Manta G-095

- 40 fps at full resolution
- PoE optional
- Angled-head and board level variants
- Video-iris lens control

Sensitive GigE camera with the Sony ICX692 CCD sensor

Manta G-095 is a very sensitive camera with the Sony EXview HAD II ICX692 sensor. It runs 40 fps at full resolution. Besides the very good sensitivity both in the visible and NIR spectrum, this camera incorporates three look-up tables, sophisticated color correction algorithms, a robust metal housing, and many modular options.

Benefits and features:

- Monochrome (G-095B) and color (G-095C) models
- GigE Vision interface with Power over Ethernet option
- Screw mount RJ45 Ethernet connector for secure operation in industrial environments
- Supports cable lengths up to 100 meters (CAT-6 recommended)
- Comprehensive I/O functionality for simplified system integration
- Popular C-Mount lens mount
- Easy camera mounting via standard M3 threads on top and bottom of housing or optional tripod adapter
- Easy software integration with Allied Vision's Vimba Suite and compatibility to the most popular third party image-processing libraries.

Specifications

<table>
<thead>
<tr>
<th>Manta</th>
<th>G-095</th>
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</thead>
<tbody>
<tr>
<td>Interface</td>
<td>IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional</td>
</tr>
<tr>
<td>Resolution</td>
<td>1292 (H) × 734 (V)</td>
</tr>
<tr>
<td>Sensor</td>
<td>Sony ICX692</td>
</tr>
<tr>
<td>Sensor type</td>
<td>CCD Progressive</td>
</tr>
<tr>
<td><strong>Manta</strong></td>
<td>G-095</td>
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<tr>
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</tr>
<tr>
<td>Shutter mode</td>
<td>Global shutter</td>
</tr>
<tr>
<td>Sensor size</td>
<td>Type 1/3</td>
</tr>
<tr>
<td>Pixel size</td>
<td>$4.08 , \mu \text{m} \times 4.08 , \mu \text{m}$</td>
</tr>
<tr>
<td>Lens mounts (available)</td>
<td>C-Mount, CS-Mount, S-Mount</td>
</tr>
<tr>
<td>Max. frame rate at full resolution</td>
<td>40 fps</td>
</tr>
<tr>
<td>ADC</td>
<td>12 Bit</td>
</tr>
<tr>
<td>Image buffer (RAM)</td>
<td>32</td>
</tr>
</tbody>
</table>

**Output**

- Bit depth: 8/12 Bit
- Monochrome pixel formats: Mono8, Mono12, Mono12Packed
- YUV color pixel formats: YUV411Packed, YUV422Packed, YUV444Packed
- RGB color pixel formats: RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
- Raw pixel formats: BayerRG8, BayerRG12Packed, BayerRG12

**General purpose inputs/outputs (GPIOs)**

- Opto-isolated I/Os: 2 inputs, 2 outputs
- RS232: 1

**Operating conditions/dimensions**

- Operating temperature: +5 °C to +45 °C
- Power requirements (DC): 8 to 30 VDC AUX or 802.3af PoE
- Power consumption: 3.6 W at 12 VDC; 4.2 W PoE
- Mass: 200 g; 210 g (PoE)
- Body dimensions (L × W × H in mm): 86.4 × 44 × 29 (including connectors)
- Regulations: CE: 2014/30/EU (EMC), 2011/65/EU (RoHS); FCC Class B; CAN ICES-003 (B)
Quantum efficiency

*QE measured without protection glass or filters. With glass or filters, quantum efficiency decreases by approximately 10%.

Features

- Video-type auto iris
- Region of interest, separate region for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 32 dB)
- Auto exposure (45 µs to 60 s)
- Auto white balance
- Look-up tables
- Gamma
- Hue, saturation, color correction
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO
- Event channel
- Chunk data
- Storable user sets
Technical drawing
Applications

Manta G-095 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