

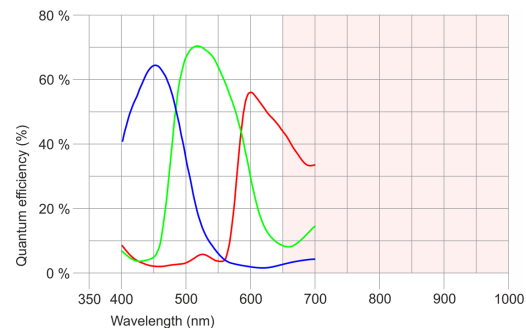
In series
The model is in series and available for the long term.



Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter
Sensor characteristic	Linear
Pixel Class	20 MP
Resolution	20.44 Mpix
Resolution (h x v)	5536 x 3692 Pixel
Aspect ratio	3:2
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1"
Optical Size	13.286 mm x 8.861 mm
Optical sensor diagonal	15.97 mm 1"
Pixel size	2.4 μm
CRA (Chief Ray Angle)	0 °
Manufacturer	Sony
Sensor Model	IMX183CQK-J
Gain (master/RGB)	-/-
AOI horizontal	same frame rate
AOI vertical	same frame rate
AOI image width / step width	256 / 16
AOI image height / step width	2 / 2
AOI position grid (horizontal/vertical)	16 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	Horizontal: mean / Vertical: mean
Binning factor	2x2
Decimation (subsampling) horizontal	same frame rate
Decimation (subsampling) vertical	same frame rate
Decimation (subsampling) method	M/C automatic



Model

Frame rate freerun mode	6 fps
Frame rate trigger (continuous)	3.2 fps
Frame rate trigger (maximum)	3.2 fps
Exposure time (minimum - maximum)	0.17 ms - 2000 ms
Long exposure (maximum)	30000 ms
Power consumption	2 W - 3.2 W
Image memory	128 MB

Ambient conditions

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

Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed device 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	8-pin Hirose connector (HR25-7TR-8PA(73))
Power supply	12 V - 24 V or PoE

Pin assignment I/O connector

1	Ground (GND)
2	Flash output with optocoupler (-) - Line 1
3	General Purpose I/O (GPIO) 1 - Line 2
4	Trigger input with optocoupler (-) - Line 0
5	Flash output with optocoupler (+) - Line 1
6	General Purpose I/O (GPIO) 2 - Line 3
7	Trigger input with optocoupler (+) - Line 0
8	Input power supply (VCC) 12-24 V DC



Design

Lens Mount	C-Mount
IP code	-
Dimensions H/W/L	34.0 mm x 44.0 mm x 35.0 mm
Mass	62 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).

Image Acquisition

Freerun	✓
Software trigger	✓
Hardware trigger	✓
Trigger controlled exposure	-
Denoiser	✓
Long exposure	✓
Line scan	-
Global start	-

Flashing

Flashing	✓
PWM flashing	✓

Subject to technical modifications (2026-08-27)

GV-5801SE-C-HQ Rev.4.2 (AB12883)

Image Adjustments

Auto exposure	✓
Auto gain	✓
Auto whitebalance	✓
Color correction	-
Gamma	✓
LUT	✓
Mirror/flip	X/Y

On-board Image Processing

Pixel formats	BayerRG8 BayerRG10p BayerRG12 BayerRG12p BayerRG10
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	2.10