

# MARS-24600-12X2M/C-TF

246MP CMOS CXP2.0 Area Scan Camera



MARS-24600-12X2M/C-TF camera is equipped with Sony IMX811 245.76MP rolling shutter sensor and uses CoaXPress interface for high-speed transmission of image data, featuring high quality images, low power consumption, high transmission speed, stable operating capability.

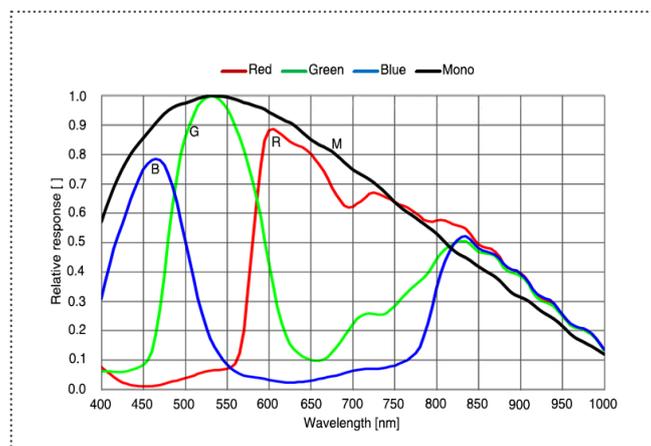
## Applications

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

## Features

- PRNU, DSNU, FFC, 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, Black Level, Timer, Counter, LUTs and User Set Control
- DAHENG IMAGING or third-party frame grabbers are available

## Spectral Response



## Specifications

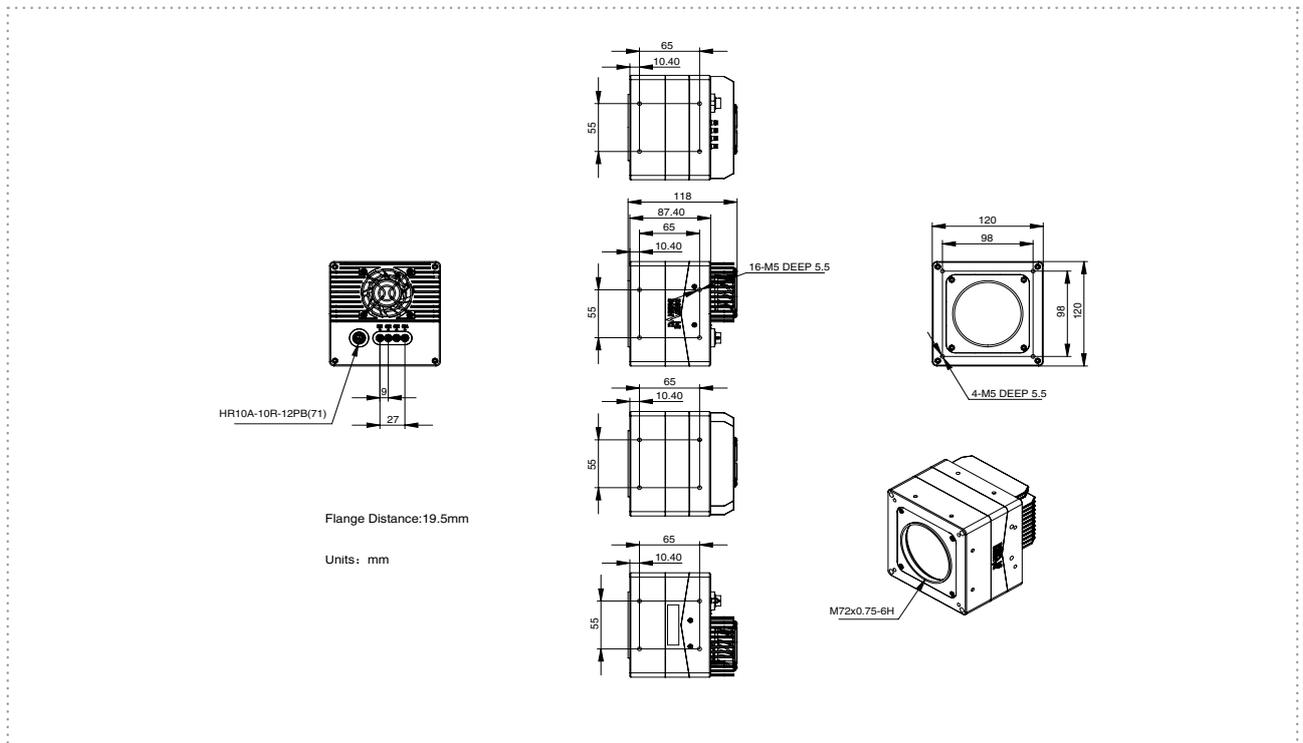
Model	MARS-24600-12X2C-TF	MARS-24600-12X2M-TF
Resolution	19200(H) × 12800(V)	
Sensor	Sony IMX811 245.76MP Rolling shutter CMOS	
Max. Image Circle	64.84 mm	
Pixel Size	2.81μm × 2.81μm	
Frame Rate	10.54fps @ 19200 × 12800	
ADC	12 bit, 14 bit, 16 bit	
Pixel Bit Depth	8 bit, 12 bit, 14 bit, 16 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG12 / Bayer RG14 / Bayer RG16	Mono8 / Mono12 / Mono14 / Mono16
SNR	43.9 dB	44.2 dB
Exposure Time	CXP12.5 × 4, Actual Steps: 4 row periods Bayer RG8: 144μs ~ 60s. Bayer RG12: 123μs ~ 60s. Bayer RG14: 144μs ~ 60s. Bayer RG16: 287μs ~ 60s	
Gain	Digital Gain: 0dB~24dB; Default: 0dB, Steps: 0.1dB Analog Gain: 0dB~16dB; Default: 0dB, Steps: 0.1dB	
Binning	Not Supported	
Decimation	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	Typical: 40.6W@24V, ambient temp. 25°C, Sensor temp. 10°C, TEC (ON), FAN (ON) 44W@Rapid cooling stage, TEC (ON), FAN (ON)	
Operating Temp.	0°C ~ +45°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Cooling	Thermoelectric Cooling (TEC) with a fan	
Lens Mount	M72	
Dimensions	120(W) × 120(H) × 118(L) mm	
Weight	2340 g	
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

Technical Drawing



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