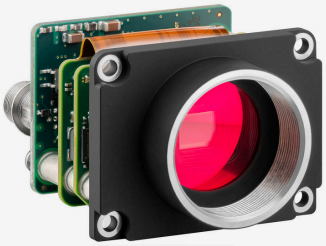
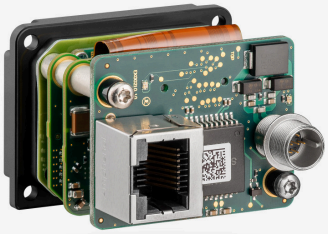
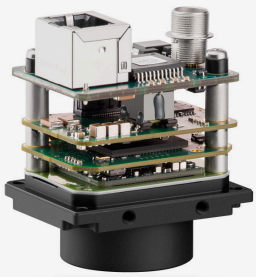
UI-5581SE-C-HQ Rev.4.2 (AB12311)

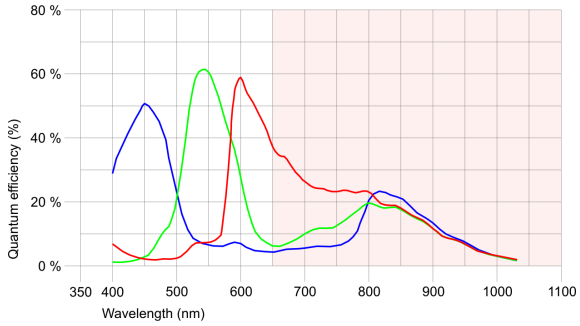
Discontinued
The model has been discontinued.

Specification

Sensor

Sensor type	CMOS Color
Shutter	Rolling shutter / Global Start Shutter
Sensor characteristic	Linear
Pixel Class	5 MP
Resolution	4.92 Mpix
Resolution (h x v)	2560 x 1920 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	12 bit
Optical sensor class	1/2"
Optical Size	5.632 mm x 4.224 mm
Optical sensor diagonal	7.04 mm (1/2.27")
Pixel size	2.2 µm
CRA (Chief Ray Angle)	7 °
Manufacturer	Onsemi
Sensor Model	MT9P006STC
Gain (master/RGB)	12.2x/5.8x
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image width / step width	32 / 4
AOI image height / step width	4 / 2
AOI position grid (horizontal/vertical)	4 / 2
Binning horizontal	increased frame rate
Binning vertical	increased frame rate
Binning method	Horizontal: addition / Vertical: mean
Binning factor	2 / 3 / 4 / 6
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	Color



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Model

Pixel clock range	5 MHz - 104 MHz
Frame rate freerun mode	15 fps
Frame rate trigger (continuous)	15 fps
Frame rate trigger (maximum)	15 fps
Exposure time (minimum - maximum)	0.031 ms - 2745 ms
Power consumption	1.2 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 (-)
3	General Purpose I/O (GPIO) 1
4	Trigger input with optocoupler (-)
5	Flash output with optocoupler (+)
6	General Purpose I/O (GPIO) 2
7	Trigger input with optocoupler (+)
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	61 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	-

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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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