

Pixelink®

A NANITAR COMPANY

M15

CMOS | ON SEMI MT9F002 | ROLLING SHUTTER

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

15MP CMOS	13 FRAMES Per Sec.	1.4µm	7.93mm	Sensor Size 1/2.3"
12 BIT	COLOR	USB 3	USB VISION	

TYPICAL APPLICATIONS

Live Cell Imaging
Microbiology
Cell Analysis
Vision Correction

Packaging
Measurements
Inspection
Paint Analysis & Dirt Analysis

TECHNICAL SPECIFICATIONS

SENSOR

Sensor	On Semi MT9F002
Type	CMOS Rolling Shutter
Resolution	15 MP (4608 x 3288)
Pixel Pitch	1.4 μm x 1.4 μm
Active Area	7.93 mm diagonal
Peak QE	57% @ 535nm

PERFORMANCE SPECIFICATIONS

FPN	< 1% of signal
PRNU	< 2% of signal
Dynamic Range	60.5 dB
Bit Depth	8 or 12-bit
Color Data Formats	Bayer 8, Bayer 12 Packed, Bayer 16 & YUV422
Mono Data Formats	Not Applicable

FRAME RATES

Resolution	Free Running
4608 x 3288	13 fps
1280 x 1024	118.1 fps
1024 x 768	180.1 fps
Frame rates will vary based on host system and configuration	

INTERFACES

Interface Data rate	USB 3.0 Micro-B 5Gbps
Trigger Mode 0	Software

MECHANICALS

Dimensions (mm)	80.59 x Ø54.01 (without lens mount)
Weight (g)	218.5 (without optics)
Mounting	C-Mount

ENVIRONMENTAL & REGULATORY

Compliance	FCC, CE & RoHS
Shock & Vibration	300 G & 20 G (10Hz - 2KHz)
Operating Temperature	0°C to 50°C
Storage Temperature	-45°C to 85°C

SOFTWARE

Pixelink Capture	Capture, control, measure & operate
Pixelink SDK	Software Development Kit
Pixelink μScope	Acquisition, analysis & reporting
3rd. Party U3V Vision Applications	

COMPUTER & OPERATING SYSTEM

	Windows	Linux x86	Linux ArmV7	Linux ArmV8
Processor	Intel i5 or better	Intel i5 or better	Arm7 (32 bit)	Arm8 (64 bit)
Memory	4GB recommended	4GB recommended	2GB	2GB
Hard Drive Space	150 MB	150 MB	50 MB	50 MB
Operating System	Windows 7/8/10	Ubuntu 14.04/16.04 Desktop	Ubuntu 14.04/16.04	Ubuntu 14.04/16.04

POWER REQUIREMENTS

Voltage Required	5V DC (from USB connector)
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AVAILABLE CONFIGURATIONS

