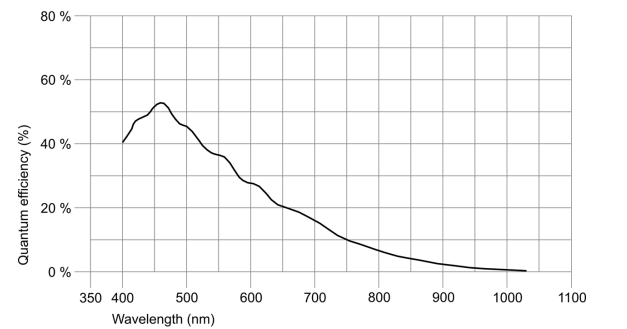


Discontinued
The model has been discontinued.



Specification

Sensor	
Sensor type	CMOS Mono
Shutter	Rolling shutter
Sensor characteristic	Linear
Pixel Class	10 MP
Resolution	10.55 Mpix
Resolution (h x v)	3840 x 2748 Pixel
Aspect ratio	4:3
ADC	12 bit
Color depth (camera)	8 bit
Optical sensor class	1/2"
Optical Size	6.413 mm x 4.589 mm
Optical sensor diagonal	7.89 mm (1/2.03")
Pixel size	1.67 µm
CRA (Chief Ray Angle)	0 °
Manufacturer	Onsemi
Sensor Model	MT9J003STM
Gain (master/RGB)	8.5x/-
AOI horizontal	increased frame rate
AOI vertical	increased frame rate
AOI image width / step width	448 / 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: addition
Binning factor	2
Decimation (subsampling) horizontal	increased frame rate
Decimation (subsampling) vertical	increased frame rate
Decimation (subsampling) method	Color



Model

Pixel clock range	5 MHz - 36 MHz
Frame rate freerun mode	3.2 fps
Frame rate trigger (maximum)	3.2 fps
Exposure time (minimum - maximum)	0.34 ms - 14582 ms
Power consumption	0.5 W - 1.3 W
Image memory	-

Ambient conditions

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

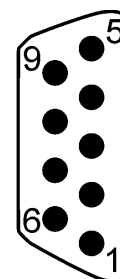
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	20 % - 80 %

Connectors

Interface connector	USB 2.0 mini-B, screwable
I/O connector	9-pin micro D-Sub socket (MPE Garry 11-0021-50-09L)
Power supply	USB cable

Pin assignment I/O connector

1	Flash output with optocoupler (-)
2	Trigger input with optocoupler (+)
3	Shielding
4	USB Power supply (VCC) 5 V
5	USB Ground (GND)
6	Flash output with optocoupler (+)
7	Trigger input with optocoupler (-)
8	USB data (+)
9	USB data (-)



Design

Lens Mount	C-Mount
IP code	IP30
Dimensions H/W/L	34.0 mm x 32.0 mm x 41.3 mm
Mass	65 g
Housing material	Aluminum / stainless steel

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 (2026-08-20)

UI-1490SE-M-GL (AB.0010.1.52500.23)

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)	
	Binning (FPGA)	-
Others	Chunks	-
	Sequencer	-
	Firmware update	-
	1st supported firmware version	3.40