

# Manta G-095



## 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  $\mu$ s 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

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