

MARS-280-409GTM/C

2.8MP CMOS 10GigE Area Scan Camera



GEN*<i>i</i>*CAM

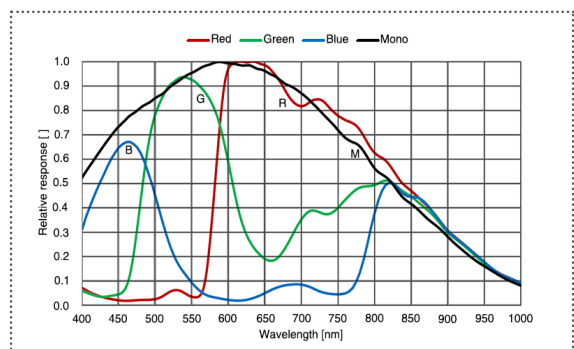


The MARS-280-409GTM/C is a monochrome/color GigE Vision camera with the Sony IMX421 CMOS sensor. The MARS-280-409GTM/C is capable of 10Gbit/s maximum transfer data rate, and has opto-isolated I/Os. Thanks to locking screw connectors, the MARS cameras can secure the reliability of cameras deployed in harsh environments. The MARS cameras are industrial cameras with high reliability and high performance ratio.

Applications

Suitable for 3C, lithium battery, photovoltaic, railway, AR and other industrial applications.

Spectral Response



Features

- Time Stamp, Binning, Reverse X/Y
- The Sequencer Control supports multiple sets of parameters configuration
- Trigger mode: Frame Start /Frame Burst Start
- Gain, GainAuto, Gamma, Black Level, Digital Shift
- Color models support Light Source Preset, Color Transformation Control and Saturation
- 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

Specifications

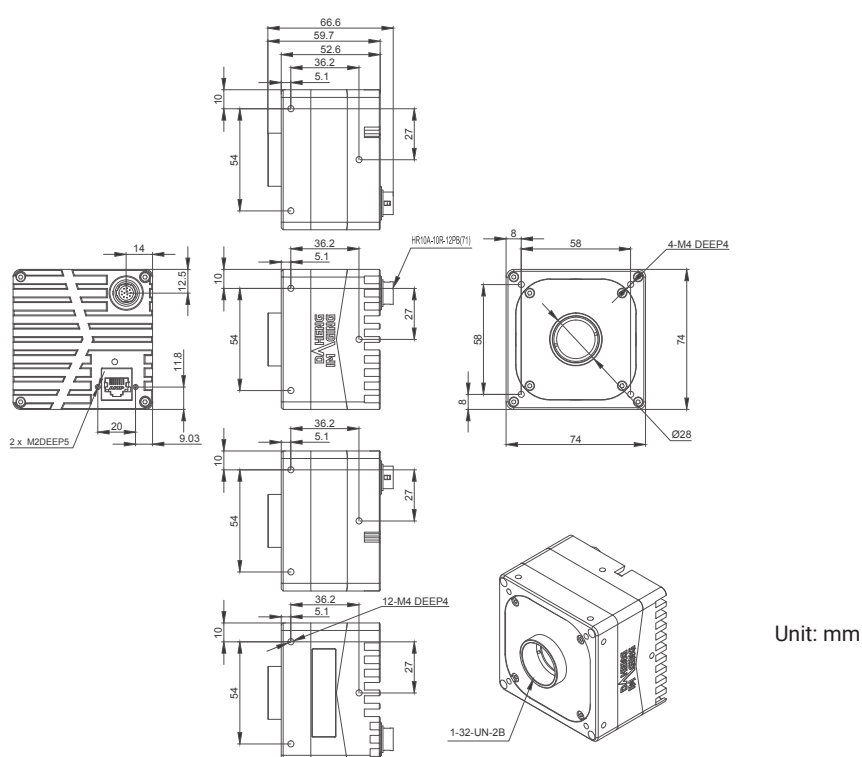
Model	MARS-280-409GTC	MARS-280-409GTM
Resolution	1936(H) × 1464(V)	
Sensor	Sony IMX421 Global shutter CMOS	
Sensor Format	2/3"	
Pixel Size	4.5μm × 4.5μm	
Frame Rate	409 fps	
ADC	12 bit	
Pixel Bit Depth	8 bit, 10 bit, 12 bit	
Mono/Color	Color	Mono
Pixel Formats	Bayer RG8 / Bayer RG10 / Bayer RG12 / Bayer RG12 Packed / Mono8 / RGB8	Mono8 / Mono10 / Mono12 / Mono12 Packed
SNR	45dB	45dB
Exposure Time	Ultra short: 1μs~5μs, Actual Steps: 0.1μs; Standard: 9μs~1s, Actual Steps: 1 row period	
Gain	Analog Gain: 0dB~48dB, Default: 0dB, Steps: 0.1dB Digital Gain: 0dB~24dB, Default: 0dB, Steps: 0.1dB	
Binning	FPGA: 1×1, 1×2, 2×1, 2×2	Sensor: 1×1, 2×2
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	
Data Interface	10GigE	
Power Supply	12VDC-10% ~ 24VDC+10%	
Power Consumption	< 12.8 W @ 12 VDC	
Operating Temp.	0° C ~ +50° C	
Storage Temp.	-20° C ~ +70° C	
Operating Humidity	10% ~ 80%	
Lens Mount	C	
Dimensions	74(W) × 74(H) × 52.6(L) mm (without mount or I/O interface)	
Weight	468 g	
OS	Win10 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



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