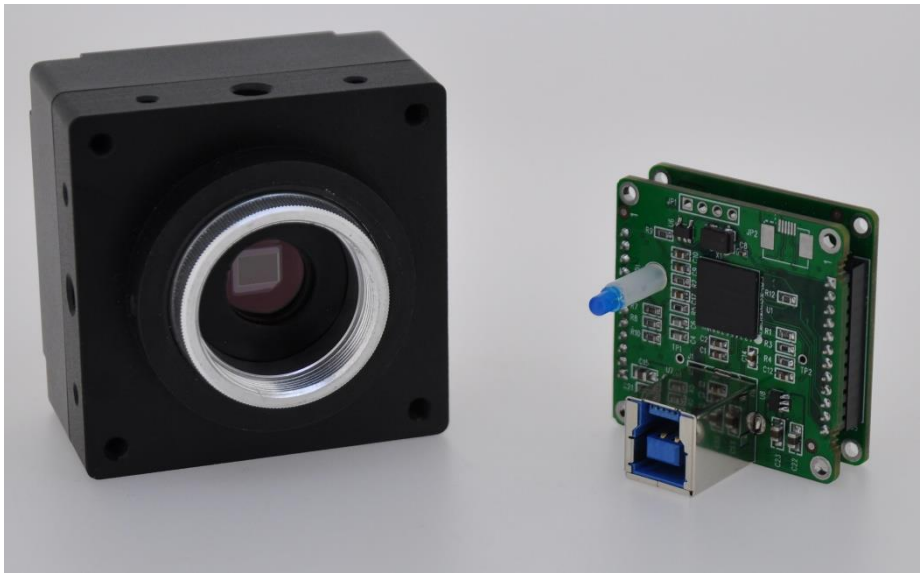
Gauss3 Series USB3.0 Industrial Digital Cameras



Introduction

Gauss3 series USB 3.0 industrial digital cameras adopt the latest USB3.0 technology, the speed is much faster than USB2.0 digital cameras. Gauss3 series digital cameras can be widely used in machine vision and a variety of image acquisition areas.

Feature

1. USB3.0 High-speed interface, Bandwidth is 5Gb/s, plug and play, no need external power supply;
2. Support more cameras work together, allows 4 cameras work with one PC at maximum speed;
3. Users can program to control white balance area and exposure area;
4. Separate image capture and preview, support high-speed preview, high-quality acquisition; Support SKIP2/SKIP4 extraction modes, the image frame rate multiplied after the extraction;
5. Support Opto-isolated external trigger interface GPIO;
6. Provide completed API for users' secondary development, support VC, VB, C#, DELPHI development language and Labview, Opencv, Mil and Halcon software;
7. Support Windows XP, WIN 7, WIN 8, WIN 10 32&64 bit operation systems, driver for Linux-Ubuntu can be customized;
8. Precision aluminum alloy shell, size 54×54×45mm, weight 165g;
9. USB3.0 cable comes with fixing screws;
10. Support C-mount interface and M12 interface customize lens.

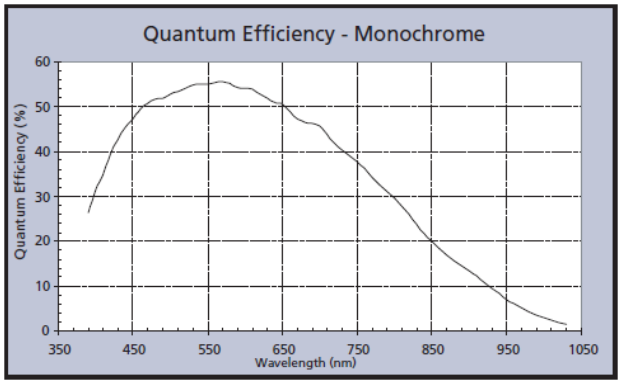
Application

Gauss3 series USB3.0 industrial cameras are mainly designed for machine vision and various image acquisition areas. They can be used for Gel imaging, License image capture, Medical diagnosis, Microscopy imaging, Notes image capture, Industrial production line image capture, Fingerprint & palmprint image capture, Desktop image, High speed vehicle license plate capture, Outdoor Monitoring, iris capture and etc..

