Allied Vision

Manta

G-032

- Versatile VGA camera
- Power over Ethernet option
- Angled head and board level variants
- Video-iris lens control

Description

Value packed Machine Vision camera, VGA, Sony ICX424 sensor, PoE option

Manta G-032B/G-032C is a value packed GigE Vision camera with VGA resolution that incorporates the high quality Type 1/3 (6.0 mm diagonal) Sony ICX424 CCD sensor. At full resolution, this camera runs 80.7 frames per second. With a smaller region of interest, higher frame rates are possible. The Manta is one of Allied Vision's versatile GigE Vision cameras with a wide range of features. Particular highlights are the three look-up tables, sophisticated color correction capabilities, a robust metal housing, and many modular options.
By default monochrome models ship with protection glass B 270 (ASG) and color models ship with IRC Hoya C-5000 IR cut filter.

Options:

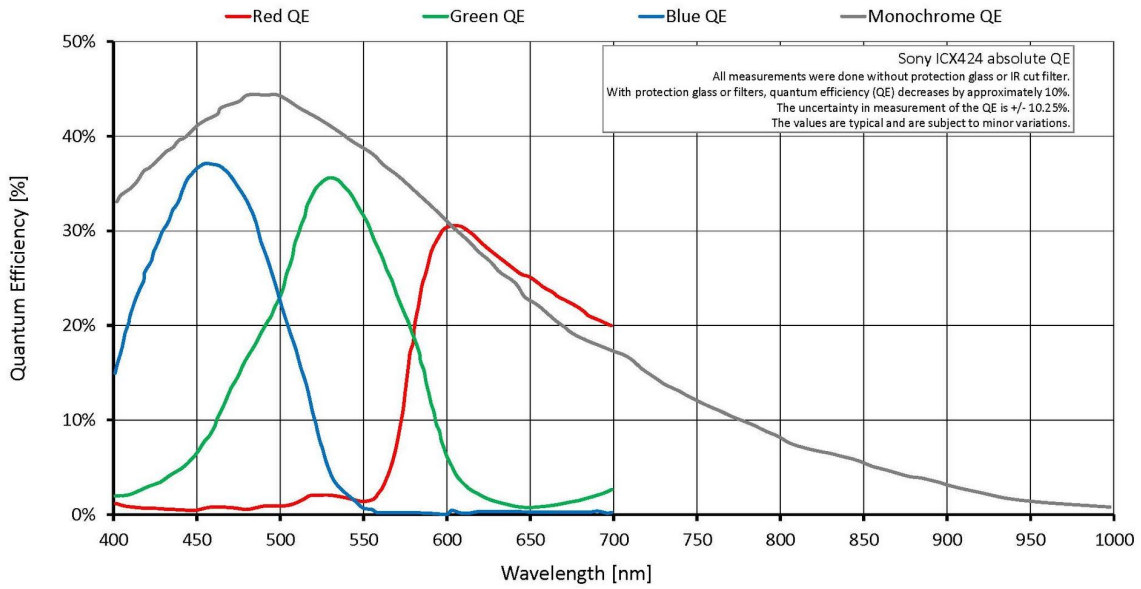
- Power over Ethernet (PoE)
- Various optical filter and lens mount options
- Angled head, board level variants, white medical housing

See the Modular Concept for lens mount, housing variants, optical filters, case design, and other modular options.

Specifications

Manta	G-032
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	656 (H) × 492 (V)
Sensor	Sony ICX424
Sensor type	CCD Progressive

Manta	G-032
Cell size	7.4 µm x 7.4 µm
Lens mount	C-Mount
Max frame rate at full resolution	80.7 fps
ADC	12 bit
Image buffer (RAM)	32 MByte
Output	
Bit depth	8-12 bit
Mono modes	Mono8, Mono12, Mono12Packed
Color modes YUV	YUV411Packed, YUV422Packed, YUV444Packed
Color modes RGB	RGB8Packed, BGR8Packed, RGBA8Packed, BGRA8Packed
Raw modes	BayerRG8, BayerRG12Packed, BayerRG12
General purpose inputs/outputs (GPIOs)	
Opto-isolated I/Os	2 inputs, 2 outputs
RS-232	1
Operating conditions/dimensions	
Operating temperature	+5 °C to +45 °C ambient (without condensation)
Power requirements (DC)	8 to 30 VDC; PoE
Power consumption (@12 V)	3.6 W @ 12 VDC; 4.2 W PoE
Mass	200 g; 210 g (PoE)
Body dimensions (L × W × H in mm)	86.4 × 44 × 29 (including connectors)
Regulations	CE, RoHS, REACH, WEEE, FCC, ICES



Features

Image optimization features:

- Auto gain (manual gain control: 0 to 36 dB; 1 dB increments)
- Auto exposure (26 µs to 60 s; 1 µs increments)
- Auto white balance (color models only)
- Binning
- Black level (offset)
- Color correction, hue, saturation (color models only)
- Gamma correction
- Look-up tables (LUTs) (3)
- Region of interest (ROI), separate ROI for auto features

Camera control features:

- Auto-iris (video type)
- Event channel
- Image chunk data
- Storable user sets
- StreamBytesPerSecond (easy bandwidth control)
- Stream hold
- Sync out modes: Trigger ready, input, exposing, readout, imaging, strobe, GPO

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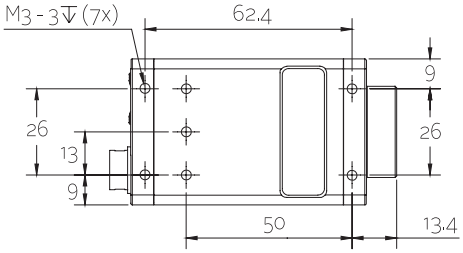
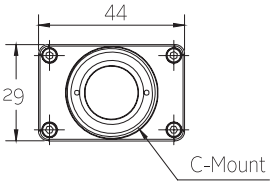
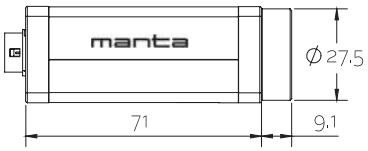
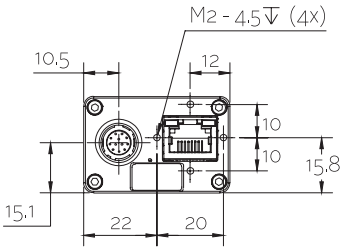
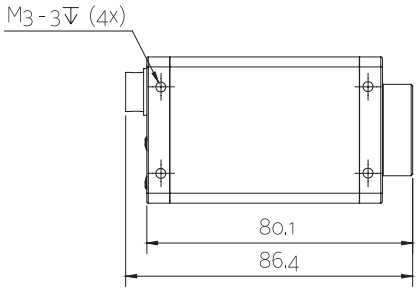
Technical drawing

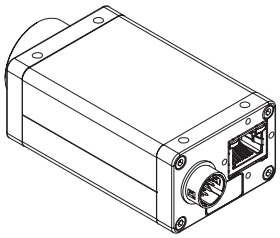












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Applications

Manta G-032B/G-032C is ideal for a wide range of applications including:

- Semiconductor inspection
- Food inspection
- Printing marks control
- Pharmaceutical inspection
- Ophthalmology
- Machine vision
- Intelligent traffic solutions (ITS)