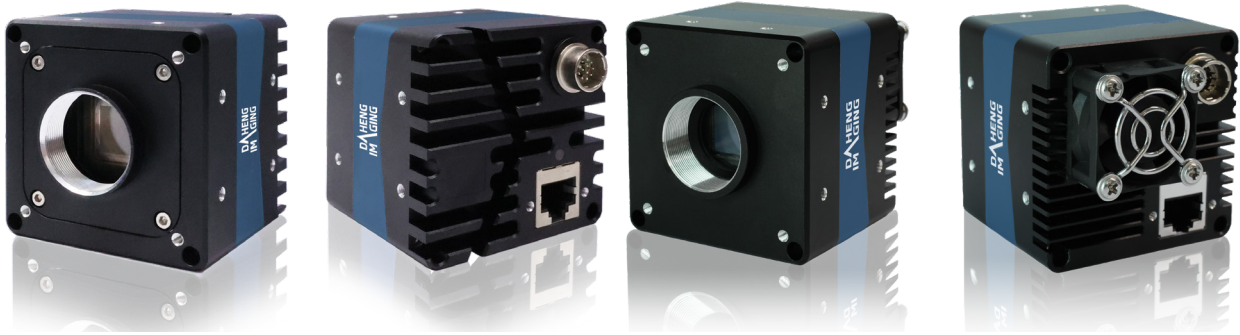


MARS-1840-63GTM/C(-NF)

18MP CMOS 10GigE Area Scan Camera



GEN*<i>*CAM



The MARS-1840-63GTM/C(-NF) is a monochrome/color GigE Vision camera with the Gpixel GMAX2518 CMOS sensor. The MARS-1840-63GTM/C(-NF) 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.

Features

- Time Stamp, Horizontal Binning, Decimation, 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, Flat Field Correction
- Color models support Light Source Preset, Color Transformation Control and Saturation
- Static Defect 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

Specifications

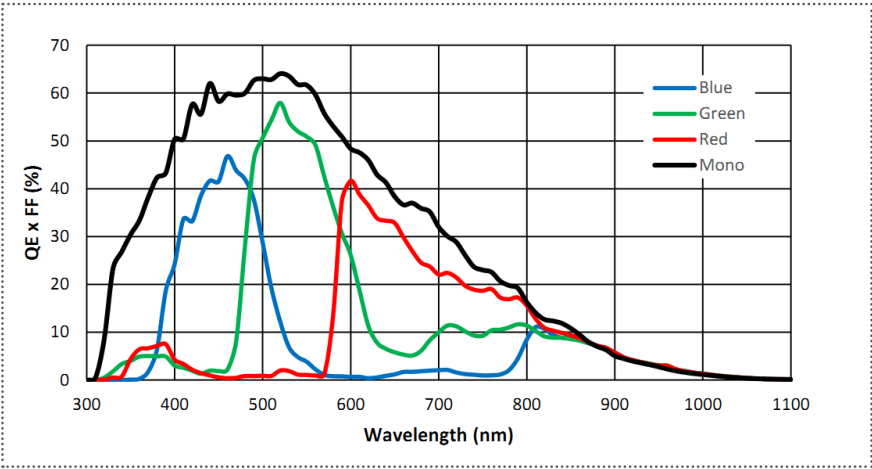
Model	MARS-1840-63GTC	MARS-1840-63GTC-NF	MARS-1840-63GTM	MARS-1840-63GTM-NF
Resolution	4496(H) × 4096(V)			
Sensor	Gpixel GMAX2518 Global shutter CMOS			
Sensor Format	1"			
Pixel Size	2.5μm × 2.5μm			
Frame Rate	63.78 fps			
ADC	12 bit			
Pixel Bit Depth	8 bit, 12 bit			
Mono/Color	Color		Mono	
Pixel Formats	Bayer GB8 / Bayer GB12		Mono8 / Mono12	
SNR	37.59 dB		37.2 dB	
Exposure Time	10μs~1s, Actual Steps: 1 row period			
Gain	0dB~16dB, Default: 0dB, Step: 0.1dB			
Binning	1×1, 2×1 (No Vertical Binning)			
Decimation	Horizontal FPGA, Vertical Sensor: 1×1, 1×2, 2×1, 2×2			
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	< 12.7W @ 24VDC(without fan), < 13.63W @ 24VDC(with fan)			
Operating Temp.	0° C ~ +50° C			
Storage Temp.	-20° C ~ +70° C			
Operating Humidity	10% ~ 80%			
Lens Mount	C			
Dimensions	60(W) × 60(H) × 54.4(L) mm (without lens adapter or connectors)			
Weight	340 g(without fan), 360 g(with fan)			
OS	Win10/Win11 32bit, 64bit OS, 64bit OS is recommended			
Conformity	CE, RoHS, FCC, ICES, UKCA, GigE Vision®, GenICam®			

