HIFLY TECHNOLOGY
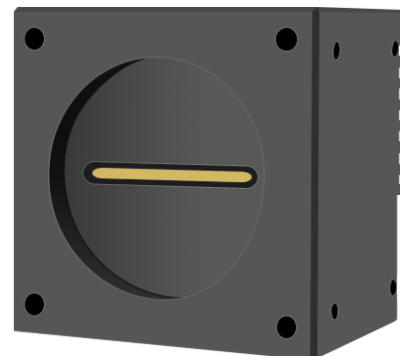
FEATURES

• Line frequency up to 27.5K, software freely set.

• Hardware ISP supports Gamma, contrast, lens shadow correction and more.

• Supports the frequency division and frequency doubling of the encoder signal, and accurately matches the motion platform.

• Support hardware SUM mode, improve brightness, reduce the requirement of light source.

• Support encoder synchronous trigger, photoelectric sensor and encoder combination synchronous trigger and other trigger modes.

• The hardware supports the automatic splicing function of horizontal pixel ROI and vertical arbitrary rows (up to the specified upper limit).

SPECIFICATIONS

Parameter＼Model	MV-LM044M-GE
Sensor	4k
Shutter	Global
Color/Mono	Mono
Pixel Size	7μm x 7μm
Resolution	4096×8
Target size	28.6mm
Imaging mode	Support multiple exposure, support 2~4 Line TDI, support hardware SUM
Dynamic range	74dB
SNR	39dB
Sensitivity	27.7 V/lux*s
AD width	12bit
Pixel output width	8bits
Maximum gain	8
Exposure time range	0.003~5ms
Video output format & Maximum line frequency	Mono 8bit:27.5k
Binning	Horizontal: Bin2/4 Sum:2/4 Vertical: Mono8bit:27.5k Bin2/4 Sum:2/4
Mirror image	Software image: left and right, up and down hardware image: up and down
Trigger mode	Continuous/software trigger/frame trigger/line trigger/conditional line trigger
Frame buffer	128MB
User EEPROM	2KB
Data interface	GigE
I/O	2 pairs of differential signal inputs, 1 optical coupling isolation signal input, 2 optical coupling isolation signal output
Power supply	12~24V
Power	<6W
Lens mount	M42*1, optical rear focus 8 GigE port 12 mm
Dimension	59.5x59.5x43.34mm (excluding lens holder and rear shell interface)

| Weight	<500g
Temperature	Operating temperature: 0~50°　　　Storage temperature: -30~ 60°
Humidity	Operating humidity: 20~80% (no condensation)　　　Storage humidity: 20~95% (no condensation)
Video standard protocol	GigE Vision V1.2,GenICam
Drive program	Directshow component Halcon special component Labview special drive OCX component TWAIN component
Programming language packages	C/C++/C#/VB6/VB.NET/Delphi/BCB/Python/Java
Operating system	WINXP, WIN7/8/10 32&64 bit system, Linux and ARM Linux driver Android platform driver, MAC OS system
Other functions	Support arbitrary size ROI custom resolution, multiple exposure, contrast and gamma adjustment, saturation adjustment, white balance correction, black point correction, custom dead point coordinate correction, ISP image processing acceleration, 3D noise reduction, custom LUT table, frame rate adjustment, custom camera name, and more

