Manta G-223 NIR

GiGE VISION

Description

GigE camera with CMOSIS CMV2000, NIR optimized, global shutter

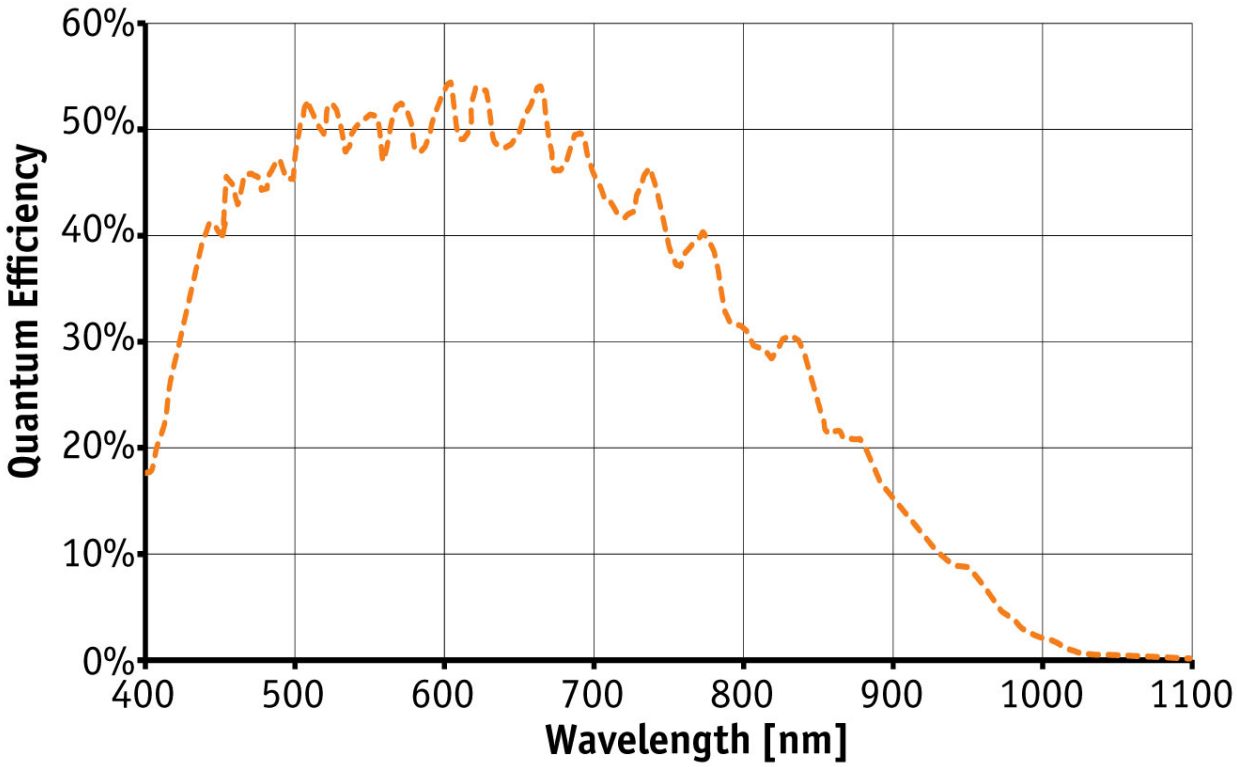
The Manta G-223B NIR is an NIR optimized GigE camera with a 2/3'' CMOSIS CMV2000 sensor. The Manta G-223B NIR offers several modular options (for example, PoE).

- CMOSIS CMV2000 (type 2/3, 1 inch lens recommended), 2.2 Megapixels (monochrome)
- 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 µs increments
- Modular options
  - Various IR cut/pass filters
  - White medical housing
  - PoE (Power over Ethernet)
- Camera temperature monitoring

Specifications

Manta	G-223 NIR
Interface	IEEE 802.3 1000baseT
Resolution	2048 x 1088
Sensor	CMOSIS CMV2000
Sensor type	CMOS Progressive
Sensor size	Type 2/3
Cell size	5.5 µm
Lens mount	C-Mount
Max frame rate at full resolution	53.7 fps
A/D	12 bit
On-board FIFO	128 MB
	Output
Bit depth	8-12 bit
Mono modes	Mono8, Mono12Packed, Mono12
	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)	3.2 W (PoE) / 2.7 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)



Smart features

- ROI (Region of Interest Readout)
- Gain (manual gain 0 to 26 dB)
- Exposure (exposure time 18 µs 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 NIR is a robust, flexible NIR optimized camera with a sensitive CMOSIS CMV2000 sensor.

Typical applications:

- Multimedia and entertainment
- Machine vision
- Security and surveillance
- Metrology and inspection systems
- Industrial image processing