

MARS-15100-6GTM/C-TF

151MP CMOS 10GigE Area Scan Camera



The MARS-15100-6GTM/C-TF is a monochrome/color GigE Vision camera with the Sony IMX411 CMOS sensor. The MARS-15100-6GTM/C-TF is capable of 10Gbit/s maximum transfer data rate, and has opto-isolated I/Os. The camera is equipped with TEC and cooling fan, which can effectively reduce thermal noise and generate high-quality images.

Applications

Suitable for screen display, measurement, semiconductor and other fields.

Features

- Time Stamp, Binning, Decimation, Reverse X/Y
- The Sequencer Control supports multiple sets of parameters configuration of FFC
- Trigger mode: Frame Start /Frame Burst Start
- Gain, GainAuto, Gamma, Black Level, Digital Shift, Flat Field Correction
- Color models support Light Source Preset, Color Transformation Control and Saturation
- Static Defect Correction, Hot Pixel Correction, Sharpness, Noise Reduction(Mono)
- Timer, Counter, LUTs and User Set Control
- Remove Parameter Limit to expand the range of Parameter
- Data storage area for saving algorithm coefficients and parameter configuration
- TEC+Fan Cooling

Specifications

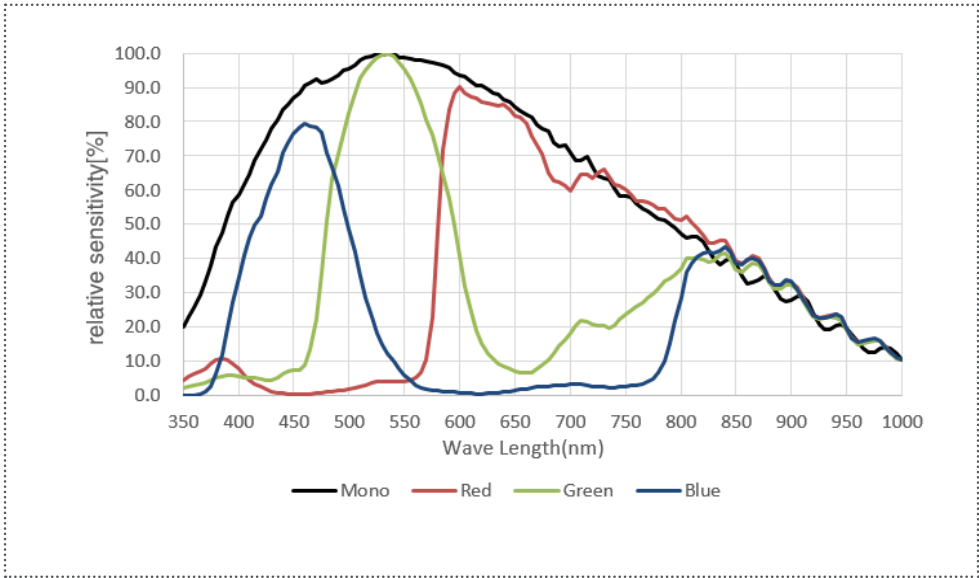
Model	MARS-15100-6GTC-TF	MARS-15100-6GTM-TF
Resolution	14192(H) × 10640(V)	
Sensor	Sony IMX411 Rolling shutter CMOS	
Sensor Format	4.2"	
Pixel Size	3.76μm × 3.76μm	
Frame Rate	6.1 fps	
ADC	16 bit, 14 bit, 12 bit	
Pixel Bit Depth	16 bit, 14 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG14 / Bayer RG16/ YUV422_8 / Mono8	Mono8 / Mono14 / Mono16
SNR	46.424 dB	46.106 dB
Exposure Time	60μs~300s, Actual Steps: 1 row period	
Gain	0dB~24dB, Default: 0dB, Steps: 0.1dB	
Binning	1×1, 1×2, 1×4, 2×1, 2×2, 2×4, 4×1, 4×2, 4×4	
Decimation	Not Supported	
Synchronization	Hardware trigger, software trigger	
Acquisition Control	Single frame, Continuous, Software trigger, Hardware trigger	
Reverse X/Y	Reverse X/Y	
I/O Interface	1 input and 1 output with opto-isolated, 1 bidirectional programmable GPIO, 1 RS232	
Data Interface	10GigE	
Power Supply	24VDC ± 10%	
Power Consumption	< 42.4W @ 24VDC	
Operating Temp.	0°C ~ +45°C	
Storage Temp.	-20°C ~ +70°C	
Operating Humidity	10% ~ 80%	
Lens Mount	M72(19.5mm), F	
Dimensions	120(W) × 120(H) × 116.3(L) mm (M72-mount), 120(W) × 120(H) × 143.38(L) mm (F-mount)	
Weight	2380 g	
OS	Win10/Win11 32bit, 64bit OS, 64bit OS is recommended	
Conformity	CE, RoHS, FCC, ICES, UKCA, GigE Vision®, GenICam®	

