Manta
G-095

GigE VISION

Description

Sensitive GigE camera with ICX692 color sensor - EXview HAD II

Preliminary

The Manta G-095C is a very sensitive camera with the EXView HAD II ICX692 color sensor (1292 x 734 pixels). It runs 40 fps at full resolution. Besides the very good sensitivity both in the visible and NIR spectrum, this camera incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options like angled heads or board level versions. All Manta cameras are **optionally available with PoE (Power over Ethernet).**

- EXView HAD II ICX692 color sensor
- Trigger
  - External trigger event: rising/falling/any edge, level high/low
  - External trigger delay: 0 to 60 seconds in 1 µs increments
- Sync modes
  - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Modular options
  - Various IR cut/pass filters
  - CS-Mount
  - Board level version
  - Angled head
  - White medical housing
  - **PoE (Power over Ethernet)**

Specifications

Manta	G-095
Interface	IEEE 802.3 1000baseT
Resolution	1292 x 734
Sensor	Sony ICX692
Sensor type	CCD Progressive
Sensor size	Type 1/3
Cell size	4.08 µm
Lens mount	C/CS-Mount
Max frame rate at full resolution	40 fps
A/D	14 bit
On-board FIFO	32 MB
	Output
Bit depth	8-12 bit
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24
Raw modes	Bayer8, Bayer16, Bayer12 packed
	General purpose inputs/outputs (GPIOs)
Opto-coupled I/Os	2 inputs, 2 outputs
RS-232	1
	Operating conditions/Dimensions
Operating temperature	+5 °C … +45 °C
Power requirements (DC)	8 V - 30 V
Power consumption (12 V)	3.6 W
Mass	<200 g
Body Dimensions (L x W x H in mm)	86.4 x 44 x 29 mm incl. connectors
Regulations	CE, FCC Class B, RoHS

Download Manta technical drawing (click here)

Smart features

- ROI (Region of Interest Readout)
- Exposure
  - Auto/one push/programmable
  - Exposure time 45 µs to 60 s
- White balance
  - Auto/one push/programmable
- On-board debayering
- Hue, saturation, sharpness (color versions)
- Gain
  - Auto/one push/programmable
  - Manual gain control: 0 to 32 dB (1 dB/step)
- Three look-up tables (LUTs), gamma correction
- DSP subregion (selectable ROI for auto features)
- Binning (up to 8 x 14, independent x and y binning)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- Event channel
- Chunk data
- Video-type auto-iris
- 5 storable user sets

Applications

The Manta G-095C is a very sensitive color camera with GigE Vision interface and PoE option. Like the other Manta cameras, it includes three separate look-up tables for R, G, and B, angled heads, or boardlevel versions with separate sensor head.

Typical applications:

- Security and Surveillance
- Imaging with low light level
- Microscopy (low light)
- ... and many more