

Manta

G-125



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

Description

GigE Vision camera with Sony ICX445 EXview HAD sensor and PoE option

Manta G-125B/G-125C is a low cost GigE Vision camera with a Sony ICX445 CCD sensor. At full resolution, this camera runs at 30.0 frames per second. This camera incorporates three look-up tables, sophisticated color correction algorithms, a robust metal housing, and many modular options.

Options

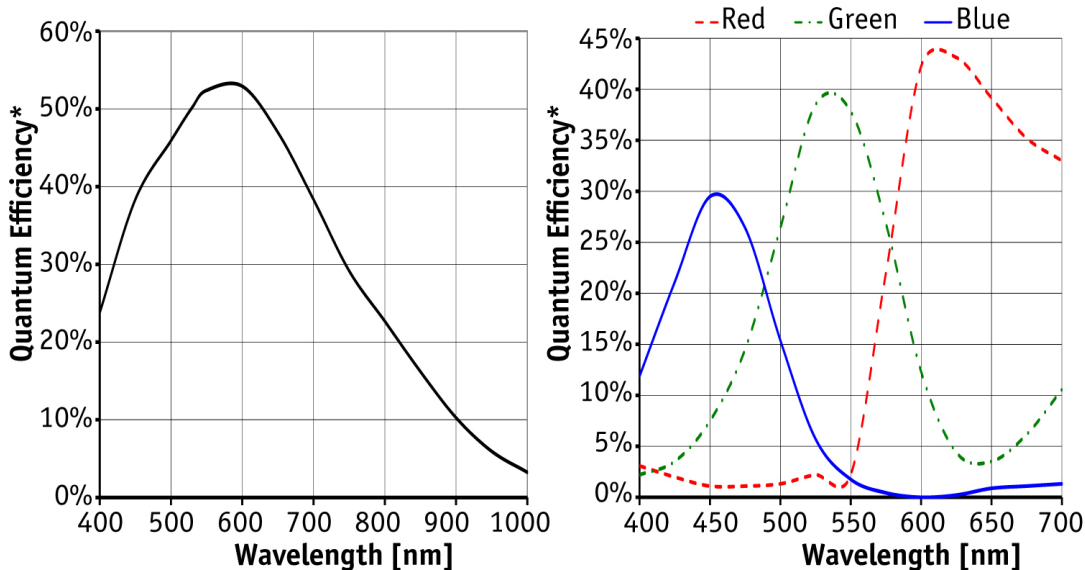
- Power over Ethernet (PoE)
- Various IR cut/pass filters and lens mounts
- Angled head, board level variants, white medical housing

See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options.

Specifications

Manta	G-125
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	1292 (H) × 964 (V)
Sensor	Sony ICX445
Sensor type	CCD Progressive
Cell size	3.75 μm x 3.75 μm
Lens mount	C-Mount
Max frame rate at full resolution	30.0 fps
ADC	12 bit
Image buffer (RAM)	32 Mbyte
Output	

Manta	G-125
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



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

Features

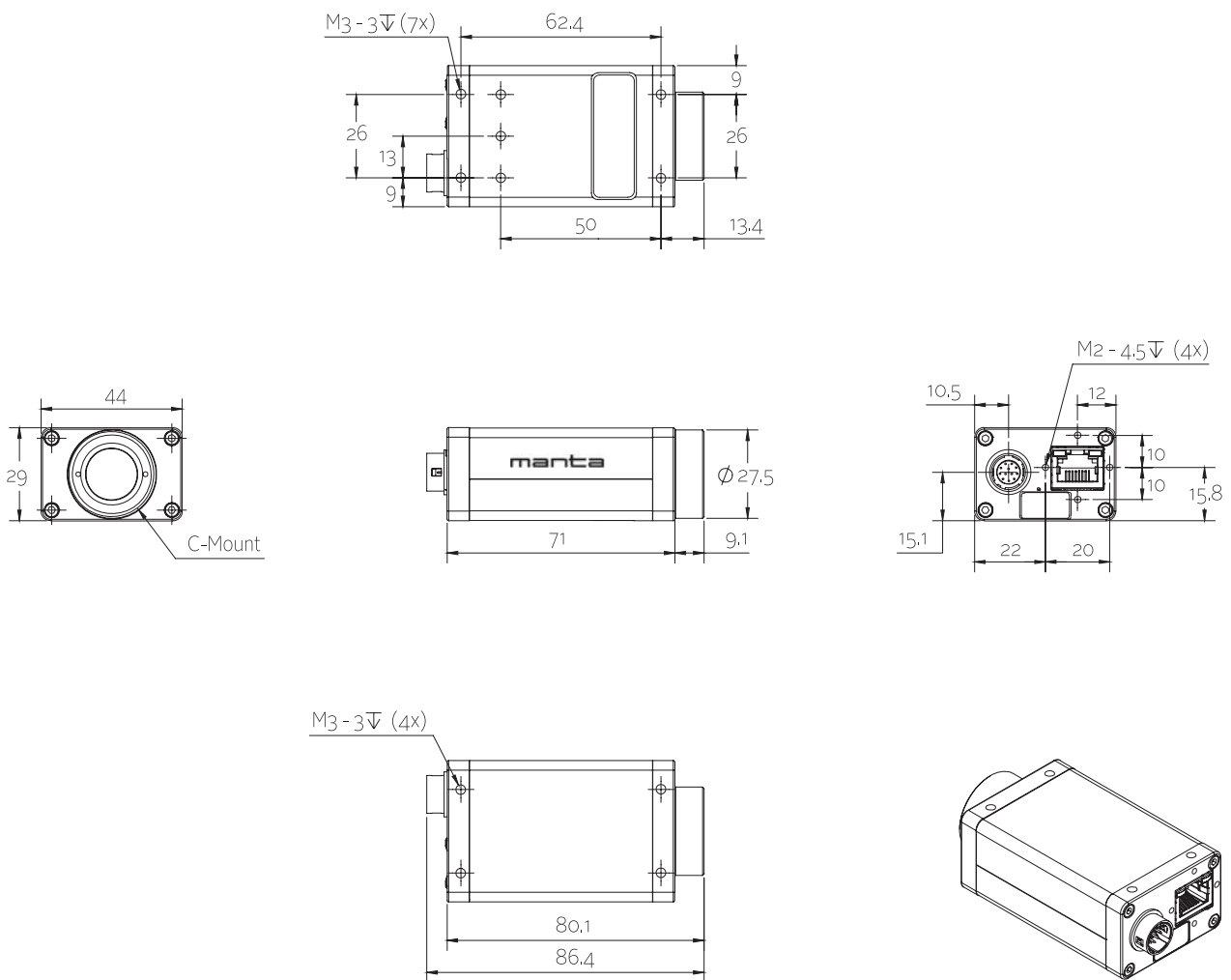
Manta G-125B/G-125C features include:

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



- Binning
- Decimation
- Auto gain (manual gain control: 0 to 31 dB)
- Auto exposure (21 #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-125B/G-125C is ideal for a wide range of applications including:



- Applications which require high sensitivity (low light)
- Quality control
- Intelligent traffic solutions (ITS)
- Semiconductor inspection
- 3D inspection
- Food inspection