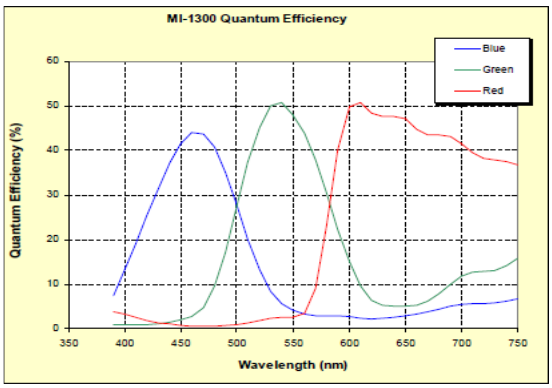
Specification

Model	U3C130M/C(MRYNO)	U3C320C(MRYNO)	U3C500M/C(MRYNO)
Sensor Model	Aptina MT9M001	Aptina MT9T001	Aptina MT9P031
Color/Mono	Mono/Color	Color	Mono/Color
Sensor Type	CMOS	CMOS	CMOS
Scan Mode	Progressive Scan	Progressive Scan	Progressive Scan
Shutter	Rolling Shutter	Rolling Shutter	Rolling Shutter
Sensor Size	1/2 inch	1/2 inch	1/2.5 inch
Pixel Size	5.2×5.2μm	3.2×3.2μm	2.2×2.2μm
Max Resolution	1280 × 1024	2048 × 1536	2592 × 1944
Frame Rate	30fps	12fps	14fps
Point Frequency	48MHz	48MHz	48MHz
SNR	45dB	43dB	38.1dB
Dynamic Range	68.2dB	61dB	70.1dB
Sensitivity	1.8V/lux-sec	1V/lux-sec	1.4V/lux-sec
Image Output	USB3.0, Bandwidth 5Gb/s		
Power Supply	USB3.0 Power Supply, 300～500mA@5V		
GPIO Control	1 channel external trigger input, 1 channel flash output		
Main Function	Image preview, image capture (bmp,jpg,tiff), video capture(compressor is optional)		
Programmable Control	Preview FOV AOI, Capture FOV AOI, SKIP/Binning mode, Contrast, Brightness, Saturation, Gamma value, color gain, exposure, dead pixels remove, focus evaluation, custom serial number (0 to 255)		
White Balance	Auto / Manual		
Exposure	Auto / Manual		
Image Format	Support 8bit, 24bit, 32bit Image Preview and Capture, Save as “Jepg”, “Bmp”, “Tiff” format (mono cameras support 8bit bitmap)		
Driver Support	ActiveX, Twain, DirectShow,VFW		
Operation System	Windows XP/VISTA/7/8/10 32&64 bit, Linux-Ubuntu 32&64 bit, ARM Linux		
SDK	Support VB, VC, C#, DELPHI developing Language, LABVIEW, OPENCV, HALCON, MIL third-party machine vision software		
Lens Port	C-mount/CS-mount		
Working Temperature	0°C~60°C		
Storage Temperature	-30°C~70°C		
Camera Dimension	54mm(height)×54mm(width)×45mm(length)		
Module Dimension	39mm(height)×39mm(width)×25.9mm(length)		
Camera Weight	Camera is 165g, Module is 30g		
Accessories	Color cameras come with IR cut filter(mono camera does not have filter), 3m USB cable with fixing screws, 1 CD with software and SDK.		

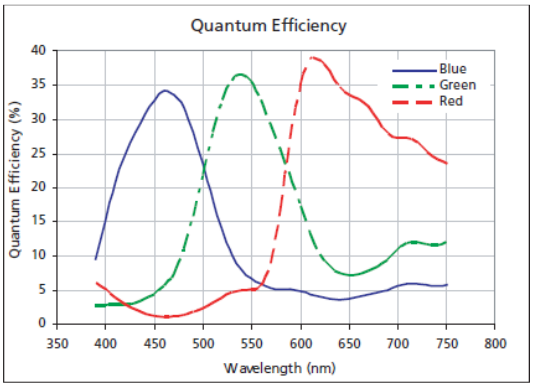
Spectral Response Curve



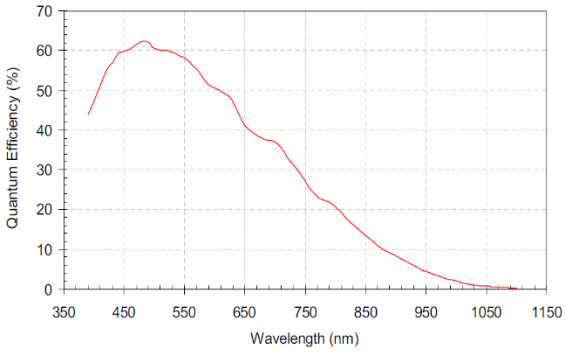
U3C130M(MRYNO)



