

Stingray – The Transformer Camera.



Description

The Stingray falls into the mid-range in terms of price, but offers a breadth of functions unrivaled in its class and an unbeatable price/performance ratio. The Stingray versions are equipped with a fast FireWire IEEE1394b interface and high-end CCD sensors in color and monochrome, with resolutions from VGA up to 5 megapixels. To meet the highest requirements in the industry, the Stingray comes optionally in a version with a copper daisy chain connection or 1 x copper combined with 1 x GOF connector (2 x optical fiber on LCLC).

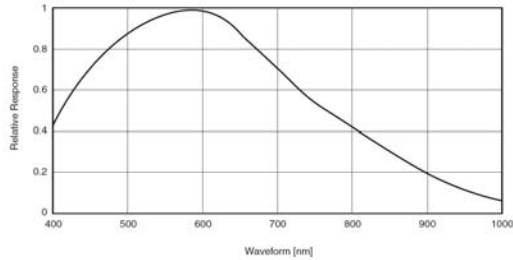
The camera is loaded with typical AVT intelligent functions for image pre-processing, like lookup tables, shading corrections, white balance and 2 to 8x binning* for enhanced photosensitivity. Grabber functions, including an internal memory and deferred transport mode, make the Stingray ideal for multi-camera operations, while the sequence mode enables lightning-fast parameter changes. The Stingray is designed to be modular and flexible, offering a wide selection of lens-mounts, sensors, case variations, interfaces and cable outputs, which can be flexibly configured using building-block principles.

* monochrome versions only

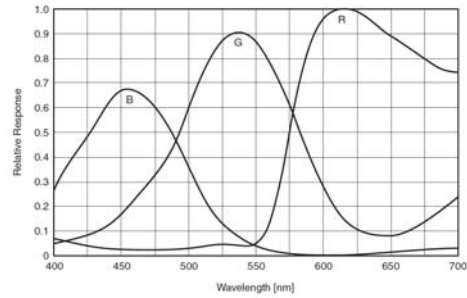
Highlights

- IEEE 1394b (S800 daisy chain)
- > WXGA (1292 x 964)
- Up to 30 fps (full resolution)
- Progressive scan CCD, monochrome and color
- Image pre-processing features:
 - LUT
 - Real-time shading correction
 - High SNR mode
 - Hue, saturation (color only)
 - Color debayering
 - 2x ... 8x binning* / sub-sampling
 - Low noise binning mode
 - Defect pixel correction
 - And lots more ...
- Smart frame grabber features:
 - 32 MB on-board
 - Deferred image transport
 - Trigger delay
 - Multi-shot, mirror image
 - SIS (secure image signature)
 - Sequence mode
 - And lots more ...
- Industry proven and robust housing
- C-Mount / CS-Mount
- Angled head, board level version (on request)
- Medical design on request

