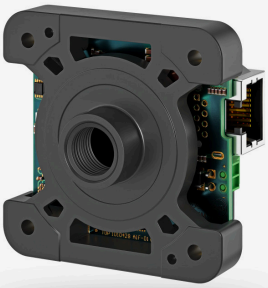
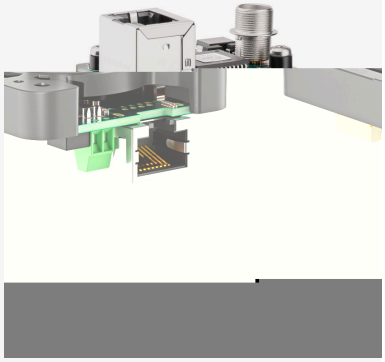
GV-54L1LE-M Rev.2 (1011629)

In series
The model is in series and available for the long term.



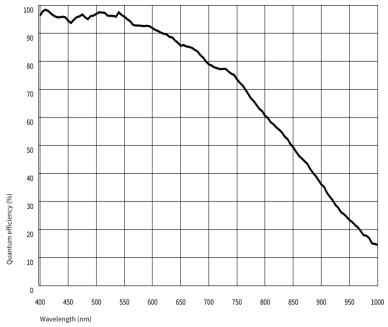




Specification

Sensor

Sensor type	CMOS Mono
Shutter	Rolling shutter
Sensor characteristic	Linear
Pixel Class	13 MP
Resolution	12.62 Mpix
Resolution (h x v)	3552 x 3552 Pixel
Aspect ratio	1:1
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.6"
Optical Size	7.104 mm x 7.104 mm
Optical sensor diagonal	10.05 mm 1/1.6"
Pixel size	2 µm
CRA (Chief Ray Angle)	12 °
Manufacturer	Sony
Sensor Model	IMX676-AAMR1-C
Gain (master/RGB)	31.6x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	256 / 2
AOI image height / step width	1 / 1
AOI position grid (horizontal/vertical)	2 / 1
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	Horizontal: mean / Vertical: mean
Binning factor	2x2
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	M/C automatic



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Model

Frame rate freerun mode	9.9 fps
Frame rate trigger (continuous)	9.9 fps
Frame rate trigger (maximum)	14 fps
Exposure time (minimum - maximum)	0.037 ms - 1999 ms
Long exposure (maximum)	119977 ms
Power consumption (external power supply)	4 W
Image memory	128 MB

HDR

Mode	ClearHDR

Ambient conditions

For PCB versions, refer to the separate hints in the respective documentation.

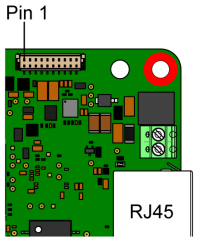
Allowed device temperature during operation	0 °C - 90 °C / 32 °F - 194 °F
Allowed ambient temperature during operation	0 °C - 40 °C / 32 °F - 104 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	GigE RJ45
I/O connector	10-pin Wuerth connector (WR-WTB 1.00 mm)
Power supply	12 V - 24 V

Pin assignment I/O connector

1	Power supply (VCC) 12-24 V
2	Power supply, ground
3	General Purpose I/O (GPIO) 2, 3.3 V - Line 3
4	General Purpose I/O (GPIO) 1, 3.3 V - Line 2
5	I2C SCL (signal clock) 3.3 V
6	I2C SDA (signal data) 3.3 V
7	Trigger input without optocoupler 3.3 V - Line 0
8	Flash output without optocoupler 3.3 V - Line 1
9	Ground (GND)
10	Voltage output 3.3 V, max. 100 mA



Design

Lens Mount	S-Mount
IP code	-
Dimensions H/W/L	50.0 mm x 50.0 mm x 28.5 mm
Mass	30 g
Housing material	-

Features

List of on-camera image pre-processing features.
All features of the table are available via our IDS peak software for image pre-processing on the host computer (sensor model dependent).

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GV-54L1LE-M Rev.2 (1011629)

Image Acquisition	Freerun	✓
	Software trigger	✓
	Hardware trigger	✓
	Trigger controlled exposure	-
	Denoiser	✓
	Long exposure	✓
	Line scan	-
	Global start	-
Flashing	Flashing	-
	PWM flashing	-
Image Adjustments	Auto exposure	-
	Auto gain	-
	Auto whitebalance	-
	Color correction	-
	Gamma	-
	LUT	-
	Mirror/flip	X/Y
On-board Image Processing	Pixel formats	Mono8 Mono10 Mono10p Mono12 Mono12p
	Region of interest	✓
	Decimation (FPGA)	✓
	Decimation (Sensor)	
	Binning (FPGA)	-
	Binning (Sensor)	2x2 Increases frame rate.
Others	IP settings	✓
	Bandwidth management	✓
	Chunks	-
	Sequencer	-
	PTP	✓
	Firmware update	✓
	1st supported firmware version	3.60

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