



Description

High-end 8 Megapixel 1394 camera for still imaging

The Oscar F-810C is an excellent camera for sophisticated still imaging. It includes a frame readout Sony CCD sensor.

- ICX456
- B/W signal out of luma interpolation (Y = 0.3R + 0.6G + 0.1B)
- B/W signal out of R, G or B channel information

Benefits of the b/w output interpolation modes:

- In some applications, such as ophthalmology with contrast input, only one color is needed for evaluation.
- For applications with monochromatic lighting, noise can be reduced by using only the respective color channel instead of the fully interpolated luma signal.
- The Oscar can use the three primary colors (R, G and B) separately and output them in a reduced data monochrome mode.

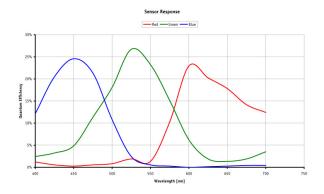


Specifications

Oscar	F-810
Interface	IEEE 1394a - 400 Mb/s, 1 port
Resolution	3272 x 2469
Sensor	Sony ICX456
Туре	CCD Progressive
Sensor Size	Type 2/3
Cell size	2.7 μm
Lens mount	С
Max frame rate at full resolution	3 fps
A/D	12 bit
On-board FIFO	32 MB
	Output
Bit depth	12 bit
Mono modes	Mono8
Color modes YUV	YUV411, YUV422, Y8-green, Y8-red, Y8-blue
Color modes RGB	RGB8
Raw modes	Raw8, Raw16
	General purpose inputs/outputs (GPIOs)
TTL I/Os	0
Opto-coupled I/Os	2 inputs, 2 outputs
RS-232	1
	Power/Mass/Dimensions/Regulations
Power requirements (DC)	8 V - 36 V
Power consumption (12 V)	<4 W
Mass	<170 g
Body Dimensions (L x W x H in mm)	72.5 x 44 x 44 mm including connectors, w/o tripod and lens
Regulations	CE, FCC Class B, RoHS

<u>Download Oscar technical drawing (click here)</u>





Smart features

Oscar cameras include several image pre-processing functions (all real-time). The below mentioned functions are performed by the camera's FPGA – with no additional load on the CPU.

- Auto/one push white balance
- Auto gain
- Auto shutter
- LUT, gamma
- Color correction
- Hue, saturation
- Sharpness
- Shading correction
- High SNR mode (up to 24 dB better signal to noise ratio)
- Image mirror
- Sub-sampling



Applications

The Oscar F-810C comes with outstanding benefits for microscopy and ophthalmology applications. Besides that, it is particularly suited for applications that require a very detailed image and excellent color reproduction, even in low light situations. Its fast preview mode makes optimal object positioning and illumination easy.

- Microscopy
- Ophthalmology
- Science and Research
- Life Science
- Still imaging with high demands for excellent color reproduction
- Imaging applications which require separate R, G or B output (full pane)