



Stingray F-504

Description

High performance 1394b camera - 5 Megapixel - 9 fps

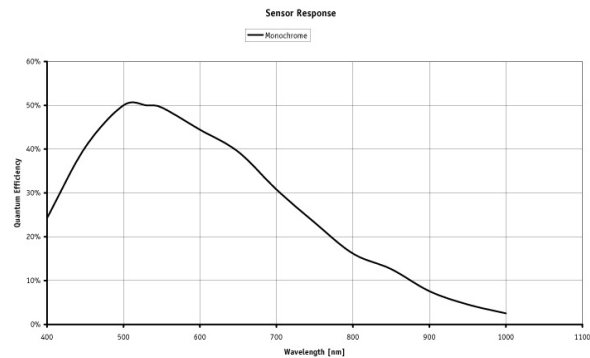
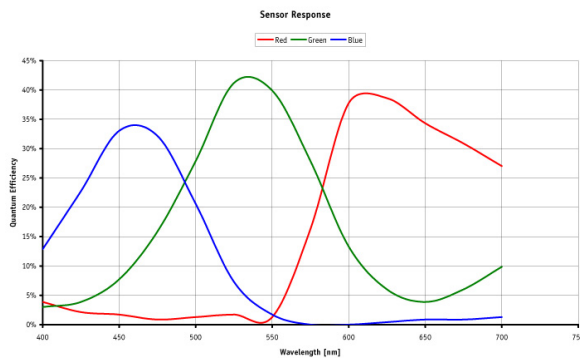
The Stingray F-504B/C is equipped with a 5 Megapixel CCD sensor (ICX655). At full resolution, this 1394b camera runs at 9 fps. Higher frame rates can be reached by a smaller AOI, binning (b/w) or sub-sampling.

- Sony ICX655
- Trigger
 - Programmable, trigger level control, single trigger, bulk trigger, programmable trigger delay
- Options
 - 1394b connectors: 2 x copper (daisy chain) or 1 x GOF, 1 x copper
 - Various IR cut/pass filters, removed cover glass
 - Various lens mounts on request
 - Hirose power: out
 - Angled head
 - White medical housing
 - Compact housing version
 - Board level versions on request

Specifications

Stingray F-504	
Interface	IEEE 1394b - 800 Mb/s, 2 ports, daisy chain, fiber optic (GOF) optional
Resolution	2452 x 2056
Sensor	Sony ICX655
Type	CCD Progressive
Sensor Size	Type 2/3
Cell size	3.45 µm
Lens mount	C
Max frame rate at full resolution	9 fps
A/D	14 bit
On-board FIFO	64 MB
Output	
Bit depth	8-14 bit
Mono modes	Mono8, Mono12, Mono16
Color modes YUV	YUV411, YUV422
Color modes RGB	RGB8
Raw modes	Raw8, Raw12, Raw16
General purpose inputs/outputs (GPIOs)	
TTL I/Os	0
Opto-coupled I/Os	2 inputs, 4 outputs
RS-232	1
Power/Mass/Dimensions/Regulations	
Power requirements (DC)	8 V - 36 V
Power consumption (12 V)	<4 W
Mass	92 g
Body Dimensions (L x W x H in mm)	72.9 x 44 x 29 mm including connectors, w/o tripod and lens
Regulations	CE, FCC Class B, RoHS

[Download Stingray technical drawing \(click here\)](#)



Smart features

Stingray cameras include numerous real-time image pre-processing functions. All below mentioned functions are performed by the FPGA inside the camera – with no additional CPU load and thus an inexpensive host computer.

- AOI (true partial scan), separate AOI for auto features
- Programmable LUT, white balance, hue, saturation
- Debayering
- Gain
 - Auto/manual
 - Manual gain control: 0 - 24.4 dB
- Exposure
 - Auto/manual
 - Exposure time: 42 μ s - 67 s
- Color correction
- Shading correction
- High SNR mode (up to 24 dB better signal-to-noise ratio)
- Local color anti-aliasing
- Sub-sampling, 2x – 8x binning (b/w)
- Low noise binning mode
- Defect pixel correction
- Sequence mode (changes the camera settings on the fly)
- Image mirror
- Deferred image transport
- SIS (secure image signature, time stamp for trigger, frame count etc.)
- Storable user settings

The Technical Manual of the Stingray contains detailed descriptions of all functions.

Applications

The Stingray F-504B/C meets high demands. Its brilliant image quality can be enhanced by several image pre-processing functions. Due to the modular design, customization is easy and cost-effective. This 5 Megapixel camera fits for:

- Intelligent traffic systems
- Industrial inspection and automation
- Logistics
- Science and research
- Microscopy
- Healthcare and medical (light gray housing available)
- Multimedia and entertainment
- ... and many more

Additionally, it is ideally suited for:

- Demanding OEM camera applications (board level versions with separate sensor board available on request)
- Daisy chaining (two copper connectors)
- Long cables - 400 meters and more without additional repeaters (fiber version)