

# 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

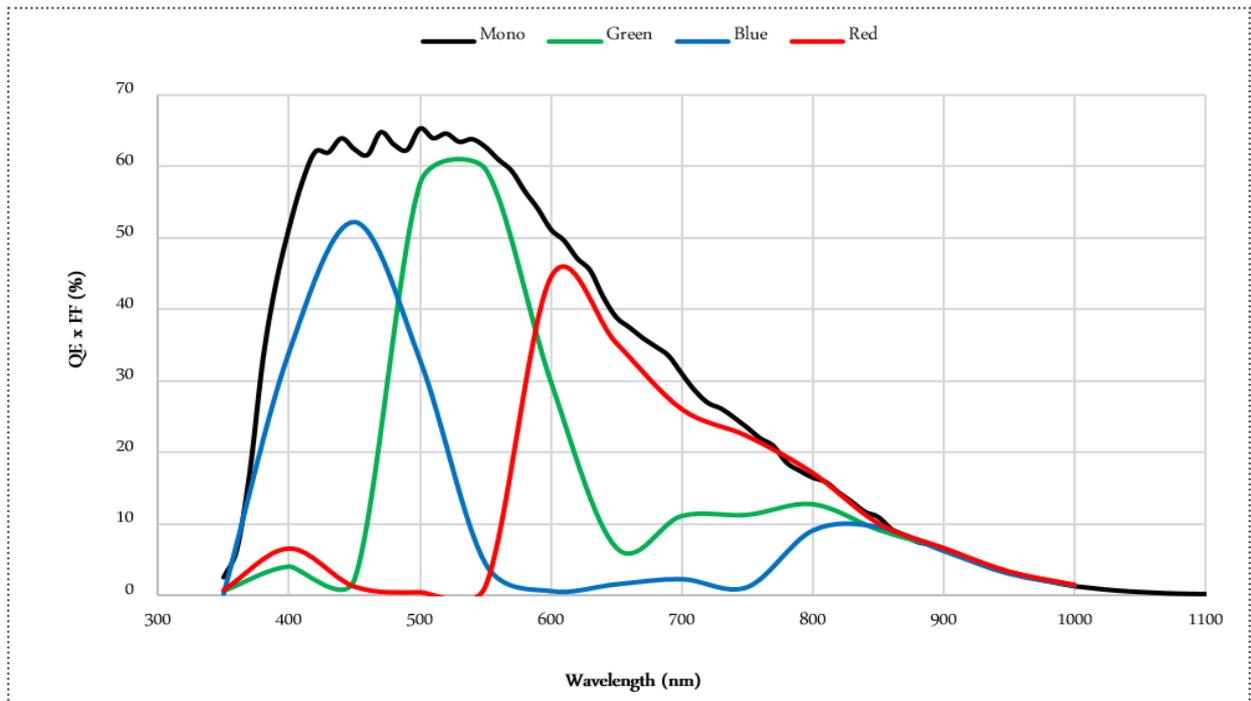
Model	MARS-6502-71X2C(-NF)	MARS-6502-71X2M(-NF)
Resolution	9344(H) × 7000(V)	
Sensor	Gpixel GMAX3265 65MP Global shutter CMOS	
Sensor Format	29.9mm × 22.4mm	
Pixel Size	3.2μm × 3.2μm	
Frame Rate	71.1 fps	
ADC	10 bit	
Pixel Bit Depth	8 bit, 10 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer GB8 / Bayer 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

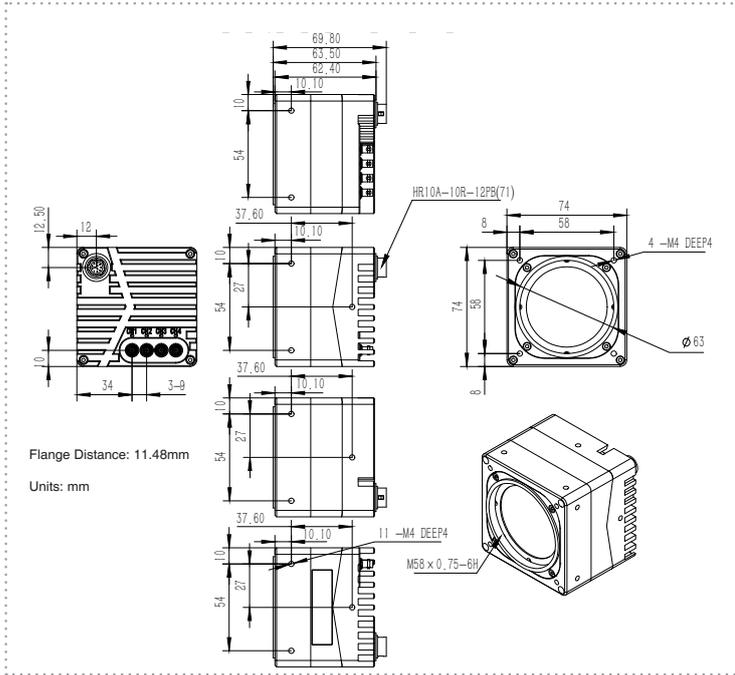


PIN	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	PWR GND & GPIO GND
3	Line 0-	Opto-isolated input -
4	POWER_IN	Camera external power 24V ± 10%
5	Line 2	GPIO input/output
6	RS232 Rx	RS232 receive
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +
9	GND	PWR GND & GPIO GND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

