

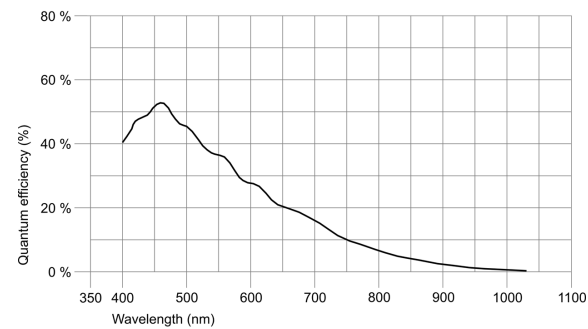
Discontinued
The model has been discontinued.



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)	12 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)	8 / 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
Decimation (subsampling) factor	2 / 4



Model

Pixel clock range	5 MHz - 68 MHz
Frame rate freerun mode	6.1 fps
Frame rate trigger (maximum)	6 fps
Exposure time (minimum - maximum)	0.18 ms - 14582 ms
Power consumption	2.4 W - 3.3 W
Image memory	64 MB

Ambient conditions

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

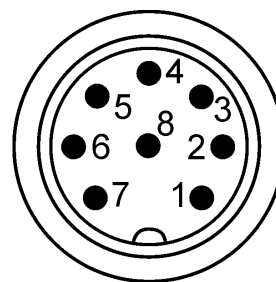
Allowed device temperature during operation	0 °C - 55 °C / 32 °F - 131 °F
Allowed ambient temperature during storage	-20 °C - 60 °C / -4 °F - 140 °F
Humidity (relative, non-condensing)	0 % - 100 %

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 39.7 mm
Mass	175 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).

Image Acquisition

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

Flashing

Flashing	-
PWM flashing	-

UI-5490RE-M-GL PoE Rev.2.2 (AB10308)

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	4.96.1