

shr461MXGE

SHR 10GigE



The high resolution SHR series offers outstanding image quality. This is made possible by the excellent physical characteristics of large pixels in large format sensors. The thermally highly optimized housing guarantees highest optical precision. The large M72 lens mount can be adapted to any lens. The economical and high-performance 10 GigE interface offers high data transfer speeds of up to 1.1 GB/s for these large images. A special frame grabber is not required.

Technical Highlights

- > User defined shading correction
- > Automatic and user defined pixel correction
- > Extremely low noise
- > Excellent dynamic range
- > high performance 10GigE interface
- > Integrated 4-channel LED strobe controller
- > Industrial TTL-24V I/O Interface with SafeTrigger, programmable logic functions, sequencers and timers, RS232

SHR Series

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| | |
|--------------------|-------------------|
| Resolution [MP] | 101.8 MP |
| Resolution (h x v) | 11648 x 8742 px |
| Frame rate (max.) | 8.7 fps |
| Chroma | mono |
| Interface | 10GigE (RJ-45) |

Sensor

| | |
|---------------------|---------------------------|
| Sensor | IMX461LLA |
| Manufacturer | Sony |
| Sensor type | Area CMOS |
| Shutter type | rolling shutter |
| Sensor size (h x v) | 43.8 x 32.87 mm |
| Optical diagonal | 54.76 mm |
| Sensor format | 55mm (Type 3.4) |
| Pixel size (h x v) | 3.76 x 3.76 μm |

Camera

| | |
|---------------------|--------------------------------|
| Exposure modes | MANUAL;AUTO;EXTERNAL |
| Trigger modes | INTERNAL;SOFTWARE;EXTERNAL |
| Exposure time (min) | 60 μs |
| Exposure time (max) | 1 sec (external ∞) |
| Pixel format / max | mono8, mono12, mono16 / 16 bit |
| Gain modes / max | manual, auto / 36 dB |
| Internal memory | 512 MB SDRAM |

Feature Set

| | |
|-------------------------|----------------------|
| LUT | yes |
| Offset | yes |
| Binning | yes |
| Image flip | yes |
| Shading correction | yes (external) |
| Defect pixel correction | yes |
| Sequencer | yes |
| POE | yes (POE+)(optional) |

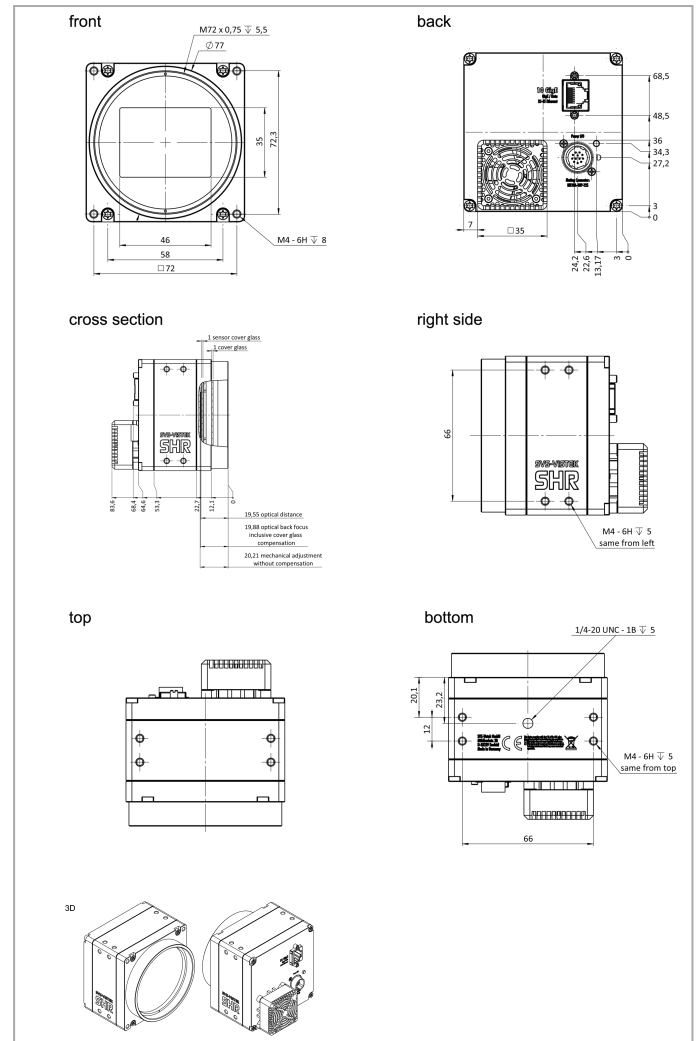
Housing

| | |
|------------------------|------------------------------|
| Lens mount | M72x0,75 |
| Dimensions (w x h x d) | 80 x 80 x 83 mm |
| Weight | 580 g |
| Ambient temperature | -10 to 45 $^{\circ}\text{C}$ |
| Ambient humidity | 10 to 90 % (non-condensing) |
| Protection class | IP30 |
| Filter-/Coverglass | Borofloat B270i - AR coating |

I/O-Interfaces

| | |
|-------------------|-------------------------------|
| Input up to 24V | 2 x |
| Input OPTO | 1 x |
| Output open drain | 4 x |
| I/O RS-232 | 1 x |
| Power supply | 10 to 25 V (DC) |
| Power consumption | 17 W (dep. on operating mode) |

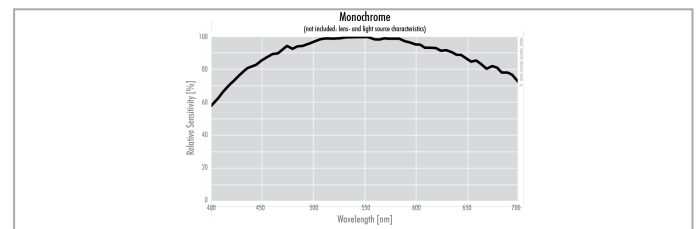
Dimensions [mm]



Pinout Mating Connector

| Hirose 12 Pin | 1 | VIN - (GND) | 7 | OUT 1 (open drain) |
|---------------|---|-------------------------|----|--------------------|
| | 2 | VIN + (10 V to 25 V DC) | 8 | OUT 2 (open drain) |
| | 3 | IN 4 (RXD RS232) | 9 | IN 3 + (opto In +) |
| | 4 | OUT 4 (TXD RS232) | 10 | IN 3 - (opto In -) |
| | 5 | IN 1 (0-24V) | 11 | OUT 3 (open drain) |
| | 6 | IN 2 (0-24V) | 12 | OUT 0 (open drain) |

Spectral Response *



* Sensor data – excludes camera cover- or IR-cut filter characteristics