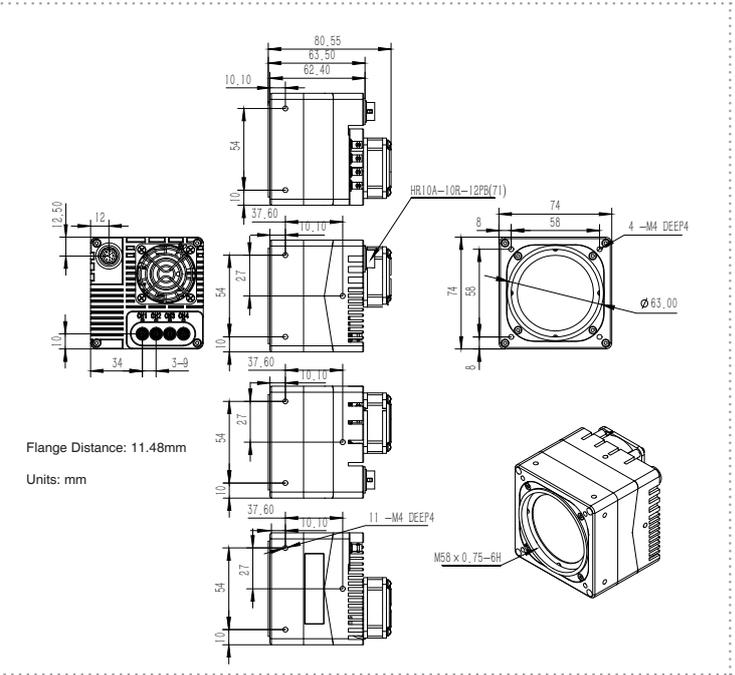
Spectral Response



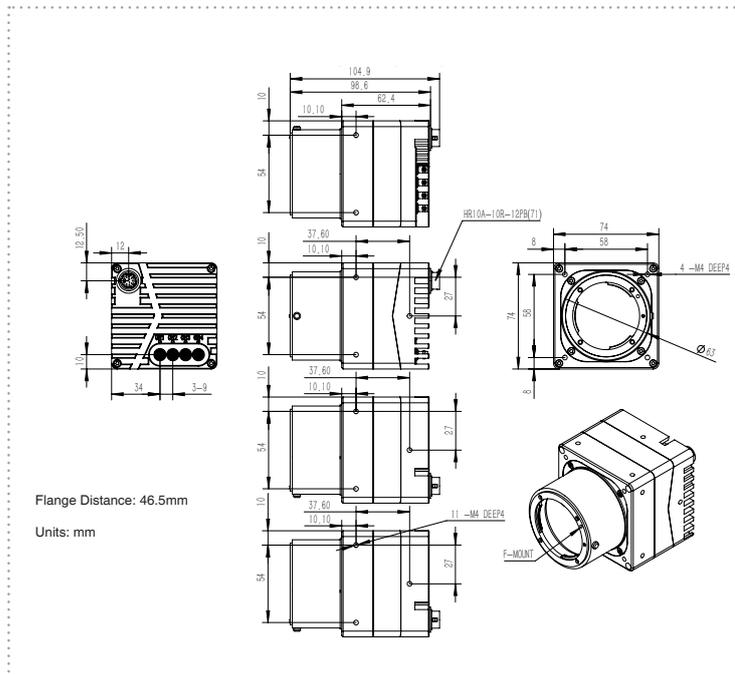
Technical Drawing



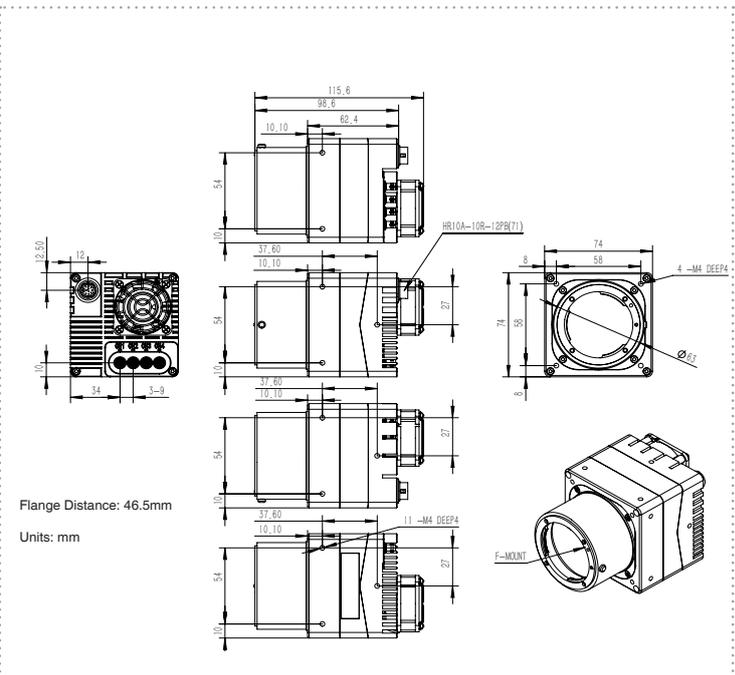
MARS-6502-71X2M/C (M58-mount)



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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