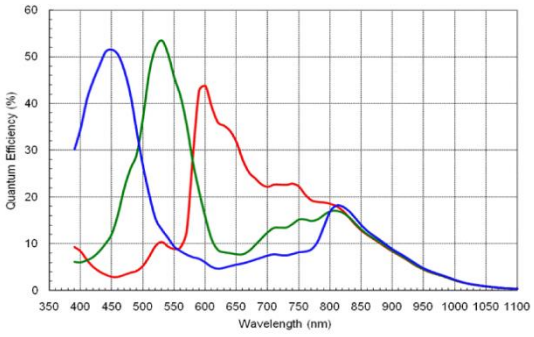
U3C130C(MRYNO)



U3C320C(MRYNO)

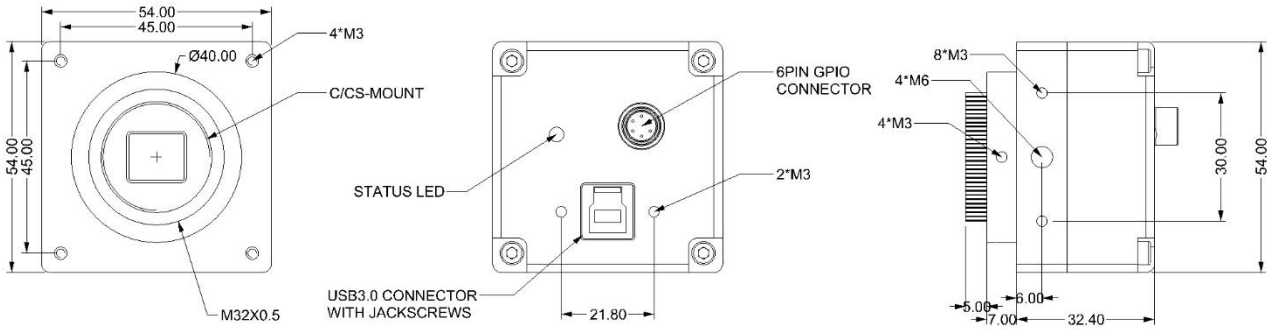


U3C500M(MRYNO)

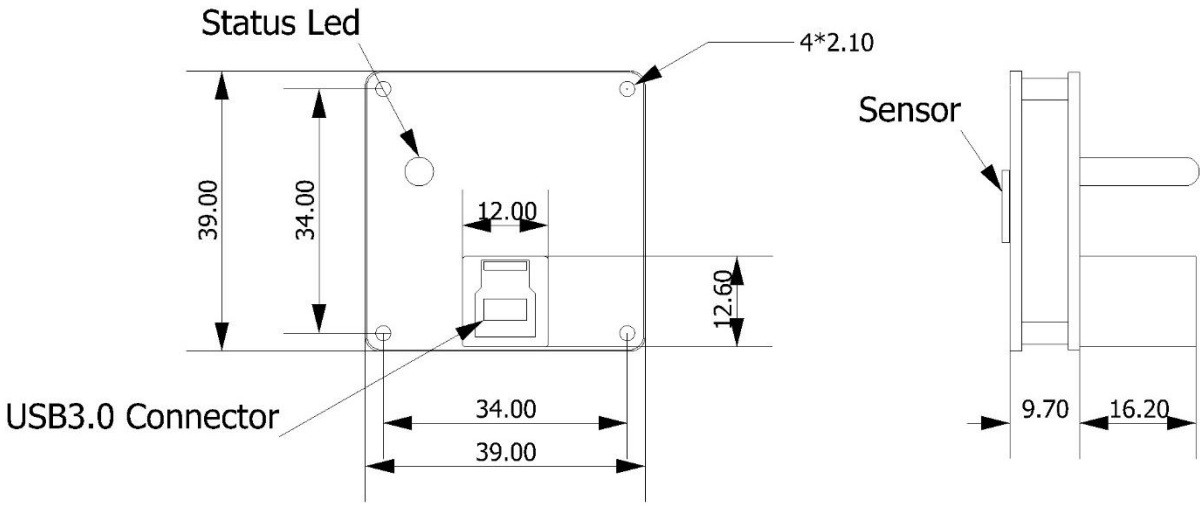


U3C500C(MRYNO)

Dimension



Camera Dimension



Module Dimension