

FEATURES

- Supports simultaneous shootings by external triggered flash.
- The camera comes with programmable IO.
- Supports Linux and ARM Linux operating systems, can be integrated into embedded devices.
- Supports 16bit grayscale and 48bit color-lossless format output.
- Multi-camera operation is very stable, no disconnection or frame loss occurs during the operation.
- Fully compatible with GigE camera's SDK for seamless replacement.
- Compatible with Vision protocol, seamlessly compatible with vision software such as Halcon, VisionPro, Labview.



SPECIFICATIONS

Parameter	Model	MV-AU502RC	MV-AU502RM
Sensor		1/2.5" CMOS	
Shutter		Rolling	
Color/Mono		Color	Mono
Pixel Size		2.2X2.2 μm	
Resolution		5MP	
Frame rate		2592X1944@59FPS	
Pixel bit depth		10bit	
Sensitivity		18.8 ke-/lux*sec	36 ke-/lux*sec
GPIO		1 trigger input, one flash control output; 1 GPO output	
Synchronization		Continuous/software trigger/hardware trigger	
Maximum gain		15	
Exposure time(ms)		0.0084~553.4	
Filter		650nm infrared cut-off filter is standard	Standard double-sided AR anti-reflection film
Frame buffer		128M Bytes	
Camera custom data		2K Bytes	
Video output format		Bayer8	Mono8
visual standard protocol		USB3 Vision 1.0、GenICam	
Lens mount		C	
Data interface		USB3.0 TYPE B	
Power supply		5V, USB Bus power supply	
Power		<3W	
Dimensions		29 (mm) X29 (mm) X32.7 (mm) (Excluding the lens base and rear case interface)	
Weight		<75g	
Working temperature		0~50°	
Storage temperature		-30~60°	
Operating system		WINXP, WIN7/8/10 32-bit & 64-bit systems, Linux and ARM Linux drivers, Android platform drivers, MAC OS systems	
Drivers		Directshow component Halcon Dedicated Component Labview Dedicated Driver OCX Component TWIN component	
Programming language package		C/C++/C#/VB6/VB.NET/Delphi/BCB/Python/Java	
Other functions		Support arbitrary size ROI custom resolution, contrast and gamma adjustment, saturation adjustment, white balance correction, black level correction, custom dead point coordinate correction, ISP image processing acceleration, 3D noise reduction, custom LUT table, frame rate adjustment, custom camera name, etc	

SPECTROGRAMS

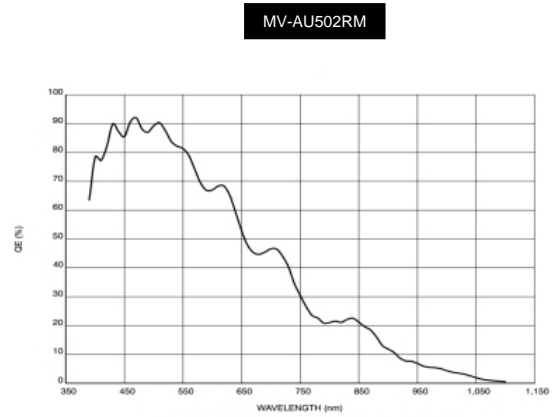
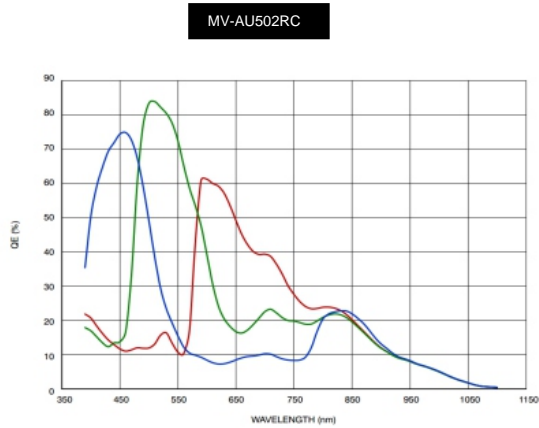
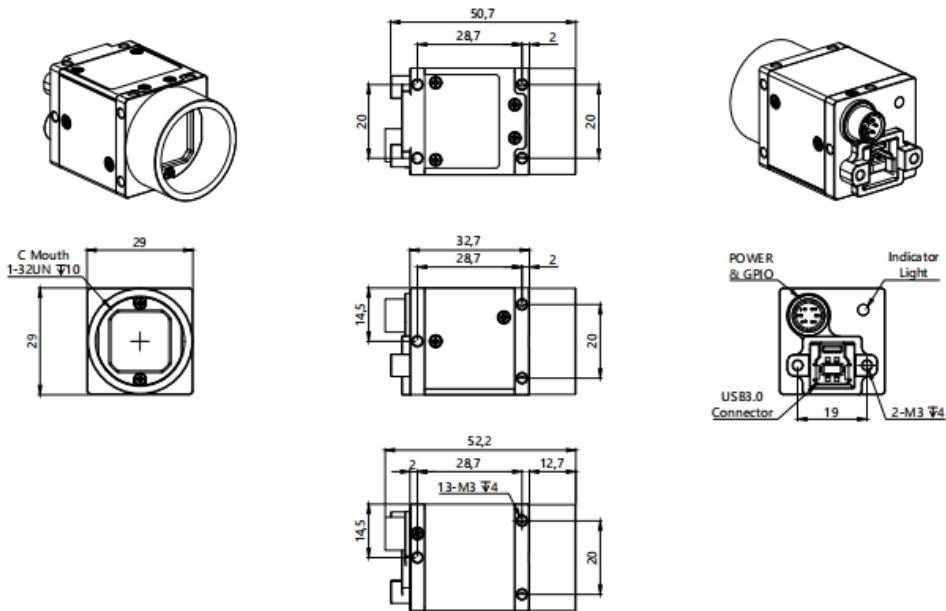