I/O Interface

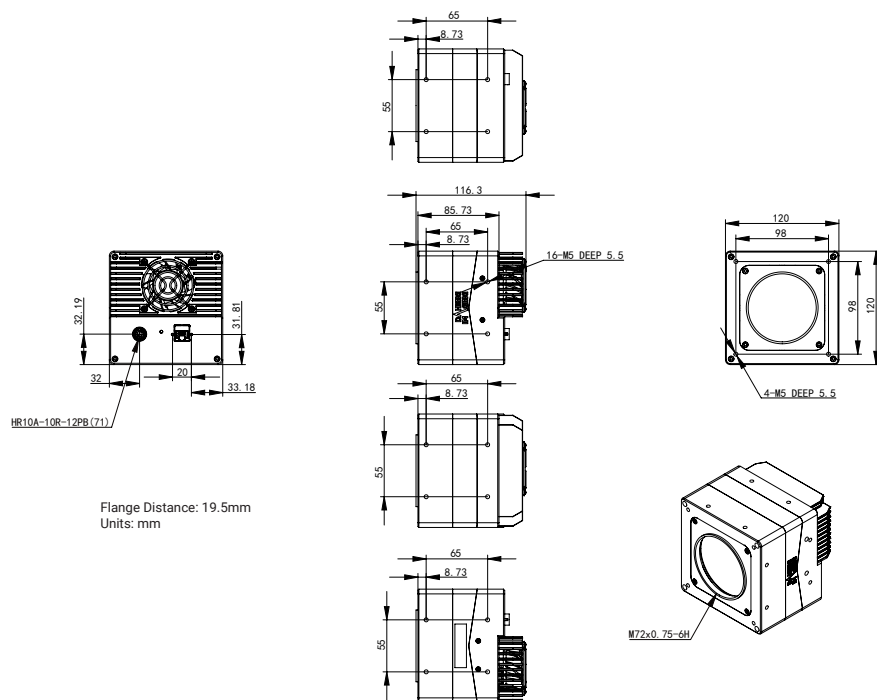


Pin	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	PWR GND & GPIO GND
3	Line 0-	Opto-isolated input -
4	POWER_IN	Camera external power 12V (-10%) ~ +24V (+10%)
5	Line 2	GPIO input/output
6	RS232 Rx	RS232 receive
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +
9	GND	PWR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

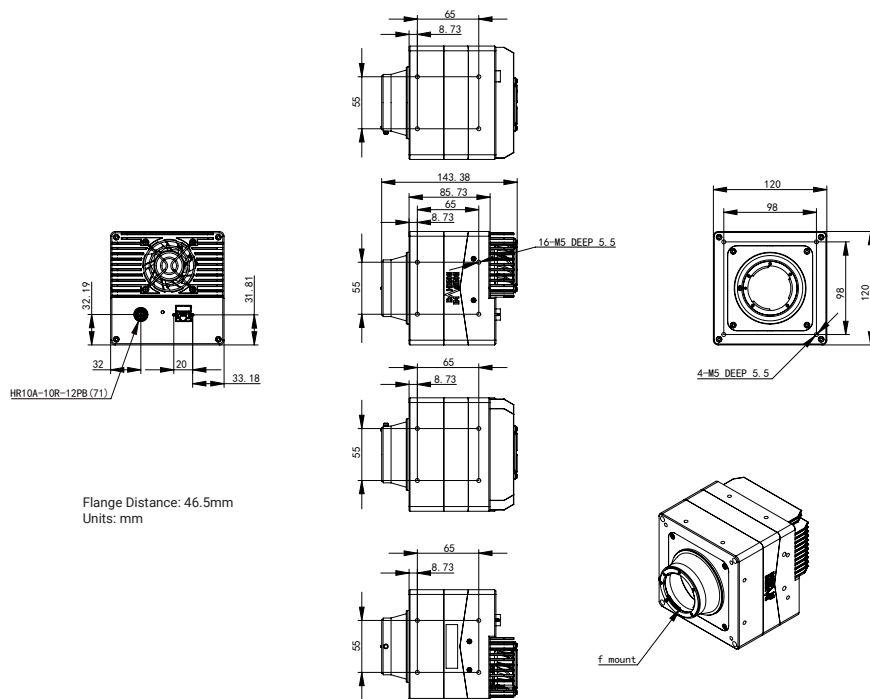
Technical Drawing



Technical Drawing



MARS-15100-6GTM/C-TF M72, M72-mount, flange distance:19.5mm



MARS-15100-6GTM/C-TF F, F-mount

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