MARS-6502-71X2M/C(-NF)

65MP CMOS CXP2.0 Area Scan Camera

MARS-6502-71X2M/C(-NF) camera is equipped with Gpixel GMAX3265 CMOS sensor and uses CoaXPress interface for high-speed transmission of image data, featuring high quality images, low power, high transmission speed, stable operating capability.

Applications

Suitable for machine vision applications such as consumer electronics, industrial inspection, medical, scientific research, education and so on.

Features

- PRNU, DSNU, FFC, Hot Pixel Correction, Static Defect Correction
- The Sequencer Control supports parameter configuration of exposure, gain, and FFC up to 16 groups
- Color models support Light Source Preset, Color Transformation Control and Saturation
- Gamma, Sharpness, Timer, Counter, LUTs and User Set Control
- DAHENG IMAGING or third-party frame grabbers are available

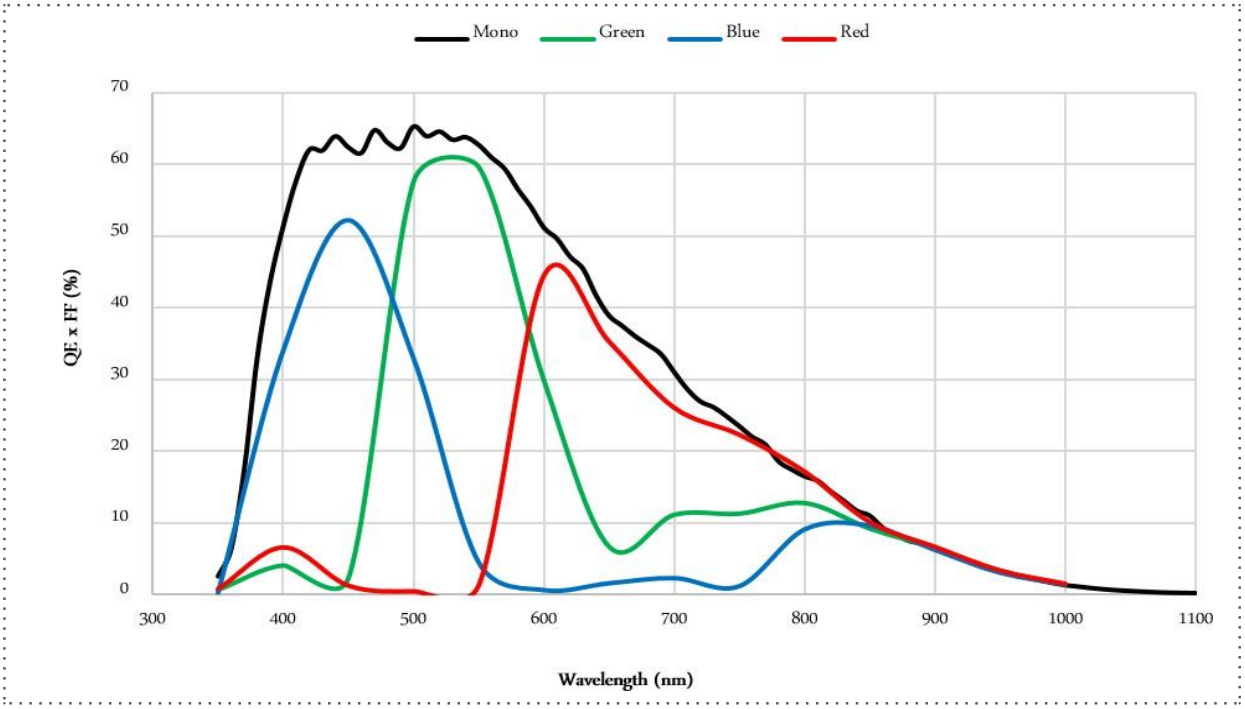
Specifications

Model	MARS-6502-71X2C(-NF)	MARS-6502-71X2M(-NF)
Resolution	9344(H) × 7000(V)	
Sensor	Gpixel GMAX3265 65MP Global shutter CMOS	
Sensor Format	29.9mm × 22.4mm	
Pixel Size	3.2μm × 3.2μm	
Frame Rate	71.1 fps	
ADC	10 bit	
Pixel Bit Depth	8 bit, 10 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer GB8 / Bayer GB10	Mono8 / Mono10
SNR	40.2 dB	40.4 dB
Exposure Time	13μs~1s, Actual Steps: 1 row period	
Gain	Digital Gain: 0dB~16dB; Default: 0dB, Steps: 0.1dB Analog Gain: 0.75dB~1.25dB; Default: 1.25dB, Steps: 0.25dB	
