

Manta

G-033



- Versatile VGA camera
- PoE option
- Angled head and board level variants
- Video-iris lens control

Description

GigE Vision camera, Sony ICX414 sensor, PoE option

Manta G-033B/G-033C is a VGA GigE Vision camera with the Sony ICX414 CCD sensor. At full resolution, this camera runs at 88.7 frames per second. With a smaller region of interest, higher frame rates are possible. 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

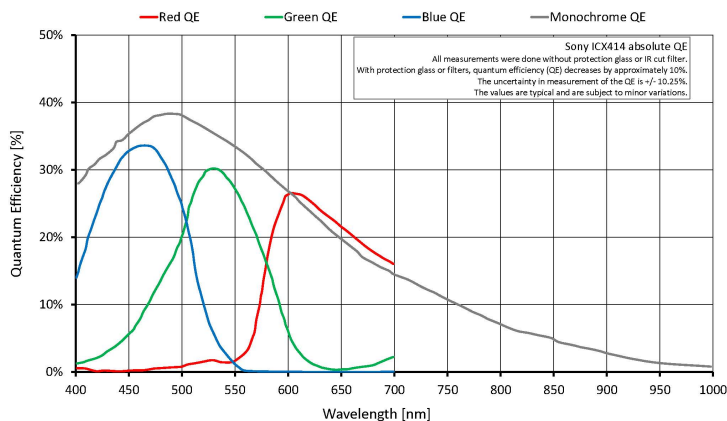
See the [Modular Concept](#) for lens mount, housing variants, optical filters, case design, and other modular options.

Optical filter note: By default monochrome models ship with protection glass B 270 (ASG) and color models ship with an IRC Hoya C-5000 IR cut filter.

Specifications

Manta	G-033
Interface	IEEE 802.3 1000BASE-T, IEEE 802.3af (PoE) optional
Resolution	656 (H) × 492 (V)
Sensor	Sony ICX414
Sensor type	CCD Progressive
Cell size	9.9 μm x 9.9 μm
Lens mount	C-Mount
Max frame rate at full resolution	88.7 fps

Manta	G-033
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, BayerRG12, BayerRG12Packed
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:

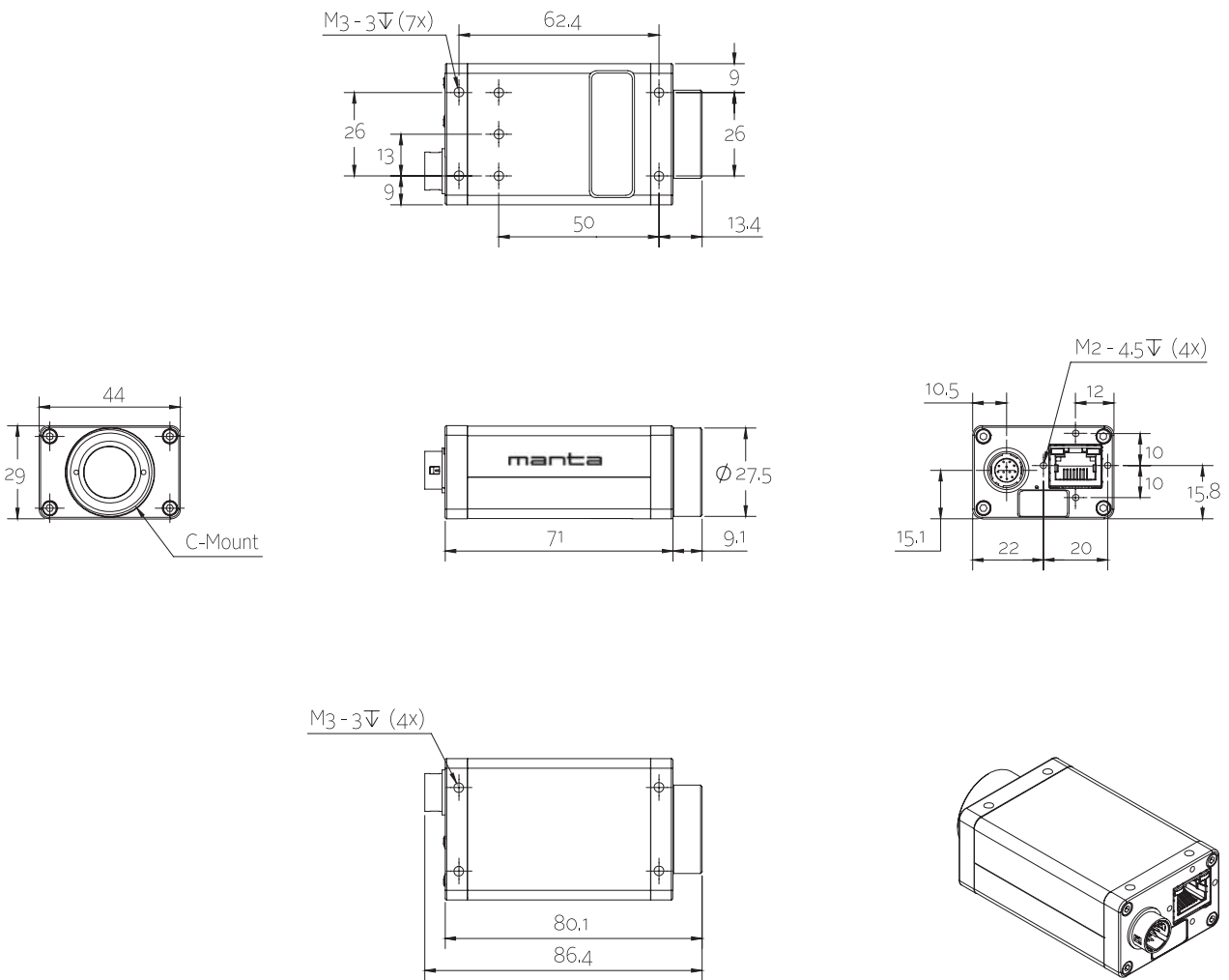


- Auto gain (manual gain control: 0 to 35 dB)
- Auto exposure (26 #s to 60 s)
- Auto white balance
- Binning
- Black level (offset)
- Color correction, hue, saturation (color models only)
- Decimation
- Gamma correction
- Look-up tables (LUTs)
- Region of interest (ROI), separate ROI for auto features

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

Technical drawing



Applications

Manta G-033B/G-033C is ideal for a wide range of applications including:



- Machine vision
- Industrial inspection and automation
- Semiconductor inspection
- Logistics
- Intelligent traffic solutions (ITS)