

Manta

G-235



- Latest Sony CMOS sensor
- PoE optional
- Angled head and board level variants
- Video-iris lens control

Description

GigE camera featuring the Sony IMX174 sensor, global shutter

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).

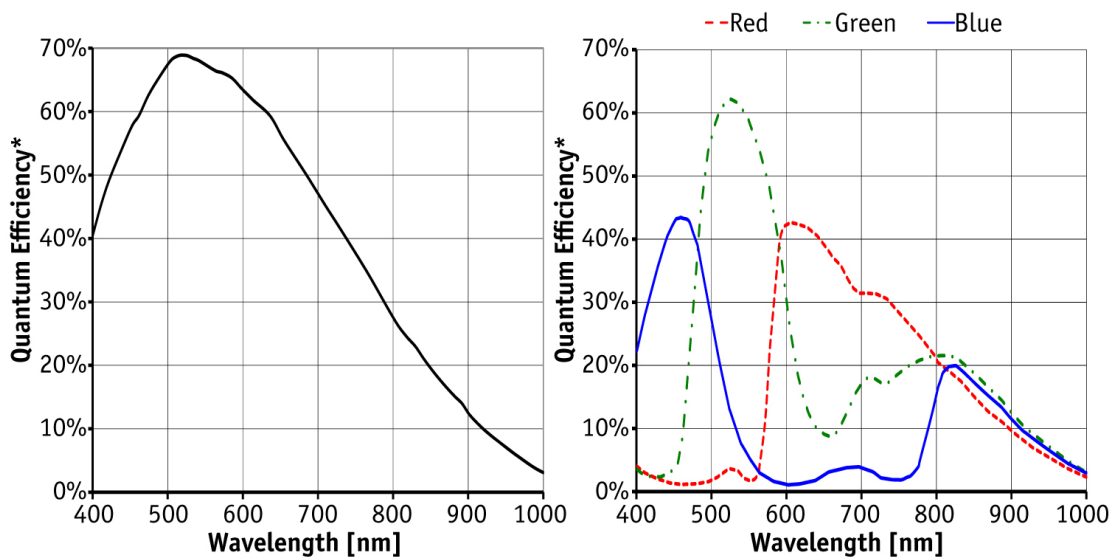
Options

- PoE (Power over Ethernet)
- Various IR cut/pass filters and lens mounts
- Angled head, board level version, white medical housing

Specifications

Manta	G-235
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1936 × 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
ADC	12 bit
On-board FIFO	128 Mbyte
Output	
Bit depth	8-12 bit
Mono modes	Mono8, Mono12Packed, Mono12
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed

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Color modes RGB	RGB8Packed, BGR8Packed
Raw modes	BayerRG8, BayerRG12
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	+5 °C ... +45 °C
Power requirements (DC)	PoE, or 8-30 VDC
Power consumption (@12 V)	3.3 W (PoE) / 2.8 W (non-PoE)
Mass	200 g (PoE) / 190 g (non-PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 mm incl. connectors
Regulations	CE, FCC Class B, RoHS



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

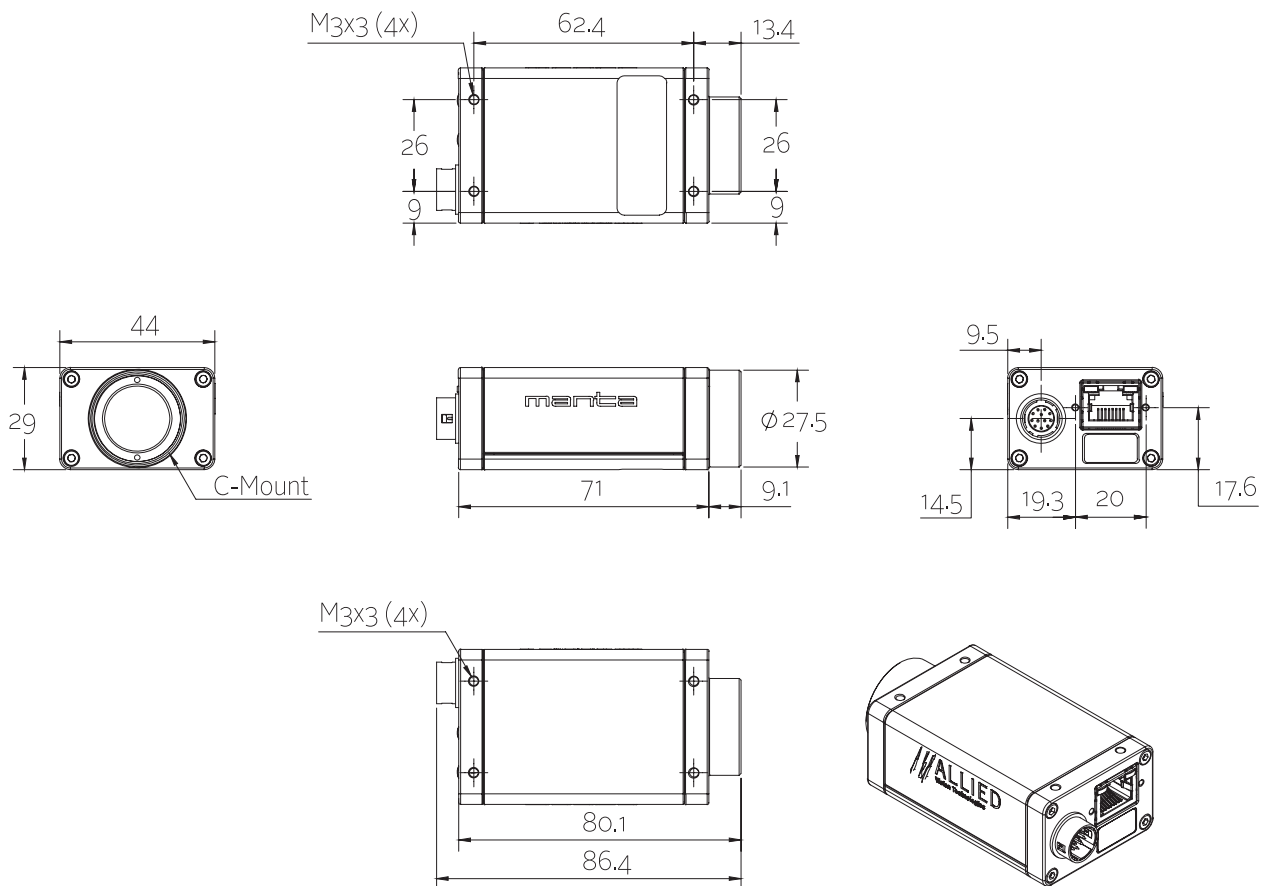
Features

- Precision Time Protocol (IEEE 1588)
- Camera temperature monitoring
- Video-type auto iris
- ROI, separate ROI for auto features
- Binning
- Decimation
- Auto gain (manual gain control: 0 to 40 dB)
- Auto exposure



- Auto white balance
- LUTs (look-up tables)
- Gamma
- Hue, saturation, color correction
- Reverse X/Y
- 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-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