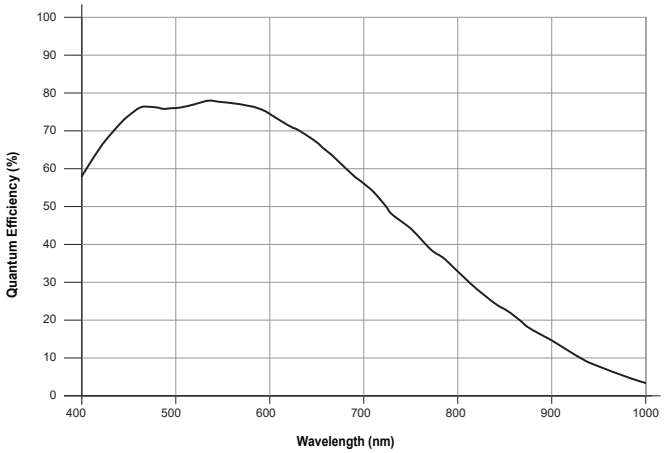
Mechanical Drawing



Responsivity Curve - Color



Responsivity Curve - Color



Industry Leading Software

PIXELINK µSCOPE

Pixelink µScope is a software tool developed for the Microscopy marketplace. It gives users the ability to quickly and easily capture, measure and enhance images. In addition to this it can also correlate image data effectively and output data in a format that can be further analysed by other software packages.

Pixelink µScope Essentials (ES) software is an easy-to-use robust image capture tool optimized for productivity. Pixelink µScope Standard (SE) Software has added features, making it a highly productive image capture tool for microscope. Pixelink µScope Pro (PRO) Software is for users needing more advanced tools for their microscopy requirements. This feature-rich applications includes tools such as z-axis, extended focus imaging, shading correction, and reflected light subtraction.

PIXELINK SDK

Providing full control of all camera functions, the Pixelink Software Development Kit (SDK) is the software package of choice for developers and system integrators who are integrating Pixelink cameras into their applications. The Pixelink SDK provides access to the full Pixelink Application Programming Interface (API) and provides sample applications, wrappers for many 3rd party controls, such as LabVIEW, along with full documentation.

The Pixelink SDK is compatible with Microsoft Windows and popular Linux platforms. When using the Pixelink SDK, developers can integrate Pixelink cameras into their applications with ease.

PIXELINK CAPTURE

Pixelink Capture is powerful multi-camera software application designed to configure “n” number of cameras and stream “n” number of cameras simultaneously in real-time high-quality video viewed in a multi-window environment. It offers options for complex image enhancements such as exposure control and filtering, in addition to multi-camera application testing and configuration.

Pixelink Capture features allows you to measure supporting point, line, circle, rectangle, polyline and polygon measurements while determining pixel location. The user can review and adjust data before exporting the findings to an Excel spreadsheet for further analysis.

Pixelink Capture also has integrated lens control (zoom & focus) for Navitar motorized lenses and accurate autofocus options for Navitar motorized fine focus mechanisms.

AVAILABLE CONFIGURATIONS

M3C-CYL
M3C-KIT-CYL
M3C-SE-CYL
M3C-PRO-CYL
M3M-CYL
M3M-KIT-CYL
M3M-SE-CYL
M3M-PRO-CYL

INCLUDED SOFTWARE

KIT= µScope Essentials
SE= µScope Standard
PRO= µScope Professional

HOUSING

CYL = Cylindrical Case

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