

# Manta G-609



## Description

### GigE camera with Sony ICX694

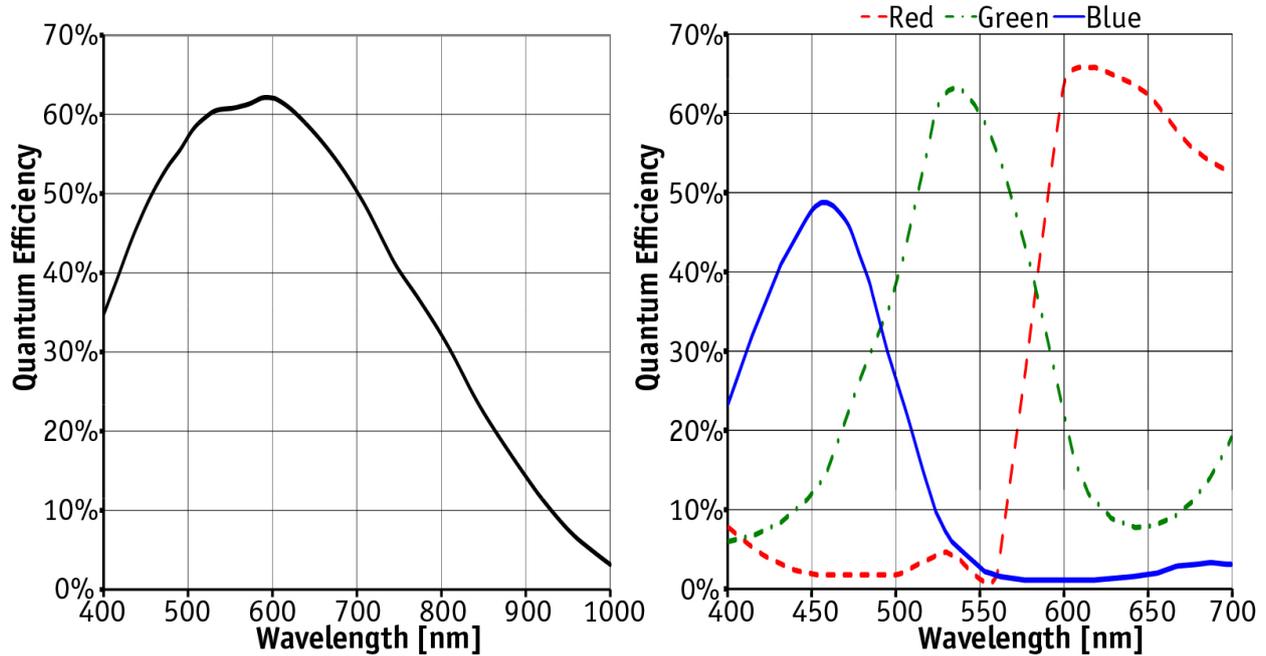
The Manta G-609B/C includes an 1" Sony ICX694 sensor with EXview HAD II technology. This sensor has an excellent sensitivity and NIR response. At full resolution, it runs 15 fps.

- Sony ICX694 EXview HAD II (type 1"), 6 Megapixels
- Sync modes
  - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Trigger
  - External trigger event: rising/falling/any edge, level high/low
  - External trigger delay: 0 to 19 s in 1  $\mu$ s increments
- Modular options
  - Various IR cut/pass filters
  - White medical housing
  - PoE (Power over Ethernet)
- Camera temperature monitoring

## Specifications

Manta	G-609
<b>Interface</b>	IEEE 802.3 1000baseT
<b>Resolution</b>	2752 x 2206
<b>Sensor</b>	Sony ICX694
<b>Sensor type</b>	CCD Progressive
<b>Sensor size</b>	Type 1
<b>Cell size</b>	4.54 $\mu\text{m}$
<b>Lens mount</b>	C-Mount
<b>Max frame rate at full resolution</b>	15 fps
<b>A/D</b>	14 bit
<b>On-board FIFO</b>	128 MB
	<b>Output</b>
<b>Bit depth</b>	8/14-8/12 bit
<b>Mono modes</b>	Mono8, Mono12, Mono12Packed
<b>Color modes YUV</b>	YUV411Packed, YUV422Packed, YUV444Packed
<b>Color modes RGB</b>	RGB8Packed, BGR8Packed
<b>Raw modes</b>	BayerRG8, BayerRG12, BayerRG12Packed
	<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 $^{\circ}\text{C}$ ... +45 $^{\circ}\text{C}$
<b>Power requirements (DC)</b>	8 V - 30 V
<b>Power consumption (12 V)</b>	4.6 W (PoE) / 3.9 W (non-PoE)
<b>Mass</b>	150 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)
- Gain (manual gain 0 to 33 dB)
- Exposure time (41  $\mu$ s to 38 s)
- 3 Look-up tables (LUTs)
- Gamma (0.25 - 4.0)
- DSP subregion (selectable ROI for auto features)
- Binning
- Decimation (sub-sampling)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- IEEE 1588 (PTP, Precision Time Protocol)
- Event channel
- Chunk data
- Storable user sets
- Camera temperature monitoring

## Applications

Thanks to the ICX694 sensor with its excellent response, this 6 Megapixel camera is suitable for various demanding applications:

- High-resolution surveillance
- Metrology and inspection systems
- Scientific measurement
- Microscopy
- Forensic solutions
- ITS traffic solutions
- Applications requiring a highly sensitive camera (low light conditions)
- Applications requiring good sensitivity in the NIR spectrum