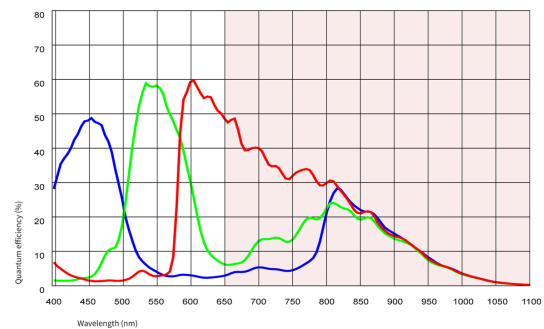


**In series**  
The model is in series and available for the long term.



Specification

|                                         |                                           |
|-----------------------------------------|-------------------------------------------|
| Sensor                                  |                                           |
| Sensor type                             | CMOS Color                                |
| Shutter                                 | Global Shutter                            |
| Sensor characteristic                   | Linear                                    |
| Pixel Class                             | 45 MP                                     |
| Resolution                              | 44.84 Mpix                                |
| Resolution (h x v)                      | 8200 x 5468 Pixel                         |
| Aspect ratio                            | 3:2                                       |
| ADC                                     | 12 bit                                    |
| Color depth (camera)                    | 12 bit                                    |
| Optical sensor class                    | 2"                                        |
| Optical Size                            | 26.214 mm x 17.472 mm                     |
| Optical sensor diagonal                 | 31.5 mm 2"                                |
| Pixel size                              | 3.2 µm                                    |
| CRA (Chief Ray Angle)                   | 10 °                                      |
| Manufacturer                            | Onsemi                                    |
| Sensor Model                            | NOIX1SE045KB-GTI                          |
| Gain (master/RGB)                       | 16x/16x                                   |
| AOI horizontal                          | same frame rate                           |
| AOI vertical                            | increased frame rate                      |
| AOI image width / step width            | 256 / 2                                   |
| AOI image height / step width           | 2 / 2                                     |
| AOI position grid (horizontal/vertical) | 2 / 2                                     |
| Binning horizontal                      | -                                         |
| Binning vertical                        | -                                         |
| Binning method                          | Horizontal: addition / Vertical: addition |
| Binning factor                          | -                                         |
| Decimation (subsampling) horizontal     | -                                         |
| Decimation (subsampling) vertical       | -                                         |
| Decimation (subsampling) method         | M/C automatic                             |



### Model

|                                   |                    |
|-----------------------------------|--------------------|
| Frame rate freerun mode           | 27 fps             |
| Frame rate trigger (continuous)   | 27 fps             |
| Frame rate trigger (maximum)      | 32 fps             |
| Exposure time (minimum - maximum) | 0.042 ms - 2000 ms |
| Power consumption                 | 12.7 W - 16.7 W    |
| Image memory                      | 2032 MB            |

### Ambient conditions

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

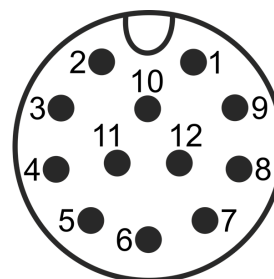
|                                             |                                 |
|---------------------------------------------|---------------------------------|
| Allowed device temperature during operation | 0 °C - 55 °C / 32 °F - 131 °F   |
| Allowed ambient temperature during storage  | -20 °C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

### Connectors

|                     |                                          |
|---------------------|------------------------------------------|
| Interface connector | GigE RJ45                                |
| I/O connector       | 12-pin M12 connector (Attend 216A-12MSR) |
| Power supply        | 12 V - 24 V or PoE+                      |

### Pin assignment I/O connector

|    |                                                 |
|----|-------------------------------------------------|
| 1  | Power supply, 12-24 V DC                        |
| 2  | Power supply, ground                            |
| 3  | (Trigger) input 0 with optocoupler - Line0      |
| 4  | Reference level for all optocoupler outputs     |
| 5  | Reference level for all optocoupler inputs      |
| 6  | (Trigger) input 1 with optocoupler - Line1      |
| 7  | (Flash) output 1 with optocoupler - Line4       |
| 8  | Fast (flash) output 2 with optocoupler - Line5  |
| 9  | Power supply for fast (flash) outputs, 3-5 V DC |
| 10 | Fast (flash) output 3 with optocoupler - Line6  |
| 11 | (Trigger) input 2 with optocoupler - Line2      |
| 12 | (Flash) output 0 with optocoupler - Line3       |



### Design

|                  |                             |
|------------------|-----------------------------|
| Lens Mount       | TFL (M35 x 0.75)            |
| IP code          | IP30                        |
| Dimensions H/W/L | 60.0 mm x 75.0 mm x 94.5 mm |
| Mass             | 570 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                   | - |

## GV-77U5WP-C-HQ (AB03375)

|                           |                                |            |
|---------------------------|--------------------------------|------------|
| Flashing                  | Flashing                       | ✓          |
|                           | PWM flashing                   | ✓          |
| Image Adjustments         | Auto exposure                  | ✓          |
|                           | Auto gain                      | ✓          |
|                           | Auto whitebalance              | ✓          |
|                           | Color correction               | ✓          |
|                           | Gamma                          | ✓          |
|                           | LUT                            | ✓          |
|                           | Mirror/flip                    | -          |
| On-board Image Processing | Pixel formats                  | Mono8      |
|                           |                                | BayerRG8   |
|                           |                                | BayerRG10  |
|                           |                                | BayerRG10p |
|                           |                                | BayerRG12  |
|                           |                                | BayerRG12p |
|                           |                                | BGR8       |
|                           |                                | RGB8       |
|                           |                                | BGR10p32   |
|                           |                                | RGB10p32   |
|                           | Region of interest             | ✓          |
|                           | Decimation (FPGA)              | ✓          |
|                           | Decimation (Sensor)            |            |
|                           | Binning (FPGA)                 | ✓          |
|                           | Binning (Sensor)               |            |
|                           |                                |            |
| Others                    | IP settings                    | ✓          |
|                           | Bandwidth management           | ✓          |
|                           | Chunks                         | -          |
|                           | Sequencer                      | -          |
|                           | PTP                            | ✓          |
|                           | Firmware update                | ✓          |
|                           | 1st supported firmware version | 3.20       |