

Manta G-235



Description

GigE camera featuring the Sony IMX174 sensor, global shutter

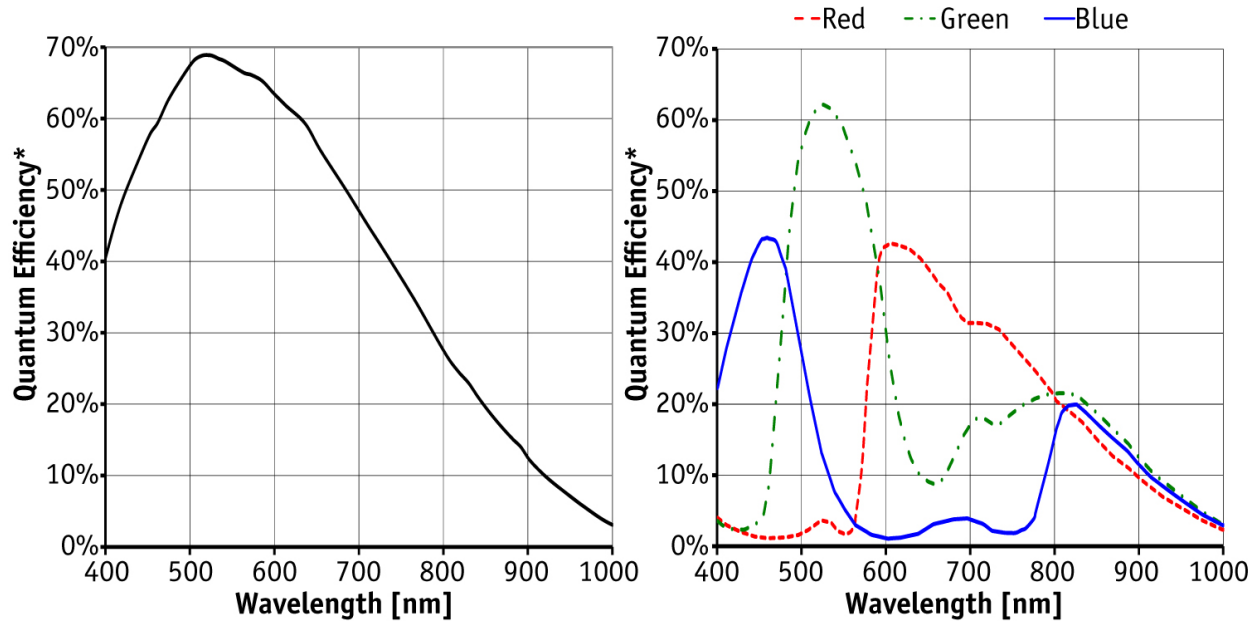
The Manta G-235B/C is an industrial camera with a 1/1.2" Sony IMX174 CMOS global shutter sensor. It's offered with several modular options (examples include PoE, board level and angled head versions, filter selections for improving the image quality, and OEM branding).

- Sony IMX174 (type 1/1.2") global shutter CMOS sensor
- 2.4 Megapixels
- Resolution of 1936 x 1216
- 50.7 fps @ full resolution
- Sync modes
 - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Trigger
 - External trigger event: rising/falling/any edge, level high/low
- Modular options
 - Various IR cut/pass filters
 - White medical housing
 - PoE (Power over Ethernet)
 - Board level and angled head versions

Specifications

Manta	G-235
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1936 x 1216
Sensor	Sony IMX174
Sensor type	CMOS Progressive
Sensor size	Type 1/1.2
Cell size	5.86 µm
Lens mount	C-Mount
Max frame rate at full resolution	50.7 fps
A/D	12 bit
On-board FIFO	128 MB
	Output
Bit depth	8-12 bit
Mono modes	Mono8, Mono12Packed, Mono12
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12Packed, BayerRG12
	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)	3.3 W (PoE) / 2.8 W (non-PoE)
Mass	150 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 \(click here\)](#)



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

Smart features

- ROI (Region of Interest Readout)
- Gain control (0 to 40 dB)
- Decimation (sub-sampling)
- Binning
- ReverseX and ReverseY
- 3 Look-up tables (LUTs)
- Gamma (0.25 to 4.0)
- DSP subregion (selectable ROI for auto features)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- Event channel
- Chunk data
- Storable user sets
- Camera temperature monitoring
- Precision Time Protocol (PTP)
- Video auto iris

Applications

The Manta G-235B/C is a robust, flexible industrial camera with the sensitive Sony IMX174 sensor.

Typical applications:

- Machine Vision
- Broadcast analysis requiring Full HD such as sports analytics
- Industrial inspection
- Security and surveillance
- ITS / traffic (traffic monitoring / speed enforcement / toll collection)
- Low light / high sensitivity conditions
- Outdoor applications with dynamic lighting situations