I/O Interface

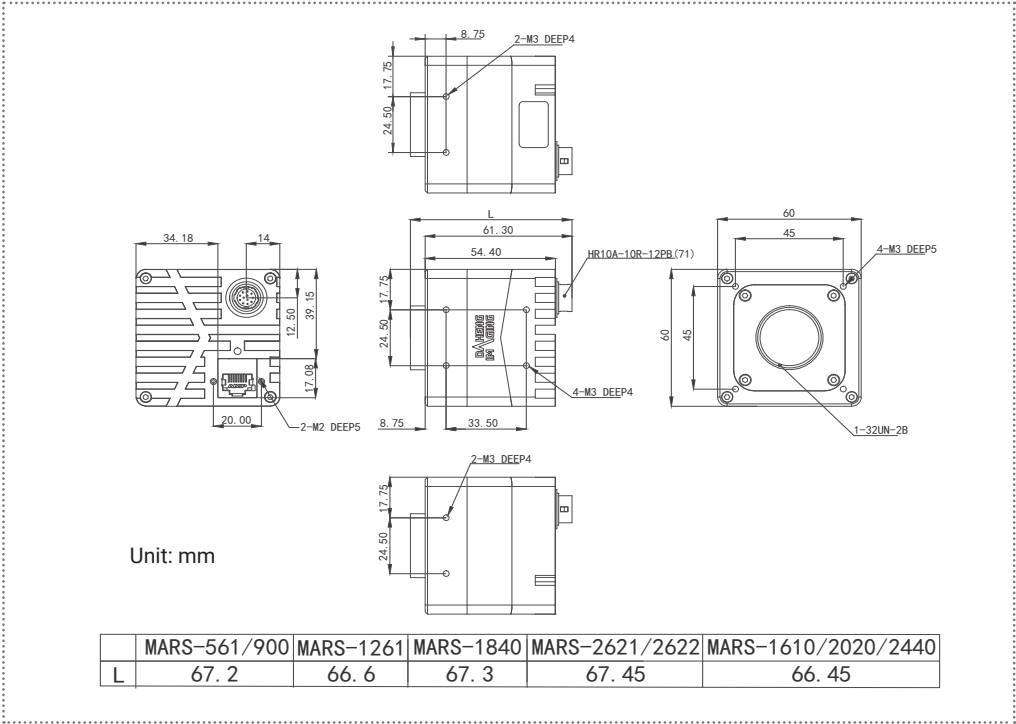


Pin	Definition	Description
1	Line 0+	Opto-isolated input +
2	GND	PWR GND & GPIO GND
3	Line 0-	Opto-isolated input -
4	POWER_IN	Camera external power 12V (-10%) ~ +24V (+10%)
5	Line 2	GPIO input/output
6	RS232 Rx	RS232 receive
7	Line 1-	Opto-isolated output -
8	Line 1+	Opto-isolated output +
9	GND	PWR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

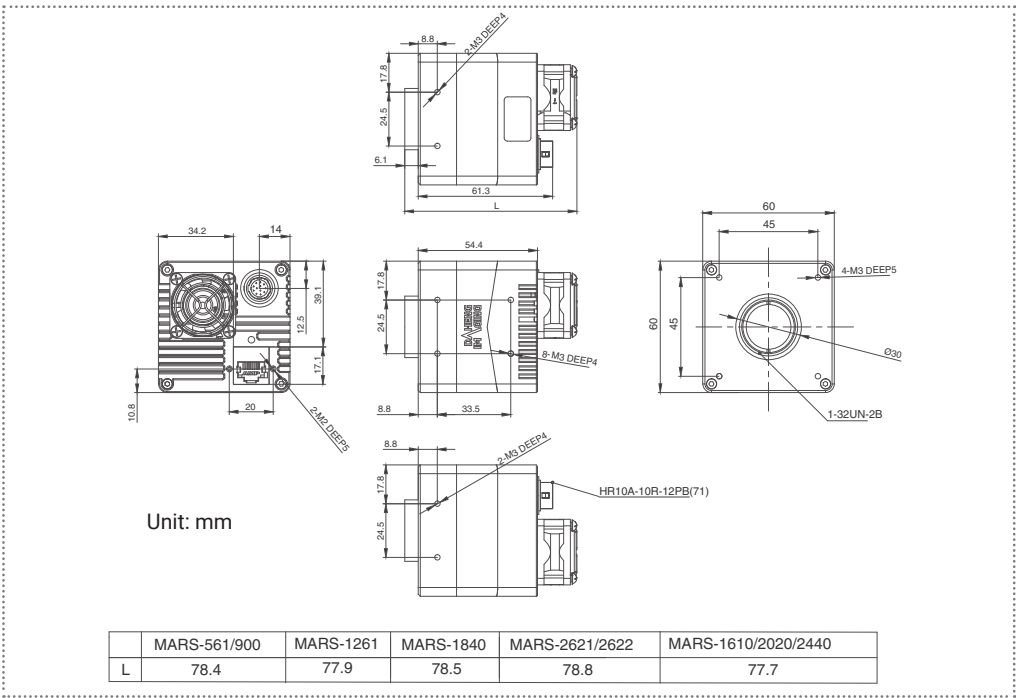
Spectral Response



Technical Drawing



MARS-1840-63GTM/C



MARS-1840-63GTM/C-NF

China Daheng Group, Inc. Beijing Image Vision Technology Branch

12F Daheng Science & Technology Tower, No.3 Suzhou Street, Haidian District, Beijing China, 100080

Tel: +86 10 82828878

E-mail: isales@daheng-imaging.com