

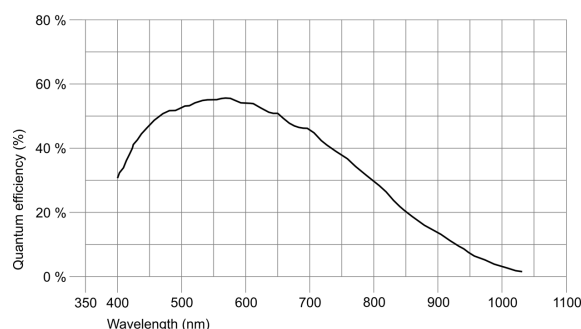


uEye industrial cameras now also work with IDS peak! We recommend the Software Development Kit for the implementation of new projects. [Learn about the process here and switch now.](#)  
Please note: The technical data given here was measured using the IDS Software Suite.

## Specification

### Sensor

|                                         |                      |
|-----------------------------------------|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Rolling shutter      |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| Pixel Class                             | 1.3 MP               |
| Resolution                              | 1.31 Mpix            |
| Resolution (h x v)                      | 1280 x 1024 Pixel    |
| Aspect ratio                            | 5:4                  |
| ADC                                     | 10 bit               |
| Color depth (camera)                    | 8 bit                |
| Optical sensor class                    | 1/2"                 |
| Optical Size                            | 6.656 mm x 5.325 mm  |
| Optical sensor diagonal                 | 8.52 mm (1/1.88")    |
| Pixel size                              | 5.2 µm               |
| Manufacturer                            | Onsemi               |
| Sensor Model                            | MT9M001STM           |
| Gain (master/RGB)                       | 13x/-                |
| 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                      | -                    |
| Binning vertical                        | -                    |
| Binning method                          | -                    |
| Binning factor                          | -                    |
| Subsampling horizontal                  | increased frame rate |
| Subsampling vertical                    | increased frame rate |
| Subsampling method                      | Color                |
| Subsampling factor                      | 2, 4, 8              |



### Model

|                                   |                   |
|-----------------------------------|-------------------|
| Pixel clock range                 | 5 MHz - 43 MHz    |
| Frame rate freerun mode           | 25                |
| Frame rate trigger (maximum)      | 25                |
| Exposure time (minimum - maximum) | 0.037 ms - 983 ms |
| Power consumption                 | 0.5 W - 1 W       |

## Ambient conditions

The temperature values given below refer to the outer device temperature of the camera housing.  
For PCB versions, refer to the separate hints in the respective documentation.

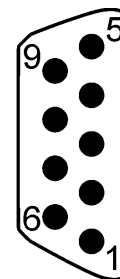
|                                     |                                 |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Device temperature during storage   | -20 °C - 60 °C / -4 °F - 140 °F |
| Humidity (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 (-)                       |



Camera rear view

## Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | -                           |
| Dimensions H/W/L | 30.0 mm x 30.0 mm x 41.3 mm |
| Mass             | 43 g                        |