Figure 20. AR0521 Mono Quantum Efficiency vs. Wavelength

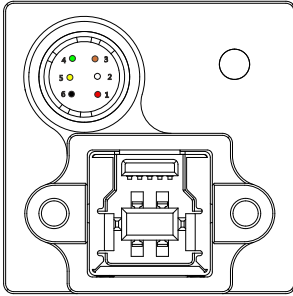
DIMENSIONS(Unit: mm)



SUA / SUF camera tail selection table

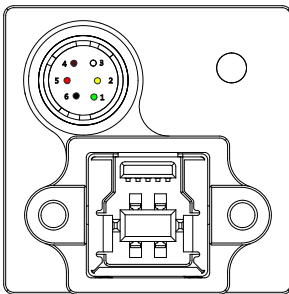
Function Suffix	Defindigram of aviation head line sequence	12VPoE	Srapnel aviation head interface	Lens interface C-mount	Lens interface CS-mount	State
-T1V-C	1	●	●	●		recommend
-T	2		●		●	Plan to stop production
-T-C	2		●	●		Plan to stop production
-TV-C	3	●	●	●		Plan to stop production

Line sequence definition 1



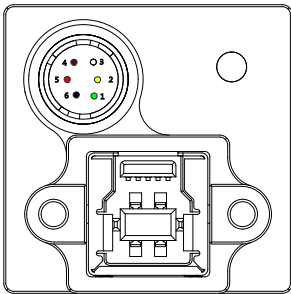
Port	Pin	Line Color	Signal Name	Signal Description	Remark
Port A	1	red	PWR12V	Camera power input positive end	
	2	white	GPI1+/TRIG_IN+	GPI1 Positive end/Trigger input positive end	The default is trigger input
	3	brown	GPI2/GPO2	GPI02 Input/output	Non-isolated bidirectional IO
	4	green	GPO1+/STRB_OUT+	GPO1 Positive end/Flash output positive end	The default output is flash
	5	yellow	GPO1-/STRB_OUT-/TRIG_IN-	GPO1Negative end/Flash output negative end/Trigger input negative end	GPIO Common negative end
	6	black	PWRGND	Camera power input negative end	

Line sequence definition 2



Pin	Line Color	Signal Name	Signal Description	Remark
1	green	GPO1+/STRB_OUT+	GPO1Positive end/Flash output positive end	The default output is flash
2	yellow	GPO1-/STRB_OUT-	GPO1Negative end/Flash output negative end	The default output is flash
3	white	GPI1+/TRIG_IN+	GPI1Positive end/Trigger Input positive end	The default is trigger input
4	brown	GPI1-/TRIG_IN-	GPI1Negative end/Trigger input negative end	The default is trigger input
5	red	GPO2+	GPO2Positive end output	
6	black	GPO2-	GPO2Negative end output	

Line sequence definition 3



Port	Pin	Line Color	Signal Name	Signal Description	Remark
Port A	1	green	GPO1+/STRB_OUT+	GPO1Positive end/ Flash output positive end	The default output is flash
	2	yellow	GPO1-/STRB_OUT-	GPO1Negative end/ Flash output negative end	The default output is flash
	3	white	GPI1+/TRIG_IN+	GPI1Positive end/ Trigger Input positive end	The default is trigger input
	4	brown	GPI1-/TRIG_IN-	GPI1Negative end/ Trigger input negative end	The default is trigger input
	5	red	PWR12V	Camera power input positive end	
	6	black	PWRGND	Camera power input negative end	