



# HR 100GigE

hr927M100GE

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

## General

|                |                              |
|----------------|------------------------------|
| Model          | hr927M100GE                  |
| Product code   | F004274                      |
| Product series | HR 100GigE                   |
| Status         | Prototype/engineering sample |

## Sensor

|                                |                                       |
|--------------------------------|---------------------------------------|
| Sensor type                    | Area scan                             |
| Chroma                         | Mono                                  |
| Spectrum                       | Visible                               |
| Spectral range                 | 400 nm to 1000 nm                     |
| Resolution                     | 10,240 × 10,240 (104.90 MP)           |
| Sensor model                   | Sony IMX927                           |
| Sensor architecture (material) | cmos                                  |
| Shutter type(s)                | Global shutter (GS)                   |
| Sensor size                    | 28.06 × 28.06 mm (39.68 mm, Type 2.5) |
| Pixel size                     | 2.74 μm × 2.74 μm                     |

## Pixel formats

|                          |                       |
|--------------------------|-----------------------|
| Sensor bit depth         | 8-bit, 10-bit, 12-bit |
| Monochrome pixel formats | mono8, mono10, mono12 |

## Timing and gain

|                 |                   |
|-----------------|-------------------|
| Max. frame rate | 112 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 x 62 x 62                |
| Filter/protection glass           | K9 - AR coating - 400-850nm |
| 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 |

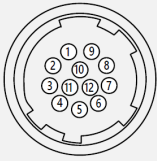
## FW features - image control

|                        |                                                      |
|------------------------|------------------------------------------------------|
| Exposure modes         | manual, auto, external                               |
| Gain modes             | auto, manual                                         |
| Image control features | roi, lut, mirror-image, dpc, shading-correction, ffc |

## 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