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Manta G-032

GiGE VISION

Description

Value packed GigE Vision camera, VGA, Sony ICX424, PoE option

The Manta G-032B/C is a value packed GigE Vision camera with VGA resolution and a Sony ICX424 sensor. It runs at 80 fps (full resolution). With a smaller ROI, higher frame rates are possible.
It incorporates three LUTs, sophisticated color correction algorithms, a robust metal housing, and many modular options like angled heads or board level versions. Manta cameras cover a wide range of imaging applications. The Manta is optionally available with PoE (Power over Ethernet).

- Sony ICX424 (type 1/3), 0.3 Megapixels
- Trigger
  - External trigger event: rising/falling/any edge, level high/low
  - External trigger delay: 0 to 60 seconds in 1 µs increments
- Sync modes
  - Trigger ready, trigger input, exposing, readout, imaging, strobe, GPO
- Modular options
  - Various IR cut/pass filters
  - CS-Mount
  - Board level version
  - Angled head
  - White medical housing
  - PoE (Power over Ethernet)

Specifications

Manta	G-032
Interface	IEEE 802.3 1000baseT
Resolution	656 x 492
Sensor	Sony ICX424
Sensor type	CCD Progressive
Sensor size	Type 1/3
Cell size	7.4 µm
Lens mount	C/CS-Mount
Max frame rate at full resolution	80 fps
A/D	12 bit
On-board FIFO	32 MB
	Output
Bit depth	8-12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411, YUV422, YUV444
Color modes RGB	RGB24, BGR24
Raw modes	BayerRG8, BayerGR12, BayerRG12Packed
	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)	<3.6 W
Mass	<200 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

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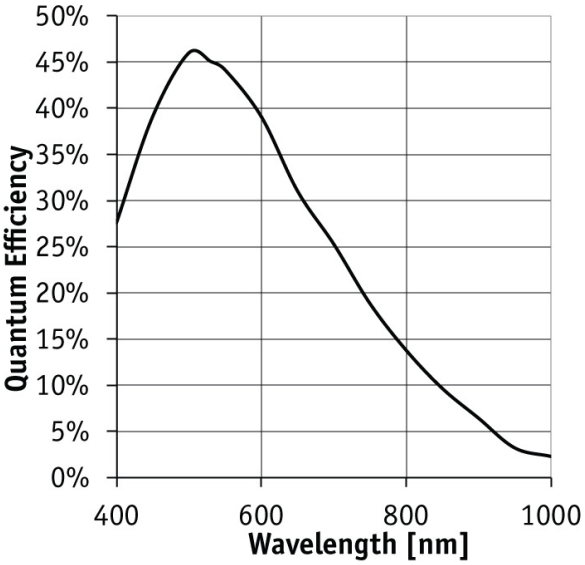

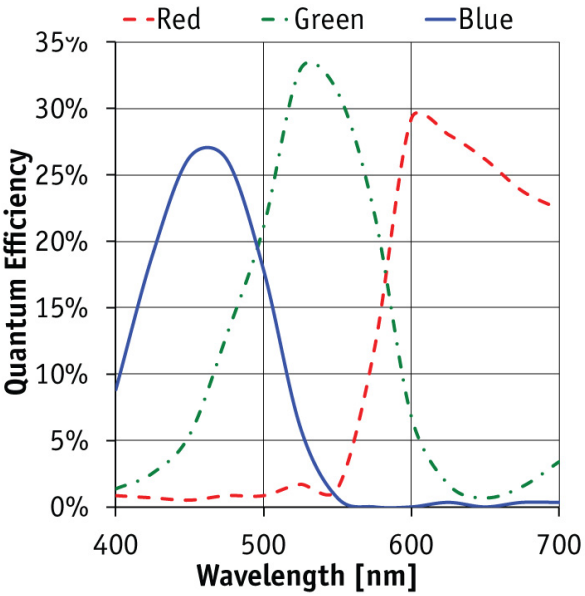

Smart features

- ROI (Region of Interest Readout)
- Exposure
  - Auto/one push/programmable
  - Exposure time 26 µs to 60 s
- White balance
  - Auto/one push/programmable
- On-board debayering
- Hue, saturation, sharpness (color versions)
- Gain
  - Auto/one push/programmable
  - Manual gain control: 0 to 36 dB (1 dB/step)
- Three look-up tables (LUTs), gamma correction
- DSP subregion (selectable ROI for auto features)
- Binning (up to 8 x 14, independent x and y binning)
- Stream hold
- StreamBytesPerSecond (easy bandwidth control)
- Event channel
- Chunk data
- Video-type auto-iris
- 5 storable user sets

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Applications

The Manta G-032B/C is a flexible, value packed VGA GigE Vision PoE camera for a variety of machine vision and inspection applications. On request, board level versions with separate sensor head (up to 200 mm distance to camera mainboard) are available. The Manta incorporates three LUTs (separate R, G, and B control), color correction, and many more features.

- Semiconductor inspection
- Food inspection
- Printing marks control
- Pharmaceutical inspection
- Ophthalmology
- Machine vision
- ITS/Traffic monitoring
- ... and many more

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