Allied Vision

# HR 100GigE

## hr928C100GE



Preliminary product information. Features and technical specifications are subject to change without notice.

preliminary

## General

| | |
|---|---|
| Model | hr928C100GE |
| Product code | F004277 |
| Product series | HR 100GigE |
| Status | Coming soon |

## Sensor

| | |
|---|---|
| Sensor type | Area scan |
| Chroma | Color |
| Spectrum | Visible |
| Spectral range | 400 nm to 1000 nm |
| Resolution | 8,256 × 8,256 (68.20 MP) |
| Sensor model | Sony IMX928 |
| Sensor architecture (material) | cmos |
| Shutter type(s) | Global shutter (GS) |
| Sensor size | 22.62 × 22.62 mm (31.99 mm, Type 2) |
| Pixel size | 2.74 µm × 2.74 µm |

## Pixel formats

| | |
|---|---|
| Sensor bit depth | 8-bit, 10-bit, 12-bit |
| RGB pixel formats | bayer8, bayer10, bayer12 |

## Timing and gain

| | |
|---|---|
| Max. frame rate | 138 fps |
| Exposure time | 8 µs to 60 s |
| Gain | 0.0 dB to 48.0 dB |

## I/Os and power

| | |
|---|---|
| Non-isolated lines | 0 x LVDS input, 0 x LVDS output, 0 x TTL input, 0 x TTL output, 2 x 24V input, 2 x Open drain output, |
| Specific non-isolated lines | 0 x RS232 input, 0 x RS232 output, 1 x RS422 input, 1 x RS422 output, |
| Opto-isolated lines | 0 x Optical isolated input, 0 x Optical isolated input, |
| I/O connector | 12-pin Hirose HR10A-10P-12S |
| Power supply | 24 to 25VDC |
| Power consumption | External: 30 W (typical) |

## Operating conditions

| | |
|---|---|
| Operating temperature (housing) | -10 °C to 60 °C |

## Mechanical properties

| | |
|---|---|
| Body dimensions (L x W x H in mm) | 93 × 62 × 62 |
| Filter/protection glass | IR-Cut - 680nm |
| IP class | IP30 |
| Lens mount(s) | M58x0.75 |
| Weight | 550 g |

## On-board memory and FPGA

| | |
|---|---|
| Image buffer (RAM) | 4032 MByte |
| Non-volatile memory (Flash) | 32768 MByte |

## Interfaces

| | |
|---|---|
| Digital interface | 100gige |
| Interface connector | (QSFP28) |
| Vision standard | GigE Vision 3.0 |

## FW features - image control

| | |
|---|---|
| Exposure modes | manual, auto, external |
| Gain modes | auto, manual |
| White balance modes | auto, manual |
| Image control features | roi, lut, color-transformation, mirror-image |

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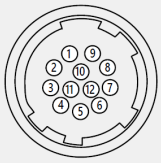
## FW features - camera control

| | |
|---|---|
| Camera control features | PTP, RDMA support, User Sets, PWM(4), Sequencer, |

## I/O pin assignment



Hirose 12 Pin

| | |
|---|---|
| 1 | V In- (GND) |
| 2 | V In+ (24 V DC) |
| 3 | In 4 (RxD RS232) |
| 4 | Out 4 (TxD RS232) |
| 5 | In 1 (0 ... 24 V) |
| 6 | In 2 (0 ... 24 V |
| 7 | Out 1 (open drain) |
| 8 | Out 2 (open drain) |
| 9 | In 3+ (opto In+) |
| 10 | In 3- (opto In-) |
| 11 | Out 3 (open drain) |
| 12 | Out 0 (open drain) |

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