Sensor Specification b/w

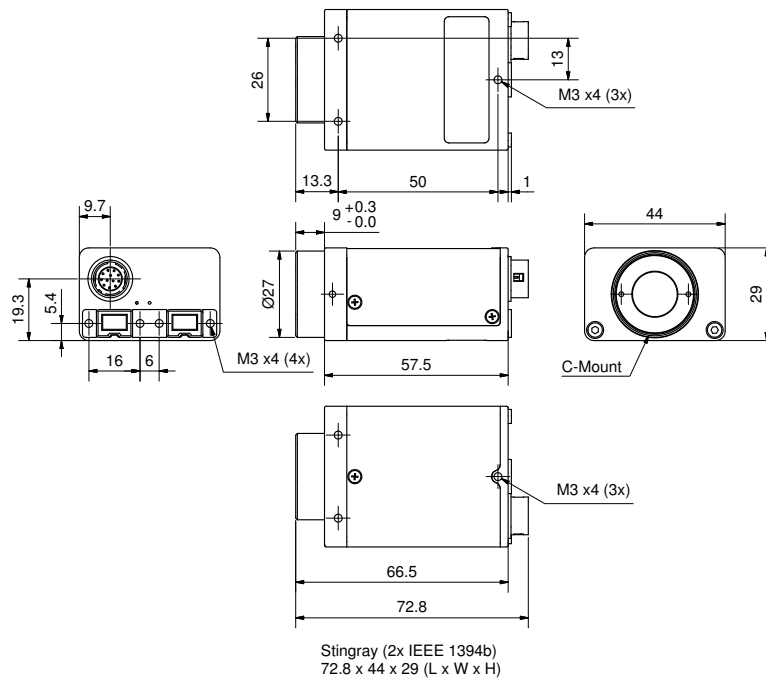


Sensor Specification color



The sensor specifications (excluding lens and filter) are typical for this camera model.

Dimensions



Connections Copper / Daisy Chain

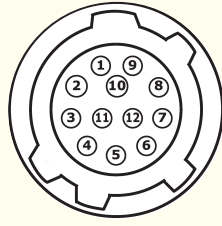


Connections Copper / GOF



| Preview mode (by sub-sampling) | |
|--------------------------------|------------|
| AOI height / pixel | Frame rate |
| 964 | 30 |
| 768 | 37 |
| 480 | 53 |
| 240 | 83 |
| 120 | 116 |
| 30 | 164 |
| 10 | 183 |
| 2 | 191 |

| I/O Connector | |
|---------------|--------------------------------|
| Pin | Signal |
| 1 | External GND |
| 2 | External Power (8...36V DC) |
| 3 | GP Output 4 |
| 4 | GP Input 1 (Default: Trigger) |
| 5 | GP Output 3 (Default: Busy) |
| 6 | GP Output 1 (Default: IntEna) |
| 7 | GP Input GND |
| 8 | RxD (RS232) |
| 9 | TxD (RS232) |
| 10 | GP Output Power (max. 35 V DC) |
| 11 | GP Input 2 (CMOS/TTL) |
| 12 | GP Output 2 |



| Camera specifications | Stingray F-125 B/C | Stingray F-125 B/C fiber |
|-----------------------|--|--------------------------|
| Image device | Type 1/3 (diag. 6 mm), progressive scan SONY CCD, ICX 445 | |
| Picture size | 1292 (H) x 964 (V) | |
| Cell size | 3.75 µm x 3.75 µm | |
| Resolution depth | 8 bit / 14 bit (16 bit in High SNR mode) | |
| Lens mount | C-Mount / optional: CS-Mount | |
| Digital interface | IEEE 1394b, (IIDC V1.31) S 800 daisy chain | |
| Transfer rate | 100 Mbit/s, 200 Mbit/s, 400 Mbit/s, 800 Mbit/s | |
| Frame rates | Up to 30 fps (full resolution) | |
| Gain control | Manual: 0...24 dB, auto gain | |
| Shutter speed | 25 µs ... ~ 67 s, auto shutter | |
| Image pre-processing | LUT; shading correction; High SNR mode; white balance; color interpolation (debayering); local color anti aliasing; hue; saturation; sub-sampling; 2x - 8x binning (only b/w) or sub-sampling; low noise binning mode; defect pixel correction; separate reference AOI for auto features | |
| Grabber features | 32 MB on-board memory; deferred image transport; trigger delay; multi-shot; mirror image; several trigger modes; SIS (secure image signature); sequence mode; storable user sets | |
| Power requirements | DC 8 V - 36 V; < 3.5 W (fiber < 4 W) @ 12 V | |
| Dimensions | 72.8 mm x 44 mm x 29 mm (L x W x H) | |
| Mass | 92 g (without lens) | |
| Operating temperature | + 5 ... + 45° Celsius | |
| Storage temperature | - 10 ... + 60 ° Celsius | |
| Regulations | CE, FCC Class B, RoHS (2002/95/EC) | |
| Options | Angled head, board level version (on request), cables, optical filters; Stingray F-125 B/C fiber; medical design on request; AVT FirePackage / Active FirePackage / Fire4Linux | |

Design and specifications of the described product(s) are subject to change without notice.
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