UI-5250FA-M-GL Rev.1.2 (AB12322)

Not recommended for new designs
The camera model is no longer recommended for new application development.

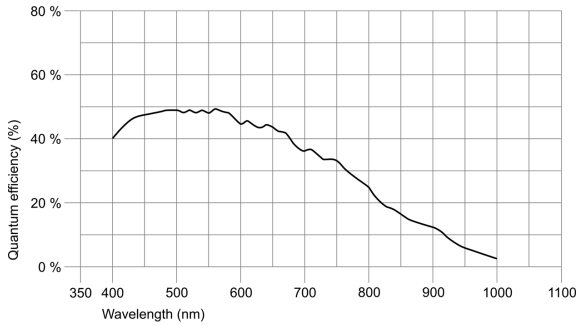




Specification

Sensor

Sensor type	CMOS Mono
Shutter	Global Shutter / Rolling shutter / Global Start Shutter
Sensor characteristic	Linear
Pixel Class	1.9 MP
Resolution	1.92 Mpix
Resolution (h x v)	1600 x 1200 Pixel
Aspect ratio	4:3
ADC	10 bit
Color depth (camera)	12 bit
Optical sensor class	1/1.8"
Optical Size	7.200 mm x 5.400 mm
Optical sensor diagonal	9 mm 1/1.8"
Pixel size	4.5 µm
CRA (Chief Ray Angle)	12 °
Manufacturer	e2v
Sensor Model	EV76C570ABT
Gain (master/RGB)	4x/-
AOI horizontal	same frame rate
AOI vertical	increased frame rate
AOI image width / step width	16 / 4
AOI image height / step width	4 / 2
AOI position grid (horizontal/vertical)	2 / 2
Binning horizontal	same frame rate
Binning vertical	same frame rate
Binning method	Horizontal: addition / Vertical: mean
Binning factor	2
Decimation (subsampling) horizontal	-
Decimation (subsampling) vertical	-
Decimation (subsampling) method	-



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Model

Pixel clock range	10 MHz - 112 MHz
Frame rate freerun mode	52 fps
Frame rate trigger (continuous)	52 fps
Frame rate trigger (maximum)	52 fps
Exposure time (minimum - maximum)	0.02 ms - 1000 ms
Long exposure (maximum)	10000 ms
Power consumption	1.7 W - 2.4 W
Image memory	128 MB
Special features	IDS line scan mode Scaler Sequencer Log mode Sensor hot pixel correction Fine exposure Sensor source gain Multi-AOI

Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.

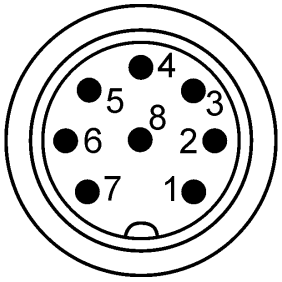
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	0 % - 100 %

Connectors

Interface connector	GigE M12, screwable
I/O connector	8-pin Binder connector (Binder series 712: 09-0427-020-08)
Power supply	12 V - 24 V or PoE

Pin assignment I/O connector

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



Design

Lens Mount	C-Mount
IP code	IP65, IP67
Dimensions H/W/L	41.0 mm x 53.0 mm x 42.7 mm
Mass	173 g
Housing material	Aluminum

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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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	-
On-board Image Processing	Pixel formats	
	Region of interest	✓
	Decimation (FPGA)	-
	Decimation (Sensor)	(2,4)x(2,4)
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	✓
	Firmware update	-
	1st supported firmware version	4.96.1

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