



## HR 100GigE

hr928C100GE

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

### 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                                 |
| Sensor size                    | 22.62 × 22.62 mm (31.99 mm, 31.9mm (Type 2.0)) |
| 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   | 4 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,                                               |
| Power supply                | 24 to 25VDC                                                                                           |
| Power consumption           | External: 28 W (typical)                                                                              |

## Operating conditions

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

## Mechanical properties

|                                   |               |
|-----------------------------------|---------------|
| Body dimensions (L x W x H in mm) | 101 × 62 × 62 |
| Filter/protection glass           | IR-Cut 680    |
| 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) |

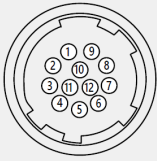
## FW features - image control

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

## 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) |

preliminary