SPECTROGRAMS
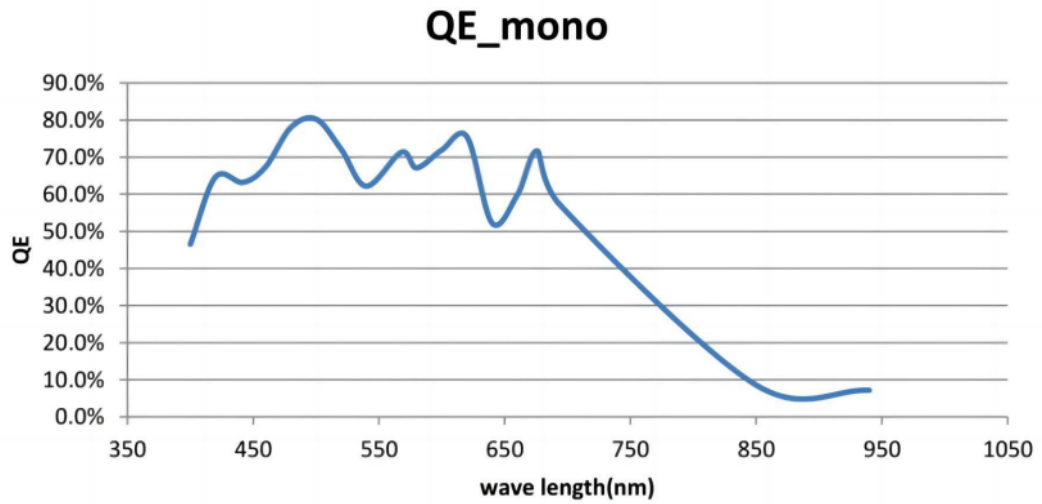
DIMENSIONS(Unit: mm)
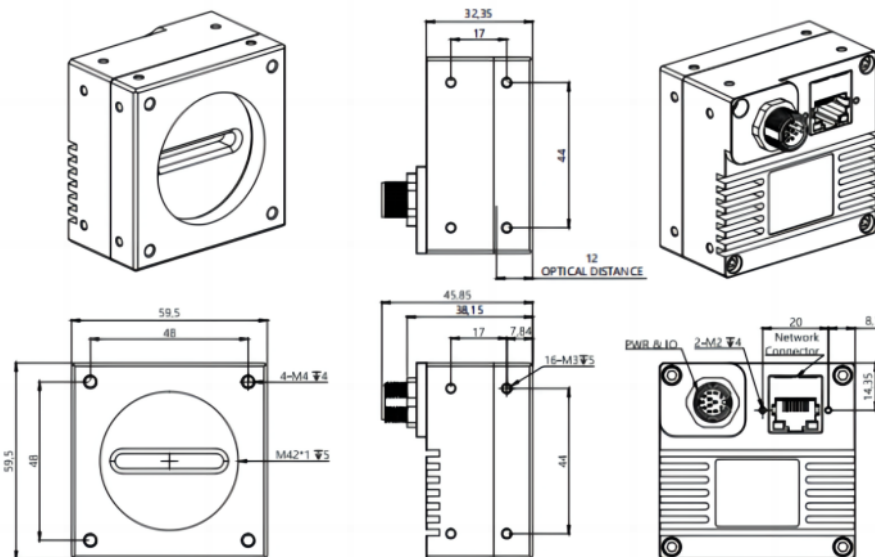
List of pin functions:

PWR & IO
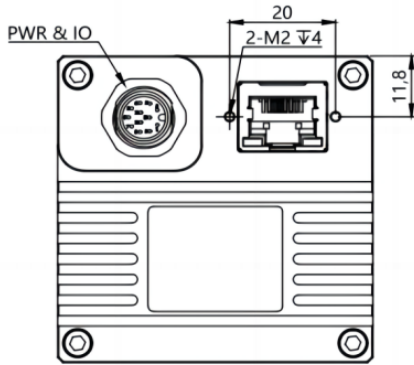
Pin	Line Color	Signal Name	Signal Description	Remark
1	black	GND	Camera power input	Power supply GND
2	red	DC12V+	Camera power input	Power supply positive
3	gray	IN1+	Encoder A phase input +	differential signal
4	pink	IN1-	Encoder A phase input -	differential signal
5	brown	IN2+	Encoder B phase input +	differential signal
6	white	IN2-	Encoder B phase input -	differential signal
7	green	IN3+	Trigger input +	opto-isolator
8	yellow	IN3-	Trigger input -	opto-isolator
9	blue	OUT1+	Optocoupler output 1+	opto-isolator
10	dark reddish purple	OUT1-	Optocoupler output 1-	opto-isolator
11	purple	OUT2+	Optocoupler output 2+	opto-isolator
12	orange	OUT2-	Optocoupler output 2-	opto-isolator

Remark 1: The frame trigger input needs to be connected to both positive and negative terminals
Remark 2: The differential signal source is 5V
Remark 3: The optocoupler input logic high level voltage is 3.3~24V, the input logic low level is 0~1V, the maximum input current of the optocoupler is 50 mA, and the breakdown voltage is 30V