

# Manta G-223



## Description

### GigE camera with CMOSIS CMV2000 sensor, global shutter

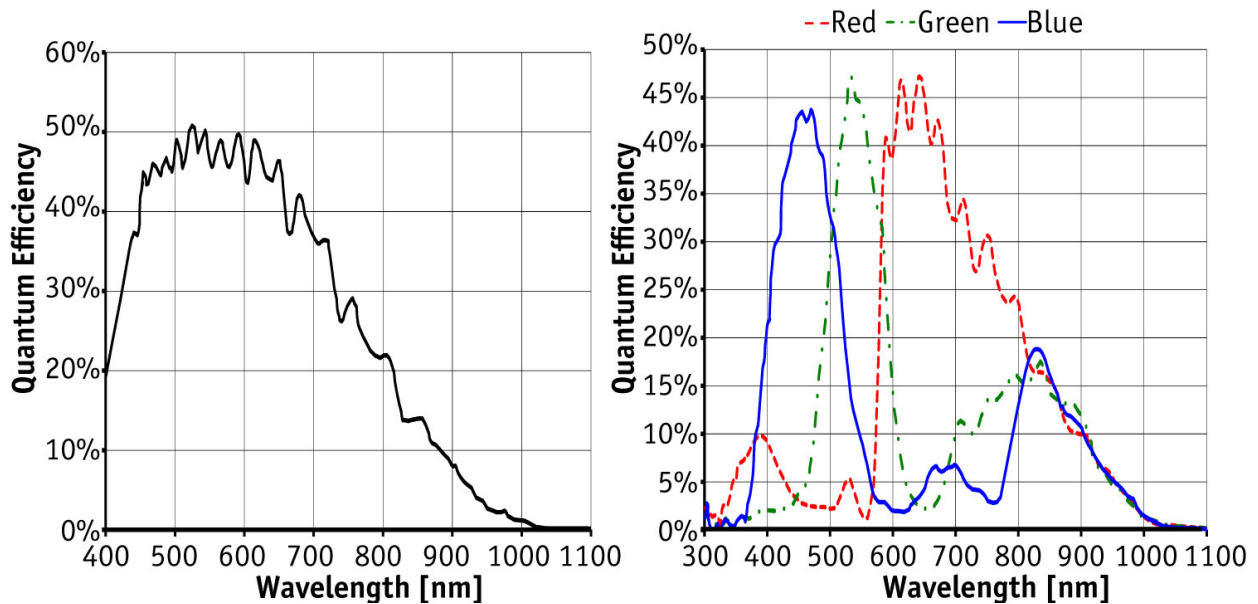
The Manta G-223B/C is an industrial GigE camera with a 2/3" CMOSIS CMV2000 sensor. The Manta G-223B/C offers several modular options (for example, PoE).

- CMOSIS CMV2000 (type 2/3, 1 inch lens recommended)
- 2.2 Megapixels, global shutter
- 53.7 fps @ 124 MB/s; 60.1 burst mode
- 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 60 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-223
<b>Interface</b>	IEEE 802.3 1000baseT
<b>Resolution</b>	2048 x 1088
<b>Sensor</b>	CMOSIS CMV2000
<b>Sensor type</b>	CMOS Progressive
<b>Sensor size</b>	Type 2/3
<b>Cell size</b>	5.5 $\mu$ m
<b>Lens mount</b>	C-Mount
<b>Max frame rate at full resolution</b>	53.7 fps
<b>A/D</b>	12 bit
<b>On-board FIFO</b>	128 MB
	<b>Output</b>
<b>Bit depth</b>	8-12 bit
<b>Mono modes</b>	Mono8, Mono12Packed, Mono12
<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 °C ... +45 °C
<b>Power requirements (DC)</b>	8 V - 30 V
<b>Power consumption (12 V)</b>	3.2 W (PoE) / 2.7 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 26 dB)
- Exposure (exposure time 18  $\mu$ s to 60 s)
- Decimation (sub-sampling)
- 3 Look-up tables (LUTs)
- Gamma (0.25 - 4.0)
- DSP subregion (selectable ROI for auto features)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- IEEE 1588 (PTP, Precision Time Protocol)
- Event channel
- Chunk data
- Storable user sets
- Camera temperature monitoring

## **Applications**

The Manta G-223B/C is a robust, flexible industrial camera with a sensitive CMOSIS CMV2000 sensor.

Typical applications:

- Full HD solutions (1920 x 1080 @ 55 fps)
- Machine vision
- Industrial inspection
- Security and surveillance
- Industrial image processing