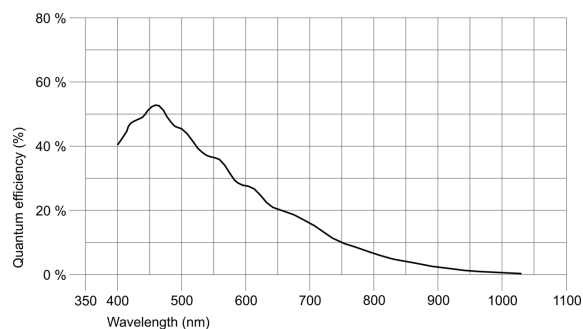


 **Discontinued**  
The model has been discontinued.

## Specification

### Sensor

|                                         |                      |
|-----------------------------------------|----------------------|
| Sensor type                             | CMOS Mono            |
| Shutter                                 | Rolling shutter      |
| Sensor characteristic                   | Linear               |
| Readout mode                            | Progressive scan     |
| 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              |
| 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                          | Color                |
| Binning factor                          | 2                    |
| Subsampling horizontal                  | increased frame rate |
| Subsampling vertical                    | increased frame rate |
| Subsampling method                      | Color                |
| Subsampling factor                      | 2, 4                 |



### Model

|                                   |                     |
|-----------------------------------|---------------------|
| Pixel clock range                 | 5 MHz - 90 MHz      |
| Frame rate freerun mode           | 8.0 fps             |
| Frame rate trigger (maximum)      | 7.9 fps             |
| Exposure time (minimum - maximum) | 0.136 ms - 14582 ms |
| Power consumption                 | 3 W - 5 W           |
| Image memory                      | 64 MB               |

### Ambient conditions

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

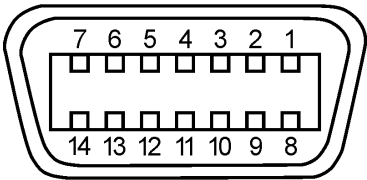
|                                     |                                 |
|-------------------------------------|---------------------------------|
| Device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Device temperature during storage   | -20 °C - 60 °C / -4 °F - 140 °F |
| Humidity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

Connectors

|                     |                                           |
|---------------------|-------------------------------------------|
| Interface connector | GigE RJ45, screwable                      |
| I/O connector       | 14-pin MDR14 connector (3M N10214-5213PC) |
| Power supply        | 12 V - 24 V                               |

Pin assignment I/O connector

|    |                                                   |
|----|---------------------------------------------------|
| 1  | Ground (GND)                                      |
| 2  | Power supply (VCC)                                |
| 3  | Trigger input with optocoupler (-)                |
| 4  | Trigger input with optocoupler (+)                |
| 5  | Flash output with optocoupler (-)                 |
| 6  | Flash output with optocoupler (+)                 |
| 7  | Ground (GND)                                      |
| 8  | Ground (GND)                                      |
| 9  | Power supply (VCC)                                |
| 10 | General Purpose I/O (GPIO) 1 (not potential-free) |
| 11 | General Purpose I/O (GPIO) 2 (not potential-free) |
| 12 | RS232 RxD (not potential-free)                    |
| 13 | RS232 TxD (not potential-free)                    |
| 14 | Ground (GND)                                      |



Camera rear view

Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | C-Mount                     |
| IP code          | IP30                        |
| Dimensions H/W/L | 38.0 mm x 38.0 mm x 89.5 mm |
| Mass             | 165 g                       |