Binning	1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Decimation	Horizontal FPGA, Vertical Sensor: 1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Synchronization	Hardware trigger, software trigger	
Acquisition Control	Single frame, Continuous, Software trigger, Hardware trigger, CXP trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	1 input and 1 output with opto-isolated, 1 bidirectional GPIO, 1 RS232	
Data Interface	CXP-12 × 4 (HDBNC)	
Power Supply	24 VDC or PoCXP	
Power Consumption	Typ.: 16W@24V, ambient temp. 25°C, FAN (ON) 14W@24V, ambient temp. 25°C, FAN (OFF)	
Operating Temp.	0°C ~ +45°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Cooling	-NF: Fan cooling	
Lens Mount	M58 / F	
Dimensions	74(W) × 74(H) × 69.8(L) mm (M58-mount), 74(W) × 74(H) × 80.55(L) mm（M58-mount with fan) 74(W) × 74(H) × 104.9(L) mm (F-mount), 74(W) × 74(H) × 115.6(L) mm（F-mount with fan)	
Weight	521 g (M58-mount), 573 g（M58-mount with fan) 615 g (F-mount), 667 g（F-mount with fan)	
Software	DAHENG IMAGING or third-party frame grabbers supporting software	
OS	Win7 / Win8 / Win10 / Win11	
Conformity	CE, RoHS, FCC, ICES, UKCA, CoaXPress2.0, GenICam	

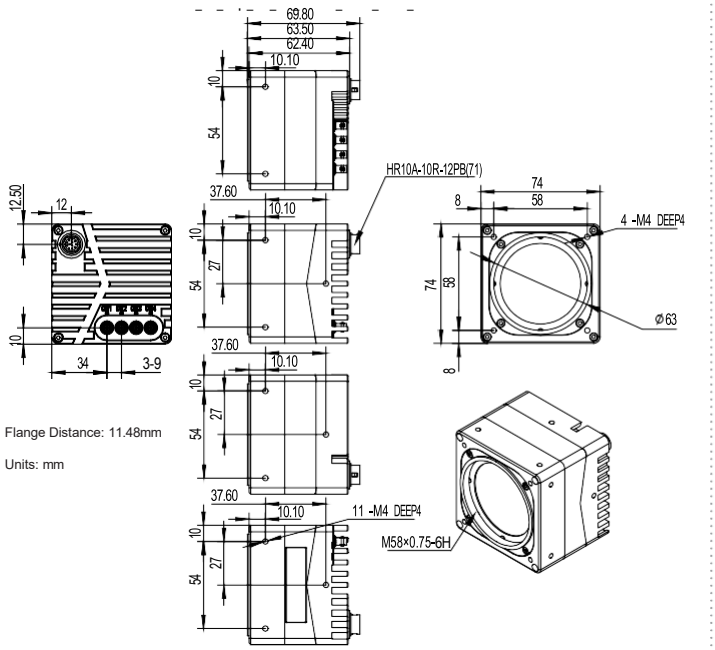
I/O Interface

PIN	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	PWR GND & GPIO GND
3	Line 0-	Opto-isolated input -
4	POWER_IN	Camera external power 24V ± 10%
5	Line 2	GPIO input/output
6	RS232 Rx	RS232 receive
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +
9	GND	PWR GND & GPIO GND
10	GND	PWR GND & GPIO GND
11	POWER_IN	Camera external power 24V ± 10%
12	RS232 Tx	RS232 transmit