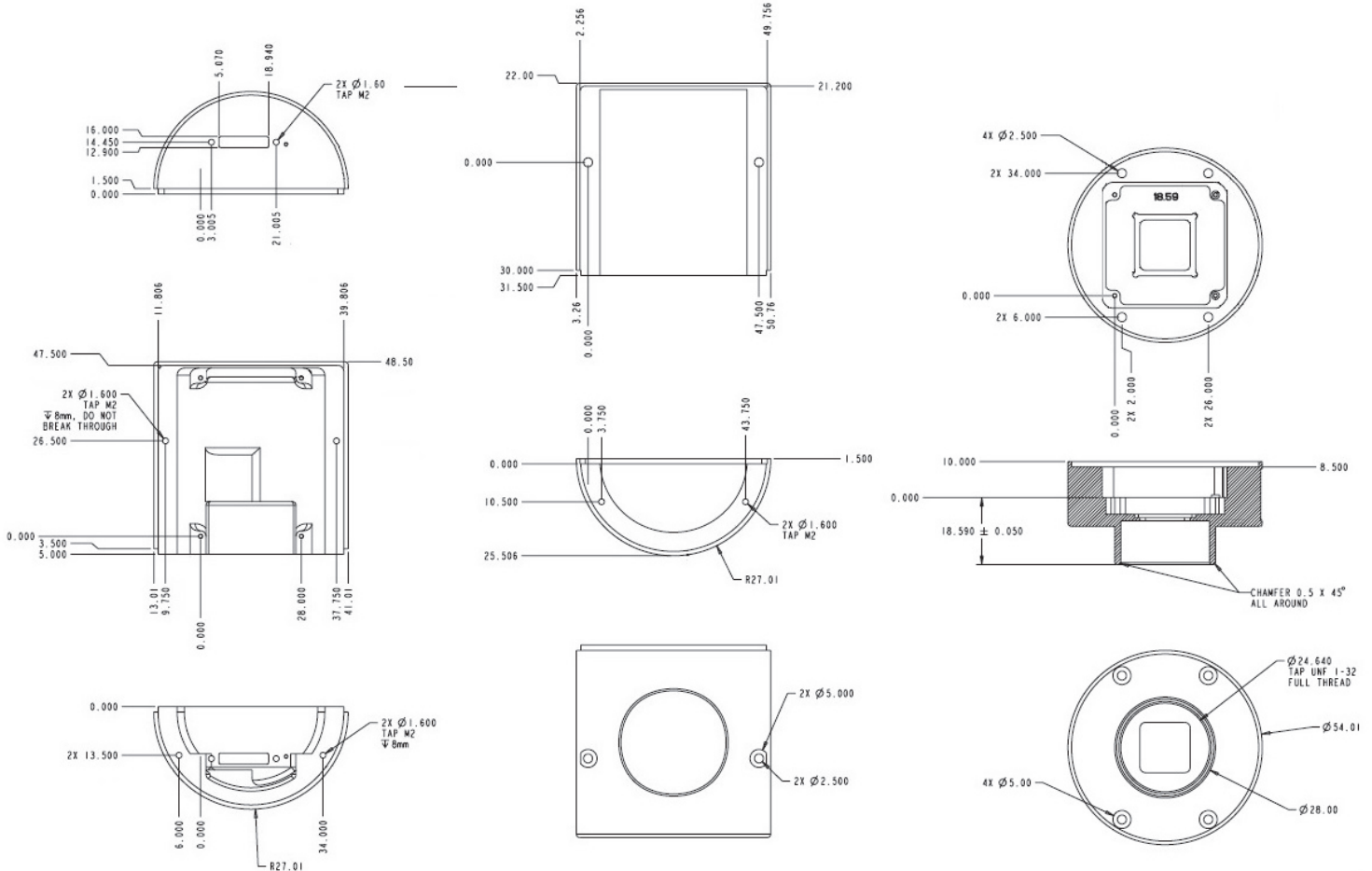
M15C-CYL
M15C-KIT-CYL
M15C-SE-CYL
M15C-PRO-CYL

Housing
CYL = Cylindrical Case

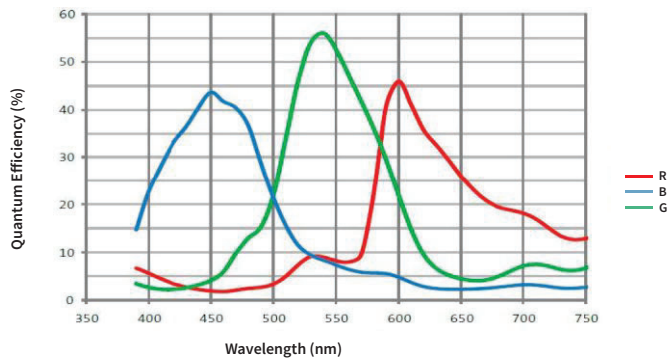
Software Included
KIT = μScope Essentials
SE = μScope Standard
PRO = μScope Professional

MECHANICAL DRAWINGS & RESPONSIVITY CURVES

MECHANICAL DRAWINGS



RESPONSIVITY CURVE - COLOR



PIXELINK'S INDUSTRY LEADING SOFTWARE

PIXELINK μ SCOPE

Pixelink μ Scope 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 the data in a format that can be further analysed by other software packages.

Pixelink μ Scope Essentials (ES) Software is an easy-to-use robust image capture tool optimized for productivity. **Pixelink μ Scope Standard (SE)** Software has added features, making it a highly productive image capture tool for microscopy. **Pixelink μ Scope Pro (PRO)** Software is for users needing more advanced tools for their microscopy requirements. This feature-rich application 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 Developers 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 custom applications with ease.

PIXELINK CAPTURE

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

Pixelink Capture also provides features to measure supporting; point, line, circle, rectangle, polyline and polygon measurements while determining pixel location. After creating spatial calibration, the user can then review and adjust 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.

For more information on Pixelink μ Scope, the Pixelink SDK and/or Pixelink Capture visit www.pixelink.com.