

SC900NIR-ICM-U

3.2 Megapixel Global Shutter NIR-Camera with external trigger



The SC900NIR-ICM is based on the highly compact 1/3.1" Sony Pregius S IMX900 CMOS image sensor. With a resolution of 3.2 megapixels (2064 × 1552 pixels), the sensor combines a minimum pixel size of 2.25 μm with state-of-the-art back-illuminated architecture. Thanks to a hardware-based global shutter, it is possible to capture extremely fast motion with absolutely no distortion. A specially optimized photodiode structure also ensures significantly increased quantum efficiency in the near-infrared range (NIR > 1000 nm) as well as excellent tolerance to incident light angles. High-performance USB 3.0 or GigE interfaces are available for flexible system integration and maximum data throughput.

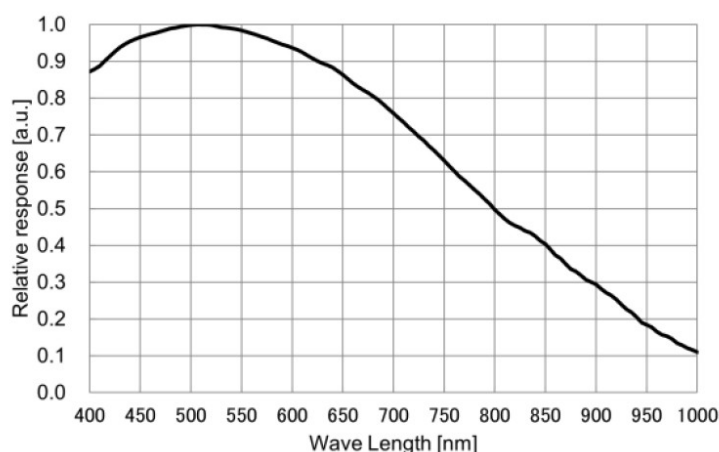


Highlights & Configurations Options

- **Sensor:** SONY IMX900AMR (1/3.1")
 - **Resolution:** 3.2 Megapixel (2048 x 1536)
 - **Spectral range:** 400nm - 1000nm
 - **Exposure time:** 11 μs - 15s
 - **Frame rate:** 53 fps USB / 16fps GigE
 - **Dynamic range mode:** TBD
 - **Shutter:** Global Shutter
 - **Interface:** USB 3.0 or GigE
 - **Software:** EHDView Software & SDK inklusive
- **Optional Bandpass filter:**
 - LP695: 715-1100nm
 - LP715: 730-1100nm
 - LP800: 820-1100nm
 - LP815: 825-1100nm
 - LP830: 845-1100nm
 - LP850: 870-1100nm
 - LP900: 910-1100nm

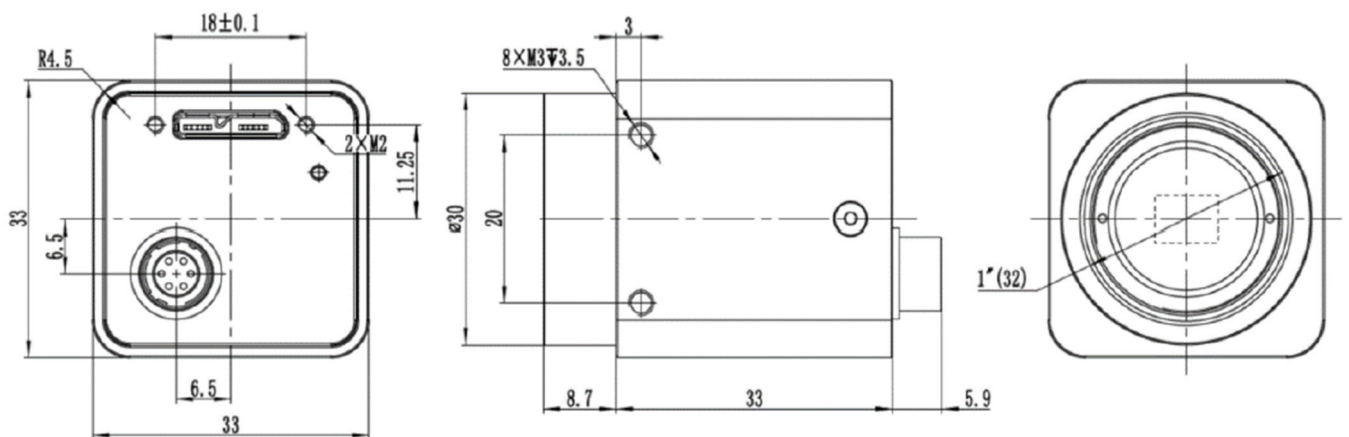
Quantum efficiency (QE vs. Wavelength)

Peak at ~500-525nm (>90% QExFF)
NIR-Sensitivity at 1000nm (~12% QExFF)



Technical Specification SC900NIR-ICM-U

Specification	Details
Image Sensor	1/3.1" SONY IMX900 backilluminated CMOS
Resolution	2048 × 1536 Pixel (3.2 Megapixel)
Pixel Size	2.25 × 2.25 µm (H × V)
Aktive Sensor Size	4.64 × 3.49 mm (H × V)
Full Well Capacity	10.0 (ke-)
Dark Current	0.15mV
Dynamic Range	64.9dB
Sensitivity	1807mV
A/D Conversion	8-bit / 12-bit
Exposure Time	11 µs ~ 15 s
Frame Rate	53 fps@2048x1536 / 126fps@1024x768
Conversation Gain	TBD
External Trigger	1 opto-isolated Input, 1 opto-isolated Output, 1 GPIO
Objektivanschluss (Lens Mount)	C-Mount
Working Temperature	-10°C ~ 50°C
Stromversorgung	DC 5V over USB-Port, 3.4W (680mA)
Abmessungen (B × H × T)	33 × 33 × 33 mm
Gewicht	70 g



Technical Specification SC900NIR-ICM-G

Specification	Details
Image Sensor	1/3.1" SONY IMX900 backilluminated CMOS
Resolution	2048 × 1536 Pixel (3.2 Megapixel)
Pixel Size	2.25 × 2.25 µm (H × V)
Aktive Sensor Size	4.64 × 3.49 mm (H × V)
Full Well Capacity	10.0 (ke-)
Dark Current	0.15mV
Dynamic Range	64.9dB
Sensitivity	1807mV
A/D Conversion	8-bit / 12-bit
Exposure Time	11 µs ~ 15 s
Frame Rate	16 fps@2048x1536 / 66fps@1024x768
Conversation Gain	TBD
External Trigger	1 opto-isolated Input, 1 opto-isolated Output, 2 GPIO
Objektivanschluss (Lens Mount)	C-Mount
Working Temperature	-10°C ~ 50°C
Stromversorgung	DC12V external
Abmessungen (B × H × T)	33 × 33 × 42 mm
Gewicht	70 g