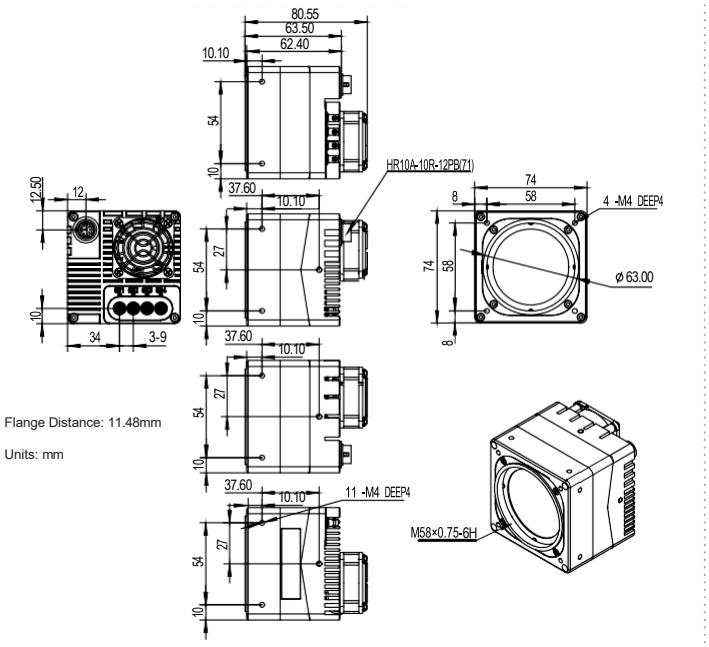
Spectral Response



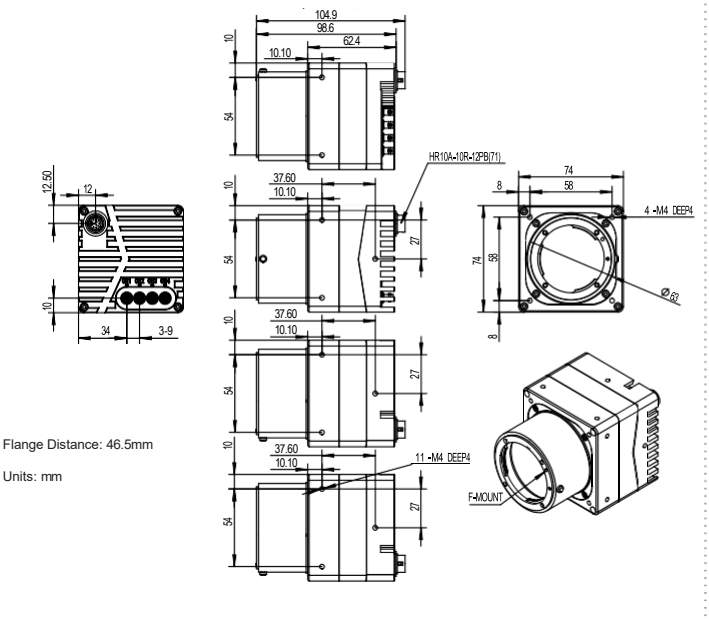
Technical Drawing



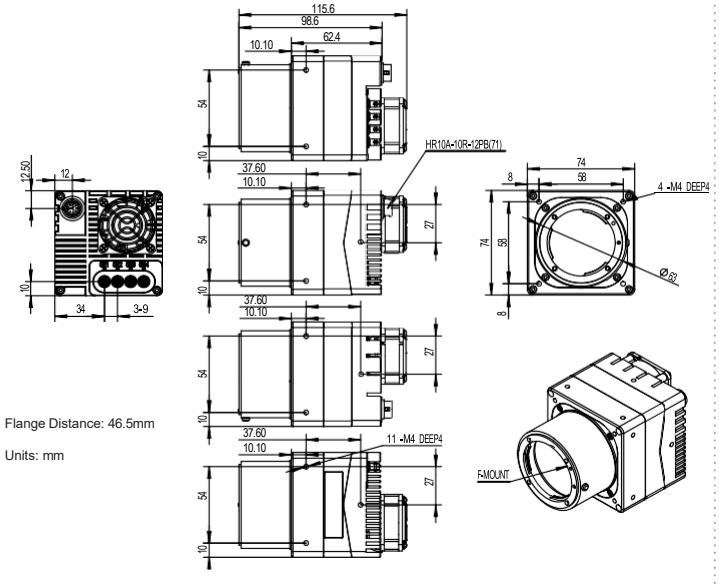
MARS-6502-71X2M/C (M58-mount)



MARS-6502-71X2M/C (M58-mount, with fan)



MARS-6502-71X2M/C (F-mount)



MARS-6502-71X2M/C (F-mount, with fan)

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