Manta
G-504

- 9.2 fps @ full resolution
- PoE option
- Angled head and board level variants
- Video-iris lens control

Description

5 Megapixel GigE Vision camera, Sony ICX655 sensor, PoE option

Manta G-504B/G-504C is a 5 Megapixel GigE Vision camera with the Sony ICX655 CCD sensor. At full resolution, this camera runs at 9.2 frames per second. The camera incorporates three look-up tables, sophisticated color correction algorithms, a robust metal housing, and many modular options.
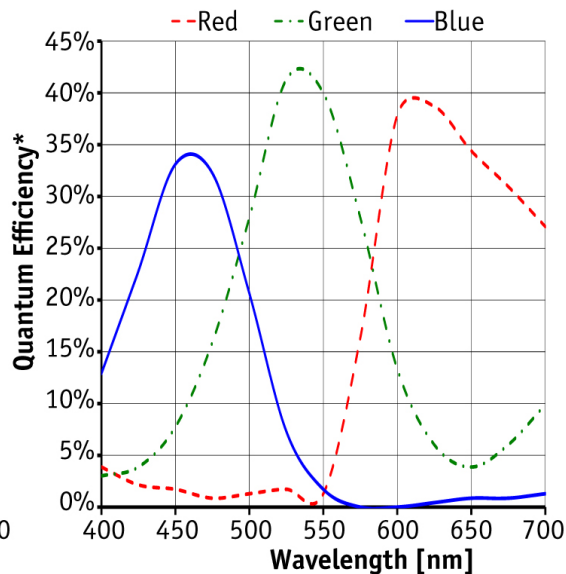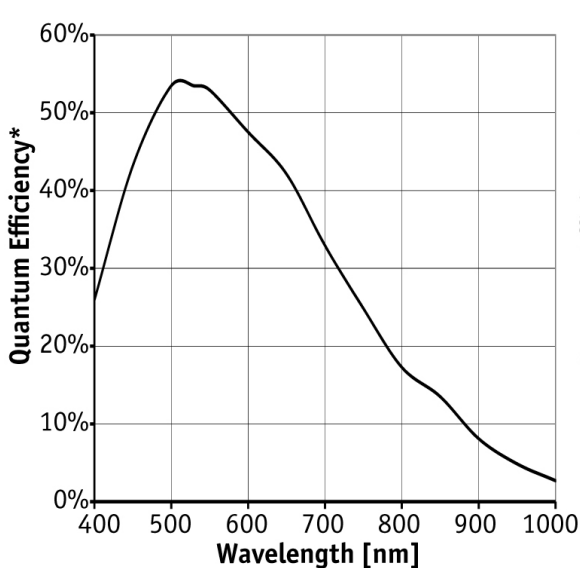**Options**

- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- 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-504
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	2452 (H) × 2056 (V)
Sensor	Sony ICX655
Sensor type	CCD Progressive
Cell size	3.45 µm x 3.45 µm
Lens mount	C-Mount
Max frame rate at full resolution	9.2 fps
ADC	12 bit
Image buffer (RAM)	32 Mbyte
Output	

Manta	G-504
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	BayerGB8, BayerGB12, BayerGB12Packed
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)	3.9 W @ 12 VDC; 4.6 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

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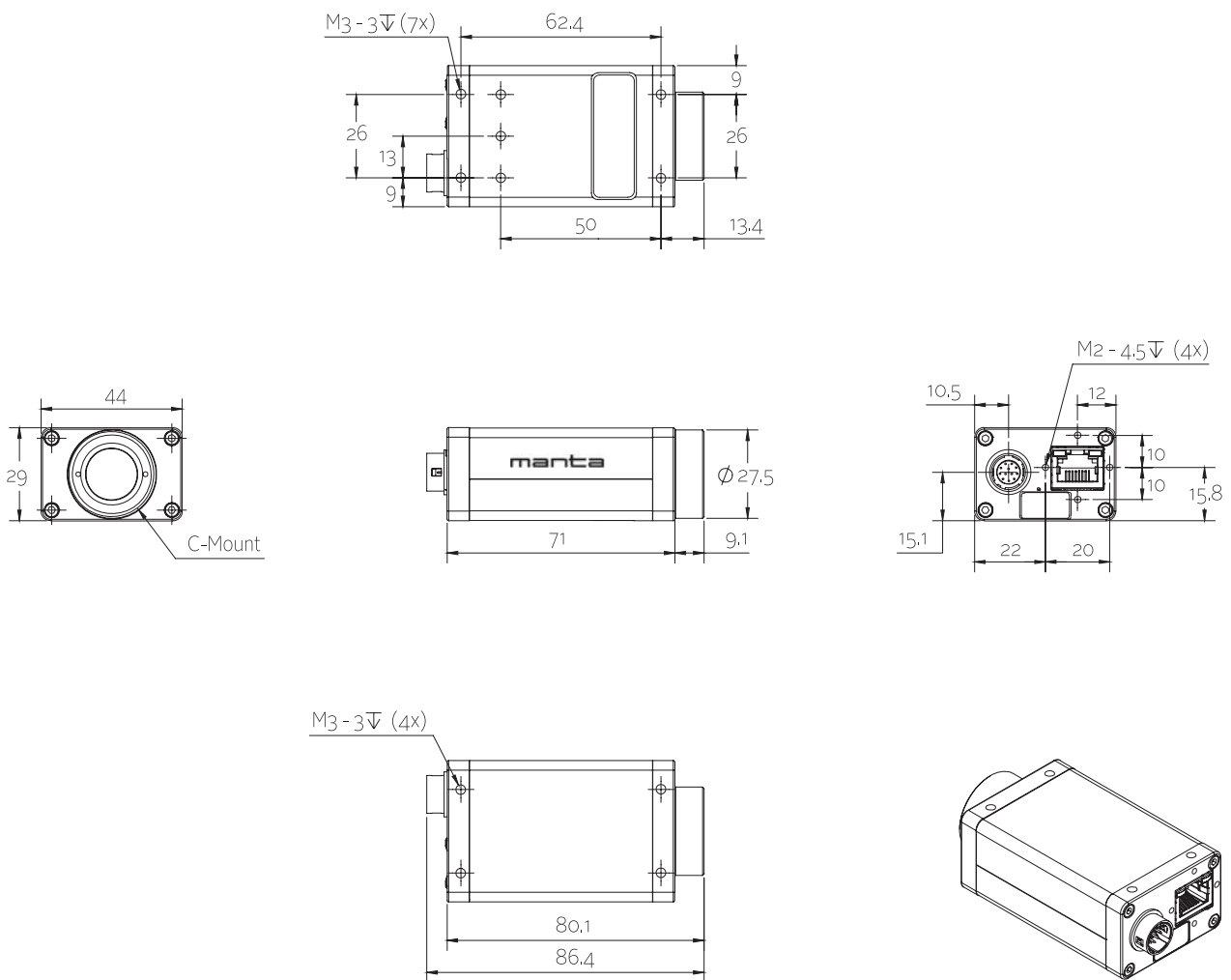
Features

Manta G-504B/G-504C features include:

- Video-type auto iris
- Region of interest (ROI), separate ROI for auto features

- Binning
- Decimation
- Auto gain (manual gain control: 0 to 32 dB)
- Auto exposure (38 #s to 60 s)
- Auto white balance
- Look-up tables (LUTs)
- Gamma
- Hue, saturation, color correction
- 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-504B/G-504C is ideal for a wide range of applications including:

- Industrial inspection with high resolution
- Automation
- Logistics
- Science and research
- Healthcare and medical
- Intelligent traffic solutions (ITS)